Interim Report of Archaeological Investigations at Dorn Levee #1 (38FA608), 2015-2018

by Andrew A. White

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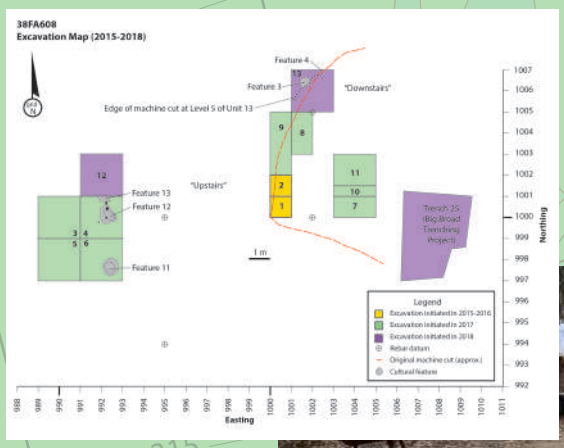


Table of Contents

List of Tables

List of Figures

Chapter 1

Background and Introduction

This report describes archaeological work undertaken at the Dorn Levee #1 site (38FA608) from the time of its initial documentation in the fall of 2015 through excavations conducted in the winter and spring of 2018. This report is preliminary in nature: detailed analyses have yet to be conducted on much of the cultural material recovered from the site. As those analyses are conducted, it is likely that classifications of some items will change and/or be elaborated, and errors in both field and laboratory documentation will be encountered and fixed.

Summary of Work

Site 38FA608 was discovered during an informal reconnaissance of a parcel of land bordering the Broad River in Fairfield County, South Carolina, during the fall of 2015. During that reconnaissance (conducted by Andrew White, Elizabeth White, and Albert Goodyear), chipped stone debris and fire-cracked rock were discovered eroding out of a 2.4 m high, 10 m long vertical exposure in a small portion of a sandy elevation oriented roughly parallel to the river channel. Cleaning and documentation of the profile later that fall revealed stratified, well-preserved cultural deposits including ceramic-bearing strata near the surface, pit features at various depths, and a horizontal zone of quartz chipping debris buried about 2 m beneath the surface (White 2015).

Archaeological work at Dorn Levee #1 in 2017 and 2018 focused on clarifying the broad outlines of the site's natural and cultural stratigraphy as well as stabilizing portions of the site that were exposed to the weather and in danger of destruction through slumping. Field school excavations during the winter/spring of 2017 established the Middle Archaic (ca. 4000 BC) age of the deeply-buried Zone 7, the presence of significant, intact Late/Terminal Archaic (ca. 2000-1000 BC) deposits nearer the surface, and the presence of probable cultural deposits underlying those exposed by the original vertical exposure (White 2017a, 2017b).

Field school excavations during the winter/spring of 2018 focused on clarifying the age and nature of the upper (Archaic and Woodland) deposits (White 2018a). In May of 2018, backhoe trenches were placed at either end of the landform upon which 38FA608 is situated to gather basic information about the horizontal extent of stratified deposits at the site (White 2018b). A third backhoe trench was excavated near the base of the exposed profile to investigate the nature of the deep sediments at the site.

Summary of Results

Hand and machine-assisted excavation work conducted at 38FA608 from 2015 through 2018 was successful in: (1) collecting basic information about the natural and cultural stratigraphy in the upper 2.5 of deposits at the site; (2) collecting detailed information about the uppermost (Historic period through Late Archaic) deposits at the site; (3) identifying the presence of possible deeply buried Early Holocene deposits; and (4) establishing that intact natural deposits dating to at least the Last Glacial Maximum (ca. 22,000 years ago) are present below the Holocene deposits.

Participants

All portions of the fieldwork described in this report were directed by Andrew A. White. Chester DePratter assisted in documenting the vertical exposure soon after the site was discovered. Participants in the 2017 field school included T. Shane Biles, Nate Brazell, Jake Butler, Kate Chatman, Samantha Clyburn, Samantha McDorman, Scott McFall, Tiffany Peacock, Elena Vories, Joshua Wilburn, Jim Legg, and DuVal Lawrence. Participants in the 2018 field school included Ella Goulding, Katherine Gray, Caroline Hall, Joseph Lindler, Benjamin Shumate, Samantha McDorman, and DuVal Lawrence. Robert Gibbes and Will Britz from the SCDNR Heritage Trust Program also participated in the 2018 work, and additional material and logistical support was provided by the SCDNR under Sean Taylor. Participants in the backhoe work conducted in May of 2018 included Will Britz, Robert Gibbes, Caroline Hall, Joseph Lindler, Karen Smith, and Sean Taylor. The SCDNR Heritage Trust Program was a partner in the backhoe work and provided abundant material and logistical support.

Acknowledgments

I appreciate the hospitality and support of the landowner and his family, as well as generosity of the Archaeological Research Trust (ART) and its board. Monies from ART supported both the 2017 and 2018 seasons of the field school, funding the purchase of expendable supplies and the staff for field and laboratory work. I would also like to acknowledge the hard work of the field school students and thank Jim Legg and DuVal Lawrence for their efforts in making the first two seasons of the excvation work successful endeavors. The support provided by the SCDNR Heritage Trust Program in 2018, both for the field school and the Big Broad Trenching Project, significantly enhanced the work and for that I am thankful. The Big Broad Trenching Project was supported by a grant from the Provost Internal Grant Program (Proposal #21300-17-44895) at the University of South Carolina. Eddie Reeps also provided assistance to the project.

Chapter 2

Description of Excavations

This chapter describes the excavations undertaken at 38FA608 from the discovery of the site in the fall of 2015 through the backhoe work conducted in the spring of 2018. Figure 1 shows a plan view of the placement of excavation units and datums in the central portion of 38FA608. Table 1 lists the sizes and locations of the units.

Horizontal and vertical control have been maintained using a site grid system first established when Units 1 and 2 were placed. Artifacts and samples (charcoal, sediment, flotation, etc.) were logged in the field using a Field Specimen (FS) number, with each unique provenience/recovery getting a unique FS number.

Catalog numbers were assigned to artifacts during basic inventorying of the collections in the lab. Refer-

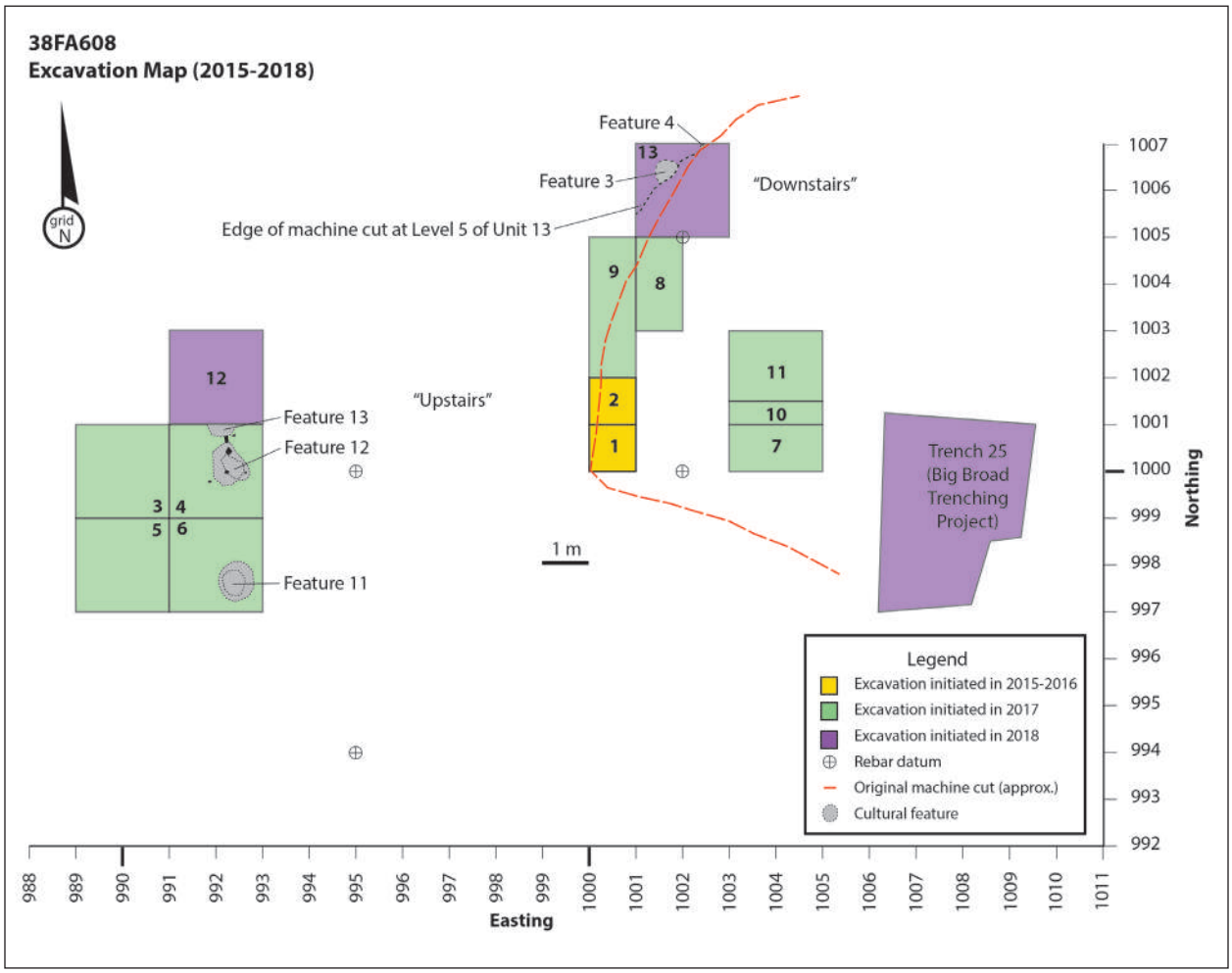


Figure 1. Locations of excavation units in the central area of 38FA608 (2015-2018).

Table 1. Size, location, and date of hand-excavated units at 38FA608 (2015-2018).

Unit	Size (m)	SW Corner Coordinates	Date(s) Excavated
1	1 x 1	N 1000 / E 1000	May 2016
2	1 x 1	N 1001 / E 1000	May 2016
3	2 x 2	N 999 / E 989	January - April 2017
4	2 x 2	N 999 / E 991	January - April 2017
5	2 x 2	N 997 / E 989	January - April 2017
6	2 x 2	N 997 / E 991	January - April 2017
7	1 x 2	N 1000 / E 1003	February 2017
8	1 x 2	N 1003 / E 1001	January 2017
9	1 x 3	N 1003 / E 1000	January-April 2017
10	0.5 x 2	N 1001 / E 1003	March 2017
11	2 x 1.5	N 1001.5 / E 1003	May 2017
12	2 x 2	N 1001 / E 991	January-April 2018
13	2 x 2	N 1005 / E 1002	January-April 2018

ences to artifacts in this chapter and those that follow are made using the convention of FS.catalog number (e.g., an artifact from FS 366 with catalog number 442 would be designated “366.442”).

Documentation of Existing Vertical Exposure (2015 and 2016)

Site 38FA608 was discovered during an informal reconnaissance conducted by Andrew White, Elizabeth White, and Albert Goodyear during the fall of 2015. During that reconnaissance, chipped stone debris and fire-cracked rock were discovered eroding out of a 2.4 m (~8’) high, 10 m (~33’) long vertical exposure that had been created by the mechanical removal of fill dirt from a small portion of a sandy natural levee parallel to the channel of the Broad River (Figure 2).

The exposure was cleaned and documented in four segments (Segments A through D) approximately 2m long. A series of datum points was created by inserting gutter spikes into the face of the exposure. These points (designated X1, X2, X3, X4, and X5) were placed at a constant elevation using string and a line level (after a grid system was established at the site, these “X” points were found to be at an elevation of 501.13m on the site elevation grid). Prior to drawing each segment, the sediment that had fallen from the upper portions of the exposure and accumulated at the base of the exposure was removed and screened through 1/4” mesh. The exposure was then cleaned by trowel scraping and photographed. Artifacts visible in the exposed surface were marked with a nail and flagging tape. Sediment zones were discerned. Artifacts and sediment zones were mapped using standard profiling techniques (Figure 3). Sediments were described and visible artifacts were collected as piece-plots. Work was performed during two days in October of 2015 and two days in May of 2016.

Inspection and documentation of the vertical exposure revealed stratified, well-preserved cultural deposits including ceramic-bearing strata near the surface, pit features originating at various depths, and a horizontal zone of quartz chipping debris buried about 2m beneath the surface. While no diagnostic stone tools were recovered in situ, a Middle Archaic Guilford point was recovered from the slump at the base of Profile Segment A. This point indicated that a Middle Archaic component was present somewhere within the exposed sediments.

The profile created from the vertical exposure (Figure 3) shows six major sediment zones. The uppermost zone (Zone 1) is a plowzone. Zone 2 is thinner and darker than Zone 1. It became apparent during

Figure 2. Photograph of the original machine cut excavation into 38FA608 (as it was encountered in September 2015).

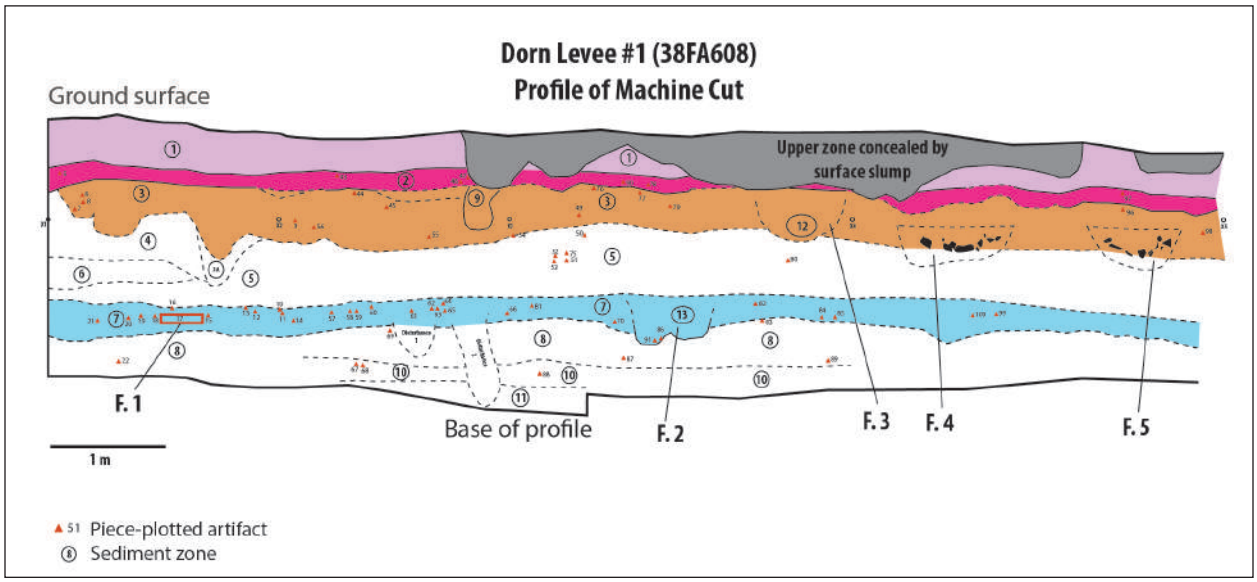


Figure 3. Profile drawing of the surface exposed by the machine cut in 2015-2016.

excvations in 2017 that at least some portions of Zone 2 have also been plowed. Zone 3-4 is a zone of relatively loose, sandy loam lacking lamellae. Several features were documented originating within this zone. Excavations later showed this zone to contain Late Archaic cultural materials. Zone 5 is composed of sandy loam with lamellae that become more pronounced with depth. Zone 7 was defined by its grayish hue. It contained a deposit of chipping debris (Feature 1). Excavation work later demonstrated that Zone 7 is Middle Archaic in age. Zone 8/10 is composed of coarse sandy loam with pronounced lamellae. At least some portions of this zone also date to the Middle Archaic period.

Units 1 and 2 (2016)

Units 1 and 2 were placed with the dual goals of: (1) exposing Feature 1 in plan view; and (2) beginning the process of straightening the vertical exposure so that it can be documented on a single plane and be effectively stabilized to prevent further damage through slumping. The units were oriented along the permanent site grid, which was established by creating two concrete and rebar datum points at the base of the vertical exposure. The southernmost of these points was designated N 1000 / E 1002 and assigned an elevation of 500 m (top of the rebar). A point established 5 m to the north was designated N 1005 / E 1002, establishing the direction of grid north.

Units 1 and 2 were laid out with their western edges along the E 1000 line. The plane of the western edges of the units intercepted the angled wall of the exposure in the zone above Zone 7, the zone containing Feature 1.

The sediment above Zone 7 was removed as a natural level in both units and screened through ¼" mesh (FS 105). Artifacts encountered in Zone 7 were associated with Feature 1 and were piece-plotted as they were removed. A sample of sediment from Feature 1 (FS 338) was retained for flotation. Following the removal of Zone 7/Feature 1, sediment was removed in 10 cm levels until the base of the exposure was reached. Flotation samples were taken for each of those levels in Unit 1. The remaining sediment was screened through ¼"mesh.

Following the excavation of Units 1 and 2, the bottom portion of the exposure in that area was vertical. The top portion (above where the unit edges intercepted the sloping surface) remained somewhat irregular. To protect this portion of the profile, the exposed surface was covered with landscape fabric and a vertical wooden structure abutting the surface was built with plywood and 2x4 lumber. Sand was used to fill the irregular areas between the landscape fabric and wood. The entire vertical exposure was covered with plastic sheeting.

2017 Field School

University of South Carolina archaeological field school excavations were undertaken at 38FA608 in 2017 and 2018 (see White 2017a, 2018a).

The 2017 field school excavations were intended to strike a balance between research, education, and site stabilization goals. Our work focused on three inter-related activities: (1) continuing to straighten and document the exposed vertical wall; (2) exposing and collecting controlled samples of artifacts and deposits to understand the occupational sequence of the levee; and (3) working to stabilize and protect the deposits exposed in the wall. To these ends, we opened excavation units in two areas of the site, affectionately known as the "upstairs" and "downstairs" (see Figure 1).

Upstairs

In the "upstairs" portion of the site, we laid out a four 2 x 2 m excavation units (Units 3-6) in a square block. Vertical control was maintained using a rotating laser level stationed on a concrete block as a datum. This datum was designated 2017A and had an elevation of 502.24 m on the site grid.

Stratigraphic information obtained from the nearby exposure provided some insight into the kinds and ordering of deposits that would be present in the block.

Table 2 summarizes the level excavations in the upstairs block in 2017. The first levels in Units 4, 5 and 6 were within the upper plowzone (Zone 1). Students excavated these levels in 1x1 m quadrants with arbitrary ending depths in order to practice the basic methods and techniques of unit/level excavations. After removing the plowscars at the base of the upper plowzone (level 4 in Units 4 and 6; level 3 in Unit 5), we

Table 2. Summary of level excavations in the upstairs block at 38FA608 (2017).

Unit	Level	Depth (cmbd)	Elevation (m on site grid)	Excavation Method	Zone
3	1 (E ½)	Surface-54/58	501.98-501.66	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	2 (E ½)	54-58-61/64	501.70-501.60	Shoveled/troweled and screened ¼"	2 (lower plowzone)
4	1	Surface-40	501.97-501.84	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	2	40-50	501.84-501.74	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	3	50 – 56/59	501.74-501.65	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	4	56/59-56/59	501.68-501.65	Shoveled/troweled and screened ¼"	1 (plow scars)
	5	56/59-70	501.68-501.54	Shovel scraped, piece-plotted	2 (lower plowzone)
	6	70-75	501.54-501.49	Shoveled/troweled and screened ¼"	2-3 interface
	7	75-90	501.49-501.34	Shovel scraped and screened ¼"	3
	8	90-100	501.34-501.24	Troweled, piece-plotted	3
5	1	Surface-40	502.01-501.84	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	2	40-63/67	501.84-501.57	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	3	63/67-64/67	501.61-501.57	Shoveled/troweled and screened ¼"	1 (plow scars)
	4	64/67-71/76	501.60-501.48	Shovel scraped, piece-plotted	2 (lower plowzone)
	5	71/76-75	501.53-501.49	Shoveled/troweled and screened ¼"	2-3 interface
	6	75-80	501.49-501.44	Troweled, piece-plotted	3
6	1	Surface-40	501.97-501.84	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	2	40-50	501.84-501.74	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	3	50-60	501.74-501.64	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	4	60-62/73	501.64-501.51	Shoveled/troweled and screened ¼"	1 (plow scars)
	5	62/73-70	501.62-501.54	Shovel scraped, piece-plotted	2 (lower plowzone)
	6	70-75	501.54-501.49	Shoveled/troweled and screened ¼"	2-3 interface
	7	75-90	501.49-501.34	Shovel scraped and screened ¼"	3
	8	90-100	501.34-501.24	Troweled, piece-plotted	3

employed a shovel-scraping and piece-plotting methodology within Zone 2 (Figure 4). Based on the profile exposed in the vertical cut nearby, Zone 2 appeared to be a possible midden. Excavation to the base of Zone 2 in the block, however, revealed plow scars at the interface of Zones 2 and 3, indicating that at least some portions of Zone 2 have been plowed in the past in this portion of the site.

In Units 4 and 6, sediment immediately below Zone 2 was removed by shovel-scraping and screening through ¼" mesh. Based on the profile exposed in the vertical cut, a large density of material was not expected high in the undisturbed deposits (i.e., immediately below Zone 2). We continued shoveling Zone 3 until it became apparent that we were coming into a relatively dense deposit of prehistoric debris. Both units were leveled off at 90cmbd (the base of level 7) and we switched to removing sediment via troweling, piece-plotting artifacts as they were encountered. A Terminal Archaic Mack point (Figure 5) plotted in situ was the first diagnostic artifact encountered in the sub-plowzone deposits in the block. The 2017 excavations in Units 4 and 6 were halted at 100 cmbd with the removal of level 8 via piece-plotting. Two cultural features (Features 11 and 12) were exposed in the floor at this depth. A third (Feature 6) was discerned at the base of level 6 in Unit 6, and was removed prior to excavation of level 7.

Excavations in Unit 5 moved at a slower pace than those in Units 4 and 6, due initially to a high density

Figure 4. Piece-plot excavations in progress in Zone 2 in 2017, upstairs block.

Figure 5. Terminal Archaic Mack point *in situ* in the upstairs block at 38FA608 (2017).

of tree roots in the upper zones. By the time the upper plowzone was removed in Unit 5, it was apparent from excavations in Units 4, 6, and 9 that Zone 2 was a plowed deposit. For this reason, Zone 2 was removed as a natural level in Unit 5 without piece-plotting. The plowed nature of Zone 2 was confirmed by the discovery of a large, plow-scarred rock situated at the Zone 2-3 interface in Unit 5 (FS 1477 in Figure 6).

A piece-plot methodology was initiated in the upper portion of Zone 3 in Unit 5 to attempt to recover in-

formation that had been missed by shovel scraping this portion of the deposit in Units 4 and 6. The large rock (FS 1477) encountered at the base of level remained in place as sediments and cultural materials were mapped and removed around it (see Figure 6). The 2017 excavations in Unit 5 were terminated at 80 cmbd. The large rock and another nearby (FS 1476, which turned out to be an axe) remained in place when the unit was backfilled at the end of the season.

Excavations in Unit 3 in 2017 were limited to the eastern half of the unit. Two levels were removed in an attempt to create a step to aid in getting in and out of the block without damaging the walls. Level 1 removed the upper plowzone (Zone 1) and level 2 removed a portion of the lower plowzone (Zone 2).

At the end of the 2017 field season, the floor and walls of the block were lined with landscape fabric and plywood and backfilled. Nails marking the corners of the units were left in place.

Downstairs

Work in the "downstairs" portion of the site in 2017 was conducted with two goals: (1) to continue the process of straightening and stabilizing the vertical exposure; and (2) to explore the deposits beneath the vertical exposure. Excavations were undertaken in five units (Table 3).

Work on the vertical exposure was undertaken by Jim Legg. The goal was to create a 3 m-long section of straight wall that would add to the profile along the E 1000 line that was started with the excavation of Units 1 and 2. Over the course of the semester, Legg and students excavated Units 8 and 9, simultaneously removing the irregularities of the existing machine cut and collecting controlled samples of artifacts all the way down through the deposits (Figure 7).

Unit 8 was a 1x2 m unit that was placed to remove a small section of the existing exposure prior to the excavation of Unit 9. Sediment in Unit 8 was removed in six levels. The bottom level excavated in 2017 – level 6 – brought the floor of Unit 8 down to the elevation at the base of the vertical exposure.

Figure 6. Excavations in progress in Unit 5 near the end of the 2017 field school. FS 1477 is a large quartz cobble with plowscars on its top surface.

Unit 9 was a 1x3 m unit that was placed to extend the profile along the E 1000 line. Level 1 was excavated as a natural level terminating at the base of Zone 1. Plow scars were documented at the base of level 1. The base of level 2 coincided with the interface of Zones 2 and 3. Although plow scars were visible at this interface in the block excavation, no such scars were identified in Unit 9. The transition between Zones 2 and 3 was more gradual in plan than it appeared in profile. Levels 3 through 8 in Unit 9 were excavated as arbitrary 20 cm levels. The bottom level excavated in 2017 – level 11 – brought the floor of Unit 9 down to the elevation at the base of the vertical exposure.

Excavation of Unit 9 was completed on March 31, 2017, with the goal of profiling the entire 5m exposure created by Units 1, 2, and 9, on the next Friday of excavation. Sometime during the week, unfortunately, a

Table 3. Summary of level excavations in the downstairs and basement portions of 38FA608 (2017).

Unit	Level	Depth (cmbd)	Elevation (m on site grid)	Excavation Method	Zone
7	1	8-20	499.82-499.70	Shoveled/troweled and screened ¼”	-
	2	20-37	499.70-499.53	Shoveled/troweled and screened ¼”	-
	3	31-50	499.59-499.40	Shoveled/troweled and screened ¼”	8/14
	4	50-70	499.40-499.20	Shoveled/troweled and screened ¼”	8/14, 15
8	1 & 2	-	500.82-500.42	Shoveled/troweled and screened ¼”	5
	3	-	500.42-500.22	Shoveled/troweled and screened ¼”	~7
	4	-	500.22-500.02	Shoveled/troweled and screened ¼”	8/14
	5	-	500.02-499.82	Shoveled/troweled and screened ¼”	8/14
	6	-	499.82-499.62	Shoveled/troweled and screened ¼”	8/14
9	1	-	501.86-501.52	Shoveled/troweled and screened ¼”	1
	2	-	501.52-501.43	Shoveled/troweled and screened ¼”	2
	3	-	501.43-501.23	Shoveled/troweled and screened ¼”	3-4
	4	-	501.23-501.02	Shoveled/troweled and screened ¼”	3-4
	5	-	501.02-500.82	Shoveled/troweled and screened ¼”	5
	6	-	500.82-500.62	Shoveled/troweled and screened ¼”	5
	7	-	500.62-500.42	Shoveled/troweled and screened ¼”	5
	8	-	500.42-500.22	Shoveled/troweled and screened ¼”	~7
	9	-	500.22-500.02	Shoveled/troweled and screened ¼”	8/14
	10	-	500.02-499.82	Shoveled/troweled and screened ¼”	8/14
	11	-	499.82-499.62	Shoveled/troweled and screened ¼”	8/14
10	1	16-75	499.74-499.15	Shoveled/troweled and screened ¼”	8/14
11	1	39-50	499.68-499.57	Shoveled/troweled and screened ¼”	8/14
	2	50-60	499.57-499.47	Shoveled/troweled and screened ¼”	8/14
	3	60-70	499.47-499.37	Shoveled/troweled and screened ¼”	8/14
	4	70-80	499.37-499.27	Shoveled/troweled and screened ¼”	8/14
	5	80-90	499.27-499.17	Shoveled/troweled, piece-plotted	8/14
	6	90-96	499.17-499.11	Shoveled/troweled, piece-plotted	15
	7	92-105	499.15-499.02	Shoveled/troweled, piece-plotted	16
	8	105-125	499.02-498.82	Shoveled/troweled and screened ¼”	19

large section of the west wall of Unit 9 collapsed (Figure 8). Because the wall was protected from rain by plastic sheeting, our best explanation is that the sandy sediments dried out during several months without the addition of moisture and became too dry and lost their cohesion. The collapsed sediments from Unit 9 were screened through ¼" mesh and the west wall, no longer plumb, was cleaned and documented. While the collapse was unfortunate, cleaning and documentation of the damaged wall still provided good information about the stratigraphy of the site and context for the artifacts excavated from Units 8 and 9.

Figure 7. Excavations in progress in Unit 9, 2017 field school.

Figure 8. Cleanup and screening of sediments from Unit 9 following the collapse of the west wall, 2017 field school.

Units 1 and 2 were uncovered and re-profiled so that the 5m exposure could be considered in its entirety as best as possible.

Unit 7 was excavated as our first attempt to investigate the "basement" deposits that are present below the floor of the borrowed area. The first levels were used to remove the cap of disturbed sediments that is present on the floor of the borrowed area. Levels 3 and 4 were excavated into undisturbed sediments. At the base of the excavation, the pronounced lamellae were absent and mottled/oxidized sediments were present.

Heavy rain flooded and damaged the soft sediments in Unit 7 between excavation days. Unit 10 was placed to expand from Unit 7, removing the damaged portion and continuing the excavation to try to understand the nature of the "basement" deposits. Sediment from Unit 10 was removed in a single level to bring the base of the excavation to match the depth of Unit 7. Units 7/10 were subsequently damaged again by heavy rain. After this second episode, the decision was made to terminate excavations into the "basement" until they could be carried out under different circumstances.

Unit 11 was excavated in May 9-12, 2017, in a second attempt to investigate deposits in the "basement." Unit 11 was placed to expand from the abandoned Unit 7/10 area, which was twice damaged by water. The 1.5x2 m unit was excavated to a final depth of 498.82 (about 80 cm beneath the elevation of the base of the vertical exposure). Work was conducted with student volunteers after the cessation of the 2017 field school (Figure 9).

Levels 1-4 of Unit 11 were excavated as arbitrary 10 cm levels. There was very little cultural material in levels 1 and 2, and level 3 was sterile. Material encountered in level 4 was limited to several very small pebbles. In level 5, we encountered several small, angular pieces of quartz that could have a cultural origin (none was a good flake). Those pieces of quartz were piece-plotted as they were encountered. Level 5 terminated in a deposit of coarse sand that did not contain visible lamellae.

Level 6 was removed as a natural level containing the coarse sand deposit. Several more angular pieces of quartz were encountered within the coarse sand and collected as piece-plots. Excavation of level 6 re-

Figure 9. Excavations in progress in Unit 11 following the 2017 field school.

sulted in the exposure of several large rocks which appeared to be sitting on top of the clayey sediments immediately below the coarse sand. Those rocks were left in place, mapped, and removed as piece-plots in level 7 (Figure 10). Level 8 consisted of a 50 cm-wide trench excavated along the north wall of the unit to expose a deeper profile. Only one small piece of angular quartz was recovered from level 8.

2018 Field School

As in 2017, the 2018 field school excavations were intended to strike a balance between research, education, and site stabilization goals. Our work in 2018 focused on two inter-related activities: (1) continuing to straighten and document the exposed vertical wall; and (2) excavating a sample of the archaeological features that were encountered in the block excavation in 2017 and were exposed in the wall. Work continued in both the "upstairs" and "downstairs" areas of the site (see Figure 1). The same concrete block placed in 2017 was used as a platform for the laser level in 2018. Videos illustrating our weekly progress are available at the Broad River Archaeological Field School website.

Upstairs

In the "upstairs" portion of the site, work began by removing a significant portion of the backfill from the block. Backfill was first removed to a depth that would allow piece-plot excavations to continue in Unit 5. Some backfill sediment was temporarily left in place in Units 4 and 6 to protect the walls and floors of those units until we ready to excavate the features exposed in the floor. Level excavations in the block during the 2018 field season are summarized in Table 4.

In Unit 5, a piece-plot methodology was retained during the excavation of level 7 980-85 cmbd). The two large rocks encountered in 2017 (one of which turned out to be a chipped stone axe) were finally removed as the level came down.

In Unit 3, the west half of level 1 (in plowzone) was removed as an arbitrary level to provide an opportunity for students to practice basic excavation techniques. Level 2 was excavated as a natural level terminating at the base of Zone 1 (the upper plowzone). Level 3 was excavated across the entire unit, terminating at

Figure 10. Rocks documented *in situ* in Level 7 of Unit 11 (2017).

Table 4. Summary of level excavations in the upstairs block at 38FA608 (2018).

Unit	Level	Depth (cmbd)	Elevation (m on site grid)	Excavation Method	Zone
3	1 (W ½)	Surf.- 40	501.97-501.84	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	2 (W ½)	40-60	501-84-501.64	Shoveled/troweled and screened ¼"	2 (lower plowzone)
5	7	80-85	501.44-501.39	Troweled, piece-plotted	3
12	1	Surf.-40	502.03-501.84	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	2	40-57	501.84-501.67	Shoveled/troweled and screened ¼"	1 (upper plowzone)
	3	51-59	501.73-501.65	Shoveled/troweled and screened ¼"	1 (plow scars)
	4	51-70	501.73-501.54	Shoveled/troweled and screened ¼"	2 (lower plowzone)
	5 (southern portion)	70-78	501.54-501.46	Trowled and piece-plotted	3

the base of Zone 2 (the lower plowzone). A chipped stone ax (FS 1549) was piece-plotted at the base of level 3. Given its position it was not clear if this artifact was in place directly below the plowzone or had been incorporated into the plowzone. Excavations in Unit 3 in 2018 were halted at the base of Zone 2.

The size of the block was increased by the addition of one new excavation unit (Unit 12) situated north of Unit 4. This unit was placed to expose the northern portion of Feature 13 in plan. The first level in Unit 12 was excavated in 1x1 m quadrants with arbitrary ending depth in order for students to practice the basic methods and techniques of unit/level excavations. Level 2 was removed as a natural level terminated at the base of Zone 1 (the upper plowzone). Level 3 was used to remove the plowscars and other remnants of the upper plowzone. Two features (Features 14 and 15 – both interpreted as historic postholes) were encountered at the base of Level 3. Level 4 was used to remove the lower plowzone (Zone 2) as a natural level. At the base of level 4, Feature 15 was still visible and an additional feature (Feature 16) was discernible. Feature 16 appeared to be a prehistoric feature that extended into the eastern wall of the unit. Because an additional unit would have been required to fully expose Feature 16 prior to excavation, the decision was made to leave the northern 125 cm of Unit 12 at the base of level 4 and continue excavating the southern portion of the unit into sub-plowzone deposits. Excavations in Unit 12 in 2018 were halted at 78 cmbd, far shy of the 100 cmbd required to expose Feature 13 in plan view. Figure 11 shows the 2018 excavations of the block in progress.

A significant portion of the effort in the "upstairs" block in 2018 was spent excavating two features (Features 11 and 12) that were exposed in the floors of Units 4 and 6 at the end of the 2017 field season. Feature excavations are described in detail in the following chapter.

Downstairs

Work in the "downstairs" portion of the site in 2018 was conducted with three goals: (1) to continue the process of straightening and stabilizing the vertical exposure; and (2) to collect more data about the kinds and ages of cultural materials in the upper 2.1 m of deposits at the site; and (3) to salvage discrete cultural features exposed in the machine-cut wall. Excavations were undertaken in a single unit: Unit 13 (Table 5). Unit 13 was a 2 x 2 m unit that was placed to expose Feature 3 (a pit feature exposed in the irregular machine-cut profile) in plan.

Levels 1 and 2 of Unit 13 were excavated as natural levels, removing zones 1 (upper plowzone) and 2 (lower plowzone), respectively. Plow scars were clearly evident at the base of Zone 2. Level 3 was excavated to about 96 cmbd in order to remove the plow scars and get securely below the plowzone.

Figure 11. Block excavations in progress during the 2018 field school. Unit 12 is in the foreground; Unit 5 is in the back corner. Backdirt remains in place in Units 4 and 6 to protect the features exposed in 2017.

Table 5. Summary of level excavations in the downstairs portion of 38FA608 (2018).

Unit	Level	Depth (cmbd)	Elevation (m on site grid)	Excavation Method	Zone
13	1	Surf.-77	Surf.-501.47	Shoveled/troweled and screened ¼”	1 (upper plowzone)
	2	77-89	501.47-501.35	Shoveled/troweled and screened ¼”	2 (lower plowzone)
	3	89-96/101	501.35-501.28	Shoveled/troweled and screened ¼”	3-4
	4	96-108	501.28-501.16	Shoveled/troweled and screened ¼”	3-4
	5	108-120	501.16-501.04	Shoveled/troweled and screened ¼”	3-4
	6	120-130	501.04-500.94	Shoveled/troweled and screened ¼”	3-4
	7	130-140	500.94-500.84	Shoveled/troweled and screened ¼”	3-4/5
	8	140-150	500.84-500.74	Shoveled/troweled and screened ¼”	5
	9	150-160	500.74-500.64	Shoveled/troweled and screened ¼”	5
	10	160-170	500.64-500.54	Shoveled/troweled and screened ¼”	5
	11	170-180	500.54-500.44	Shoveled/troweled and screened ¼”	5
	12	180-190	500.44-500.34	Shoveled/troweled and screened ¼”	5
	13	190-200	500.34-500.24	Shoveled/troweled and screened ¼”	~7
	14	200-210	500.24-500.14	Shoveled/troweled and screened ¼”	8/14
	15	210-220	500.14-500.04	Shoveled/troweled and screened ¼”	8/14
	16	220-230	500.04-499.94	Shoveled/troweled and screened ¼”	8/14
	17	230-250	499.94-499.74	Shoveled/troweled and screened ¼”	8/14

The top of Feature 3 began to be discernible at about 105 cmbd and was well-defined at about 107 cmbd. Level 4 was halted at 108 cmbd so that Feature 3 could be documented and removed (see next chapter).

Following the removal of Feature 3, Level 5 of Unit 13 was excavated to a depth of 120 cmbd. Excavation of this level resulted in the recovery of two Savannah River projectile points (FS 1619 and FS 1633) n situ at depths 7-11 cm below the depth of definition of Feature 3 (i.e., at about 501.1-501.06 m in elevation on the site grid) (Figure 12). An amorphous zone of relatively dark sediment was apparent at the base of Level 6, originating at an elevation comparable to that of the upper portion of the corner of Feature 4 (about 125 cmbd; 500.99 m on the site elevation grid). A third Savannah River point (FS 1682) was piece-plotted within this dark zone at 128 cmbd (500.96 m on the site elevation grid). The dark sediment was removed as a single zone in level 7. At the base of level 7, a dark, ovoid stain was discerned within a larger, more indistinctly discolored area. The ovoid stain was designated Feature 17 (see next chapter). Feature 17 was removed by bisecting the feature along a line roughly parallel with the edge of the vertical cut. The discolored sediment zones around the feature were removed separately and screened through ¼" mesh. One of those zones (Zone A) contained a fourth Savannah River point (FS 1691).

Figure 12. One of several Savannah River points recovered *in situ* from Unit 13.

Two possible postmolds (PH 13-1 and PH 13-2) were discerned at 150 cmbd (the base of level 8) following the removal of Zone D (Figure 13). Cross-sectioning the possible postmolds revealed that both were shallow. While neither could be definitively demonstrated to be a postmold, a cultural origin could not be ruled out. Given their proximity to clearly cultural features (i.e., Feature 4) and their possible association with a cultural zone containing Savannah River points, the stains may have been Late Archaic postmolds.

Levels 9 through 16 of Unit 13 were removed as arbitrary 10 cm levels. Level 17 was 20 cm thick. No discrete cultural deposits were encountered originating below level 8. A Middle Archaic Guilford point (FS 1814) was recovered from level 16, and a Morrow Mountain point (FS 1816) was recovered from level 17. Two additional, unidentified points were recovered – one from level 13 (FS 1809) and one from level 17 (FS 1815).

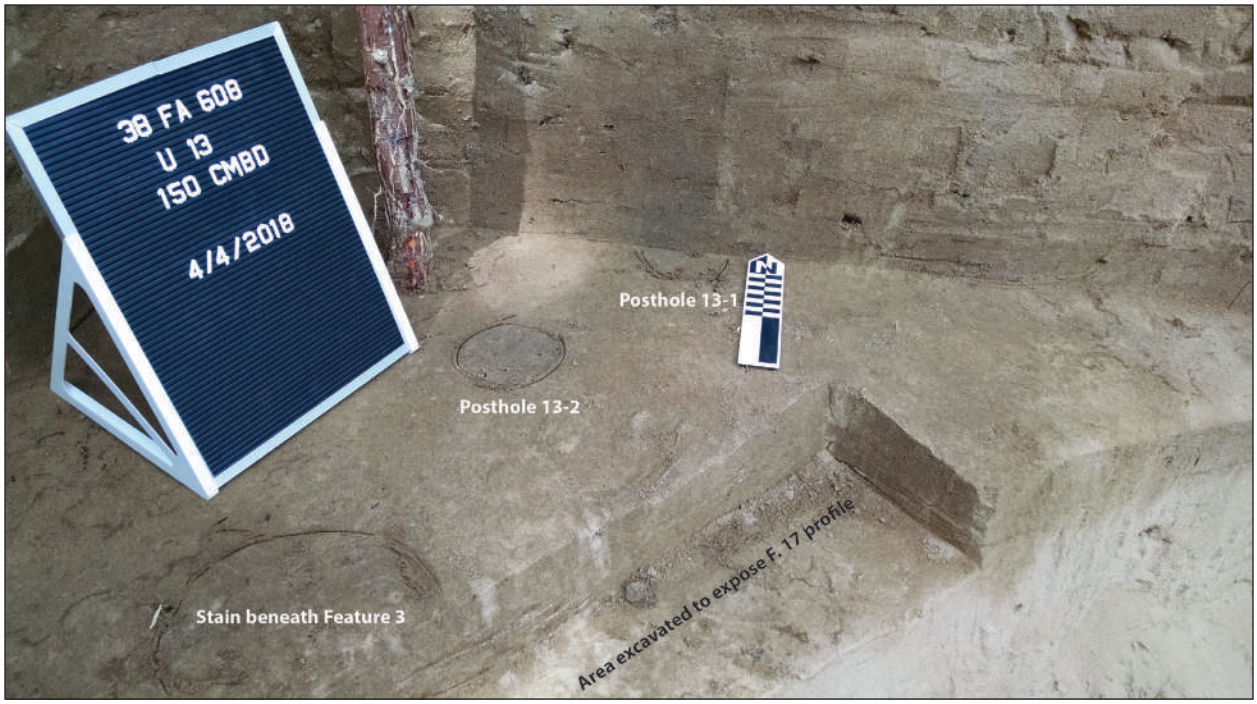


Figure 13. Excavations in progress in Unit 13 showing possible postholes.

2018 Trenching

Three backhoe trenches were excavated within the boundaries of 38FA608 during the course of the Big Broad Trenching project. The goal of that project was to systematically assess the depth and nature of buried archaeological deposits present with the Dorn Levees, a series of alluvial deposits situated along a 1.6 km stretch of the Broad River in Fairfield County, South Carolina. Site 38FA608 is situated on one of those deposits. The project was supported by an internal grant from the University of South Carolina and facilitated by significant support from the Heritage Trust Program of the South Carolina Department of Natural Resources.

Two trenches (Trench 1 and Trench 4) were excavated near the southern and northern boundaries of the site to investigate the nature of buried archaeological/natural deposits in those areas. Profiles of those trenches are showin in Figures 14 and 15. The third trench was excavated near the "downstairs" excavation area in order to gather information about the nature of the deep deposits at the site (Figure 16)

These backhoe trenches were excavated to quickly gather basic information about the presence and depth of buried archaeological deposits across a large area. One wall of each of trench was cleaned and documented (photographed and drawn/described). Samples of charcoal and artifacts were collected when possible. Generally, sediments were not screened. All trenches were backfilled after documentation. A GPS receiver was used to map trench locations. Fieldwork was completed in May of 2018.

South Trench (Trench 1)

Trench 1 was excavated near the southern boundary of 38FA608 as currently recorded, roughly perpendicular to the long axis of the landform. To be clear, the southern boundary of the site is defined by a property boundary: the site almost certainly continues to the south.

Trench 1 revealed the presence of buried deposits in the southern portion of 38FA608. Cultural materials were observed in situ below the plowzone at depths of up to 75 cm below surface. Lamellae were present in the lowest zone exposed in the profile (Figure 14)

Big Broad Trenching Project
Trench 1
North Wall Profile
5/28-30/2018
CEH, JAL, WKB, DSM

Zone A Sandy loam; 10YR 3/6.

Zone B Sandy loam; 10YR 3/4.

Zone C Sandy loam; 10YR 3/4 mottled with 10YR 4/4.

Zone D Sandy loam;10YR 4/4 mottled with 10YR 5/4 sandy loam;

Zone E Sandy loam; 10YR 54; lamellae present (becoming more pronounced with depth).

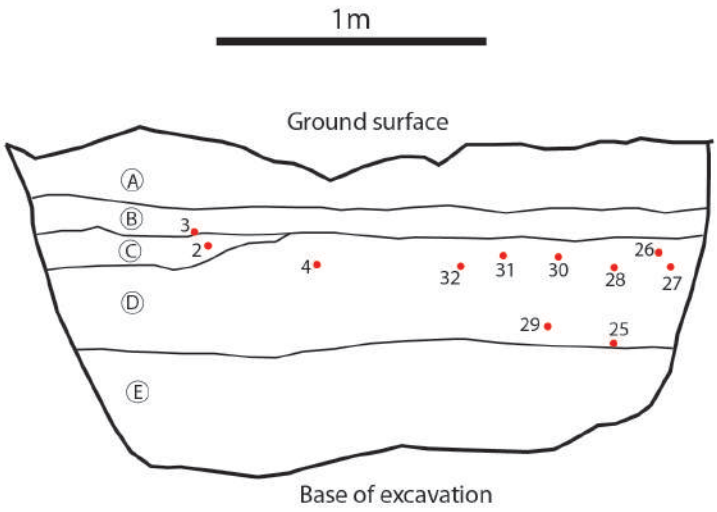


Figure 14. Profile of Trench 1, excavated near the southern boundary of 38FA608. (Note: FS numbers are particular to the Big Broad Trenching project).

Big Broad Trenching Project
Trench 4
South Wall Profile
5/28/2018
CEH, JAL, AAW

Zone A 10YR 3/3 sandy loam; diffuse boundary with Zone B.; FS 74 = artifacts from this zone.

Zone B 10YR 4/3 sandy loam; this is the zone of highest artifact density (FS 75).

Zone C 10YR 4/3 sandy loam.

Zone D 10YR 4/2 sandy loam; faint, continuous lamellae present (~0.5 cm thick, spaced 5-8 cm apart); FS 76 = artifacts from this zone.

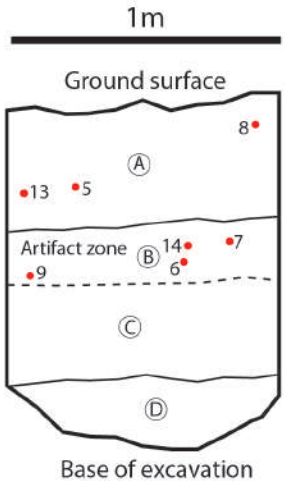


Figure 15. Profile of Trench 4, excavated near the northern boundary of 38FA608. (Note: FS numbers are particular to the Big Broad Trenching project).

Big Broad Trenching Project
Trench 25
North Wall Profile
6/1/2018
AAW

Zone A 10YR 5/3 coarse sand; loose; continuous lamellae ~1-2 cm thick, 3-8 cm apart.

Zone B 10YR 4/3 coarse sand; loose; no inclusions or lamellae; coundary with Zone C is abrupt and regular.

Zone C 10YR 4/4 sandy clay loam; compact; proinent mottles of 10YR 5/3 ringed with 10YR 3/6; mottles show up as irregular vertical blobs ~8-16 cm long and 3-6 cm wide; boundary with Zone D is abrupt.

Zone D Coarse sand with lamellae; 10YR 4/6 at top, 10YR 5/4 at bottom; lamellae are continuous, ~0.5-1 cm thick, and 6-12 cm apart; boundary with Zone E is abrupt.

Zone E1 10YR 3/4 sandy clay loam; relatively high clay content, but not extremely compact; few mottles of 10YR 5/4 (probably root/insect intructions).

Zone E2 10YR 5/4 sand; boundary between Zone E1 and Aone E2 is difuse, occuring over ~10 cm.

Zone F 10YR 5/4 medium sand; loose; no lamellae.

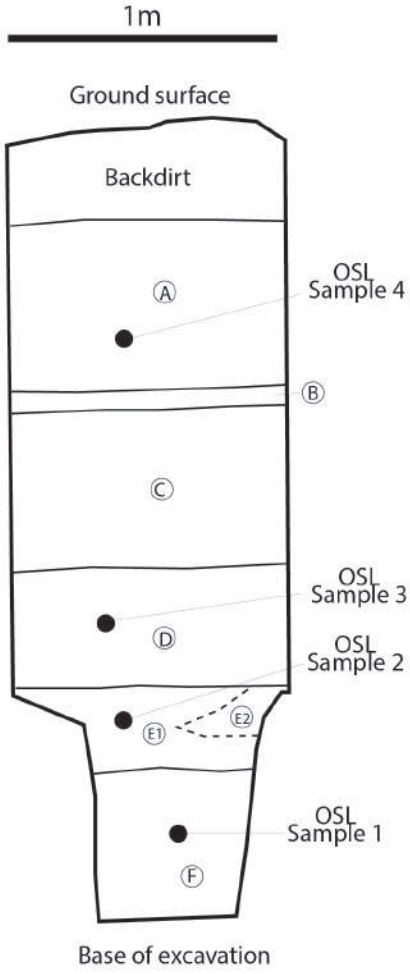


Figure 16. Profile of Trench 25, excavated adjacent to Unit 11 (see Figure 1). (Note: FS numbers are particular to the Big Broad Trenching project).

North Trench (Trench 4)

Trench 4 was excavated near the northern boundary of 38FA608 as currently recorded, roughly perpendicular to the long axis of the landform. The northern boundary of the site is defined by the northern terminus of the raised landform within which 38FA608 is situated.

As in Trench 1, Trench 4 revealed the presence of buried cultural materials in situ at depths of up to 75 cm below surface. No clear plowzone was evident in the trench profile. Faint, continuous lamellae were present in the lowest sediment zone exposed in the profile (Figure 15).

"Downstairs" Trench (Trench 25)

Trench 25 was excavated in the "downstairs" portion of 38FA608, just to the east of the Unit 11. The trench was excavated to the maximum reach of the bucket, with a final depth of about 2.9 m below the existing surface.

The profile of Trench 25 revealed a sequence of six major sediment zones, only the upper three of which had been previously investigated with the excavation of Unit 11. No cultural materials were observed in the exposed profile. An unsystematic sample of the sand from the lowest zone (Zone F) was screened through ¼" mesh – no artifacts were present. Samples of sand for OSL dating were obtained from Zones F, E, D, and A. At the time of this writing, only the Zone F sample has been dated (see Chapter 5).

Chapter 3

Feature Descriptions

By of the end of the 2018 field season, feature numbers had been assigned to eighteen subsurface anomalies encountered during excavations at 38FA608. Some of these features have been excavated as of this writing, and some have not. The statuses of identified features as of the end of the 2018 field season are summarized in Table 6.

Feature 1

Feature 1 is a concentration of lithic debris exposed by the original machine excavation into 38FA608 (Figure 17). Based on what was visible in the profile and what was documented during the excavation of Units 1 and 2, Feature 1 appears to be a Middle Archaic (Guilford-age) deposit of chipping debris. An unknown amount of the deposit was removed by the original machine excavation that exposed the deposit in profile. Much of the quartz debris recovered from the slump in Profile segments A and B was probably associated with this feature (or related concentrations in Zone 7).

Feature 1 was excavated in conjunction with Units 1 and 2, which were placed to remove irregularities

Table 6. Status of features encountered at 38FA608 (2015-2018).

Feature	Unit(s)	Status	Definition Elevation (m on site grid)	Description	Age
1	1, 2	Excavated	500.38	Chipping debris deposit	Middle Archaic
2	9	Excavated	500.38	Possible shallow pit	Middle Archaic
3	13	Excavated	501.16	Pit	Late Archaic/Woodland
4	13	Partially excavated	500.99	Basin with FCR	Late Archaic
5	-	Not excavated	500.99	Basin with FCR	Late Archaic
6	6	Excavated	501.49	Pit	Woodland
7	3, 5	Partially excavated	501.49	Pit	Woodland
8	5	Excavated	501.49	Posthole	Historic
9	1	Not excavated	501.43		
10	1	Not excavated	501.58		
11	6	Excavated	501.24	Pit	Middle Woodland
12	4	Excavated	501.24	Basin with FCR	Late Archaic
13	4, 12	Not excavated	501.24		
14	12	Excavated	501.67	Posthole	Historic
15	12	Not excavated	501.67		Historic
16	12	Not excavated	501.54		Woodland (?)
17	13	Excavated	500.99		Late Archaic

in the machine cut wall and expose Feature 1 in plan. Figure 18 shows the excavation of Units 1 and 2 in progress; Figure 19 shows Feature 1 exposed in plan view.

Materials associated with Feature 1 were removed as piece plots (Figure 20). In total, 367 pieces of quartz

Figure 17. Profile Segment A showing Feature 1, visible as a cluster of white quartz chipping debris within Zone 7.

Figure 18. Excavation of Units 1 and 2 in progress (May 2016). Feature 1 is visible in the wall below the excavated floor marked by the yellow folding ruler.

Figure 19. Chipping debris exposed *in situ* as Feature 1 is excavated (May 2016).

debris were removed from Feature 1. The majority of these (*n* = 243) were removed during excavation of the feature via Units 1 and 2. A large number (*n* = 113) were removed when the deposit was first documented in the profile: it was evident when the profile was drawn that the soft sediments containing Feature 1 were being actively eroded through exposure to the elements and that whatever was left of Feature 1 was in danger of collapse. It is likely that much of the quartz debris recovered from the slumped sediments at the base of machine cut were originally part of Feature 1. It is also probable that some lithic debris associated with Feature 1 remains unexcavated beyond the western boundary of Units 1 and 2.

Feature 2

Feature 2 was a possible pit feature exposed by the original machine excavation into 38FA608 (Figure 21). During documentation of the irregular profile, Feature 2 was a slightly darker area within Zone 7 that seemed to extend several centimeters below Zone 7. Feature 2 was not well-defined and could not be reliably discriminated from Zone 7 during the excavation of Unit 9 in 2017. One piece of charcoal and one piece of fire-cracked rock were collected from the feature as piece-plots when the profile was drawn in 2016.

Feature 3

Feature 3 was a pit feature identified in the irregular profile exposed by the original machine cut into 38FA608. Based on what was exposed in the profile, Feature 3 appeared to be a pit about 65 cm in diameter with a rounded bottom. The top of the feature was difficult to define. The feature appeared to originate in Zone 3.

During the 2018 field school, Unit 13 was placed to expose and excavate whatever remained of Feature 3. The excavators were able to define the outlines of the feature in plan at 108 cmbd (501.16 m on the site elevation grid; the base of level 4 of Unit 13) (Figure 22). Assuming the pit was originally symmetrical, it appeared as though about half the feature remained intact.

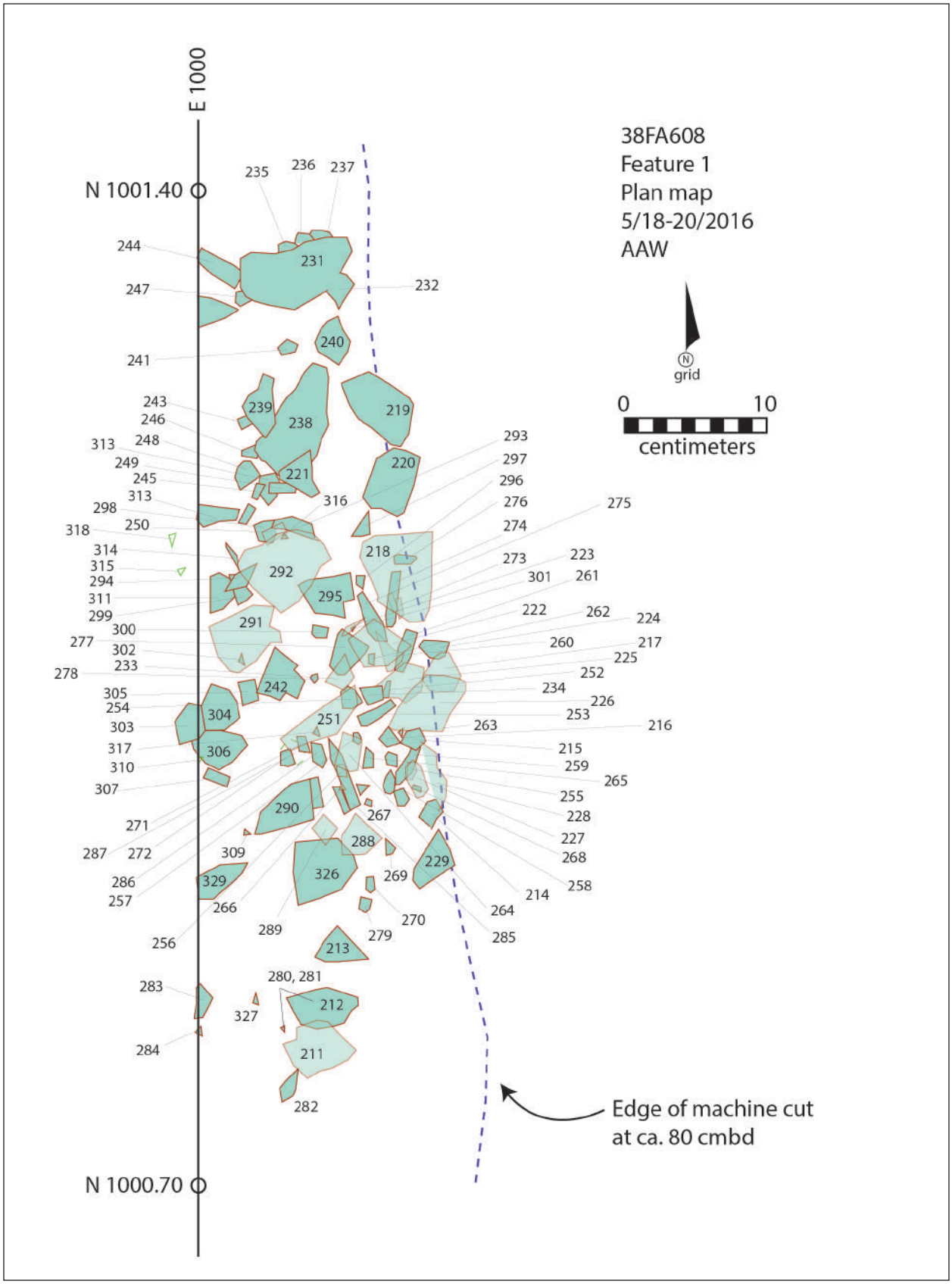


Figure 20. Draft map of piece-plotted chipping debris excavated as Feature 1.

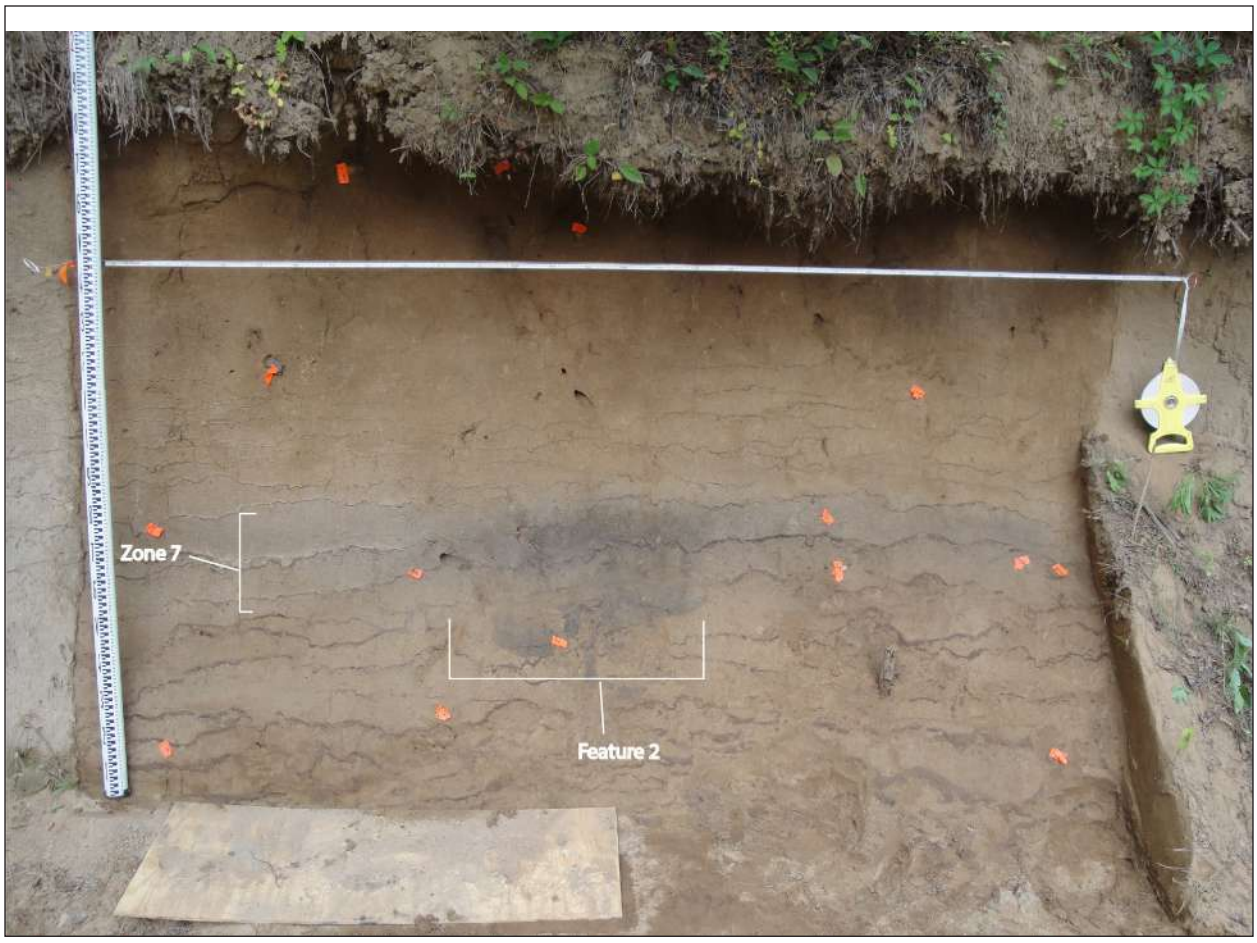


Figure 21. Feature 2 as documented in Profile Segment C of the original machine cut surface.

Feature 3 was defined in plan at 108 cmbd as a round, charcoal-flecked stain approximately 55 cm in diameter. Two zones were discernible. The lighter-colored interior zone was probably the result of a depression in the central portion of the feature being naturally filled with sediment after the darker fill was deposited. Feature 3 originated well below the plowzone and was not truncated by plowing.

The feature was excavated by first removing the inner zone (Zone A) and screening the sediment through ¼" mesh (FS 1553). Approximately 5.5 liters of sediment from Zone B was taken as a flotation sample (FS 1580). The remainder of the sediment from Zone B was screened through ¼" mesh (FS 1581). The feature maintained a consistent shape and did not appear to have been substantially damaged by roots, burrows, or other natural disturbances. The base of the feature was at 151 cmbd (500.73 m on the site elevation grid).

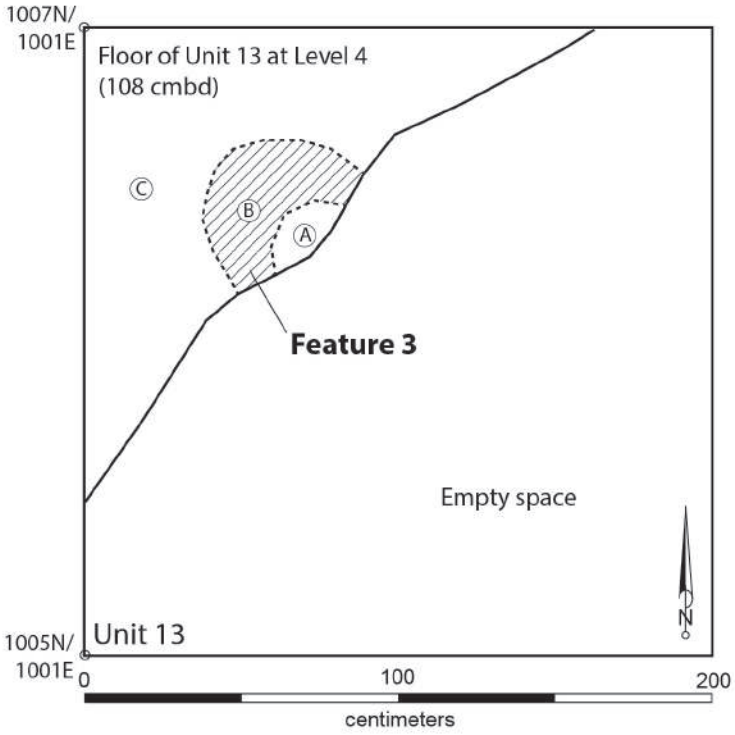
Feature 3 appears to have originally been a round pit about 55 cm in diameter and 43 cm deep. Materials recovered from the feature include light densities of chipped stone debris, fire-cracked rock, pebbles, and burned clay. No diagnostic artifacts were recovered. Botanical remains recovered from the flotation samples have yet to be analyzed.

Based on its stratigraphic position, Feature 3 probably dates to sometime in the Late Archaic or Early Woodland period.

Feature 4

Feature 4 is a pit feature exposed by the original machine excavation into 38FA608 (see Figure 3). In the

38FA608
Feature 3
RLG, DFL, AAW
3/9/2018



Zone A Feature interior fill zone; 10YR 3/6 sandy loam; no charcoal.

- screened 1/4" (FS 1553)

Zone B Feature fill; 10YR 2/2 sandy loam; loose; common flecks of charcoal < 4 mm; common mottles of 10YR 3/4; boundary with matrix is 3-8 cm.

- flot. sample (FS 1580)
- screened 1/4" (FS 1581)

Zone C Matrix; 10YR 3/4 sandy loam.

Feature 3 exposed in plan and profile

Figure 22. Feature 3 in plan and profile.

original machine-cut profile, the cross-section of Feature 4 is that of a shallow pit extending approximately 90 cm in width and approximately 30 cm in depth. The feature was defined by the color of its fill (darker than the surrounding matrix) and a discontinuous layer of fire-cracked rock that appears to line the bottom of the original basin. The edges of dark fill of Feature 4 are diffuse and appear to extend beyond the original limits of the feature.

A small portion of what remained of this feature (the southernmost portion) was excavated in 2018 in conjunction with Unit 13 (Figure 23). Large pieces of fire-cracked rock were piece-plotted as they were removed, and a flotation sample (FS 1685) was taken from the exposed portion of the feature's interior. The remainder of the feature has not yet been excavated.

Materials recovered from the excavated portion of Feature 4 include a moderate amount of fire-cracked rock and a single piece of chipped stone debris. No diagnostic artifacts have been recovered thus far. Botanical remains recovered from the flotation samples have yet to be analyzed.

Based on its stratigraphic position, Feature 4 probably dates to the Late Archaic period. It appears similar in size and shape to Features 5 and 12.

Feature 5

Feature 5 is a pit feature exposed by the original machine excavation into 38FA608 (see Figure 3). A portion of the feature detached from the wall between the documentation of the profile and May of 2016. In profile, Feature 5 appears generally similar to the nearby Feature 4 in terms of its size, shape, and contents. No portion of Feature 5 has been excavated. Based on its stratigraphic position, Feature 5 probably dates to the Late Archaic period. It appears similar in size and shape to Features 4 and 12.

Feature 6

Feature 6 was a dark, charcoal-flecked stain encountered in Level 6 of Unit 6. It was recognized and defined at 75 cmbd (501.49m on the site elevation grid; the base of level 6 of Unit 6). In plan, Feature 6 was

Figure 23. Excavation of the portion of Feature 4 in Unit 13.

a circular stain approximately 38 cm in diameter. Two concentric zones were discerned: a dark (10YR 2/2-3/4) inner zone approximately 20-25 cm in a diameter ringed by a lighter (10YR 3/4) outer zone. Charcoal was present in both zones but was more plentiful in the inner zone. The transition between the inner and outer zones was diffuse, occurring across 2-3 cm. The boundary between the outer zone and the surrounding matrix was also diffuse.

Feature 6 was excavated during the 2017 field school. It was cross-sectioned by removing the southern half. Fill removed from the inner zone was screened through ¼" mesh – no cultural material other than charcoal was present. Fill from the outer zone was also screened through ¼" mesh (FS 623). A 46 x 25 cm block of matrix (i.e., level 7 of Unit 6) was removed around the southern half of the feature to expose the edges of the feature in profile (FS 624). The excavation of matrix extended to 90 cmbd (the base of level 7 of the unit).

Both zones visible in plan were also visible in the profile of the feature. The inner zone extended about 7-8 cm below the depth of definition. The outer zone extended about 11 cm below the depth of definition. Both zones had sloping sides and rounded bottoms. Following documentation of the profile, the northern half of the feature was removed. Fill from the inner zone was taken as a flotation sample (FS 625). Fill from the remaining outer zone of the feature was screened through ¼" mesh (FS 626).

No diagnostic artifacts were recovered from the feature. Materials recovered include light densities of chipped stone debris and fire-cracked rock and a moderate amount of burned clay. Botanical remains recovered from the flotation samples have yet to be analyzed.

Feature 6 originated above the Terminal/Late Archaic deposits encountered in the block, and thus probably dates to the Woodland period. The feature was recognized higher in Unit 6 than Feature 11, which was radiocarbon dated to the Middle Woodland period. Feature 6 was first discerned at the interface of Zones 2 and 3, suggesting it may have been truncated by the plowing of Zone 2.

It is likely that the inner zone of Feature 6 represents the original pit. The outer zone appears to have been created through small scale bioturbation of the feature and its surrounding matrix, presumably by insects, worms, and small roots.

Feature 7

Feature 7 was dark, charcoal-flecked stain encountered in Level 5 of Unit 5. It was recognized and defined at 75 cmbd (501.49m on the site elevation grid; the base of level 5 of Unit 6). The feature extends past the north wall of Unit 5 (i.e., into Unit 3). The portion of the feature in Unit 3 has not yet been exposed.

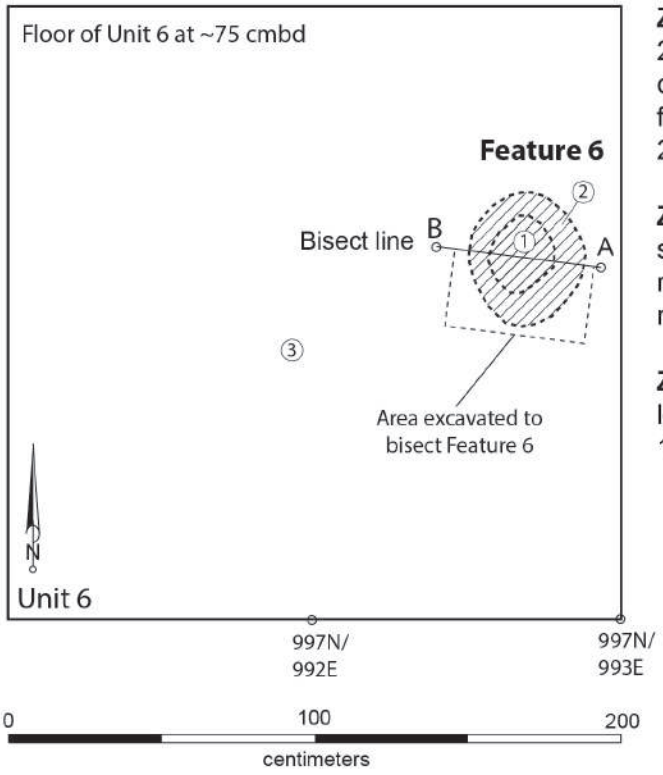
In plan view, the exposed portion of Feature 7 contained two concentric zones: a darker (10YR 3/4) inner zone with common flecks of charcoal and a slightly lighter (but also 10YR 3/4) outer zone that contained less charcoal. The boundaries between these zones and between the outer zone and the matrix were diffuse.

The two zones in Feature 7 were removed separately and screened through ¼" mesh (FS 824 and 827) during the 2017 field school. This resulted in the feature being exposed in profile in the north wall of Unit 5. In profile, the feature appeared to be a basin-shaped pit about 7-8 cm in depth. The two zones visible in plan could not be reliably discerned in profile. The feature appears to have been truncated by tilling of the lower plowzone (Zone 2).

Materials recovered from the southern half of Feature 7 include light amounts of chipped stone debris, burned clay, and fire-cracked rock.

Like Feature 6, with which it appears to share general characteristics of size, shape, and contents, Feature

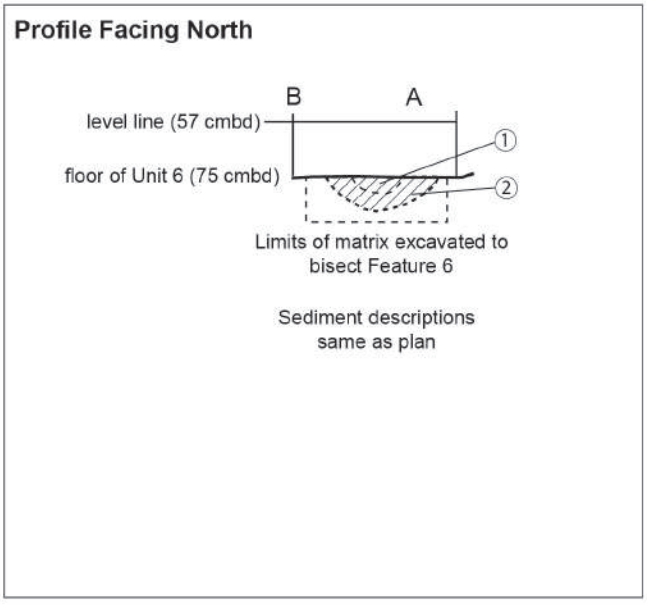
38FA608
Feature 6
DSM, KAC, AAW
2/24/2017



Zone 1 Inner feature fill; 10YR 2/2-3/4 sandy loam; moderately compact; light/moderate charcoal flecks < 50 mm; boundary with Zone 2 is 2-3 cm).

Zone 2 Outer feature fill; 10YR 3/4 sandy loam; moderately compact; rare charcoal flecks < 50 mm; faint mottles .

Zone 3 Matrix; 10YR 3/4 sandy loam with mottles (0.5-2 cm) of 10YR 4/4.



Feature 6 plan view prior to excavation

Figure 24. Feature 6 in plan and profile.

Figure 25. Southern portion of Feature 7 exposed in plan view in Unit 5.

7 probably dates to the Woodland period.

Feature 8

Feature 8 was a light-colored, circular stain encountered in Unit 5. It was first formally noted as large mottle during excavation of Level 5 at the base of the second plowzone but was visible during the previous level. It was given a feature designation at the base of level 6 (75 cmbd; 501.49m on the site elevation grid). In plan view at this depth, it was a well-defined, circular stain of 10YR 4/6 (lighter than the surrounding matrix) (Figure 26).

The north half of the feature was removed to expose a cross-section. In profile the feature had straight, well-defined sides that extended more than 13 cm below the depth of definition. The fill was screened through ¼" mesh (FS 1120).

The size and shape of this feature, as well as its light color and apparent origination above the lower plowzone, are consist with a historic-era posthole.

Feature 9

Feature 9 is a small, basin-shaped stain exposed by the original machine excavation into the site. The stain extends south of the boundary of Unit 1 and was not defined until the western wall of Unit 1 was profiled during the 2017 field school (Figure 27).

In profile, the feature appears to be a shallow pit approximately 30 cm wide and 12 cm deep. It originates at the base of the lower plowzone (Zone 2). The fill of the feature is dark (10YR 3/2) sediment containing moderate amounts of charcoal. The boundary between the feature and its matrix is approximately 2-3 cm.

Feature 9 appears comparable to Features 6 and 7 in terms of its size, shape, fill, and stratigraphic position. Feature 9 presumably dates to the Woodland period. A piece of charcoal was collected from the exposed profile of the feature. Feature 9 remains unexcavated.

Figure 26. Feature 8 in plan in Unit 5.

Feature 10

Feature 10 is a probable pit feature partially exposed in the western wall of Unit 1 (see Figure 27). The exposed portion of the feature is a dark (10YR 3/3), charcoal-flecked stain with a sloping wall that appears to originate at the interface between Zones 3-4 and Zone 5. Feature 10 remains unexcavated.

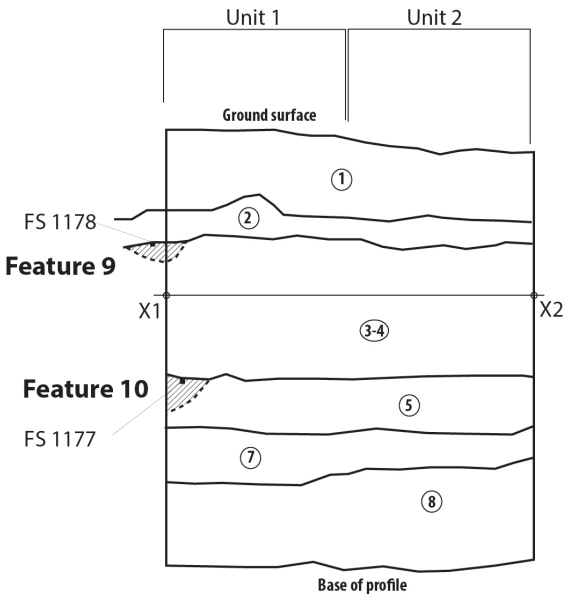
Feature 11

Feature 11 is a pit feature exposed in plan by the excavation of Unit 6 in the "upstairs" excavation block. The feature was originally recognized in the floor of level 9 (100 cmbd; 501.24 m on the site elevation grid) near the close of the 2017 field school. It was covered with landscape fabric and protected by backfilling of the excavation block until it could be re-exposed, documented, and excavated during the 2018 field school season. It is likely that the feature originated higher than the depth at which it was defined.

Feature 11 was defined in plan view as a circular stain approximately 55-58 cm in diameter. While the fill of the feature was slightly darker than the surrounding matrix, it was the relative abundance of charcoal flecks in the feature fill and the relatively low densities of artifacts compared to the surrounding matrix that allowed the limits of the feature to be discerned.

The feature was excavated by bisecting the feature along its east-west axis, removing the north half to expose a south-facing profile (Figure 28). This was accomplished by excavating an 80 cm x 30 cm rectangular area extending from the bisection line north into the matrix. Feature fill and matrix were kept separate during this excavation, with an effort made to piece-plot artifacts encountered in both the feature and the matrix. This was complicated somewhat by the diffuse boundaries of the feature, which made it difficult to recognize the edges of the feature as excavation progressed downward. The excavation of the north half of Feature 11 took several days. As the feature was the lowest spot in the excavation block, it was protected with landscape fabric and backfilled between each excavation day to protect it from water damage.

The south profile of Feature 11 shows it to be a pit with a rounded bottom and relatively straight sides (Figure 29). The feature extended 55 cm below the depth of definition, with a final depth of 155 cmbd



Zone 1 (upper plowzone) 10YR 3/6 sandy loam; moderately compact; common linear (vertical) mottles near the interface with Zone 2 (mottles are 10YR 3/3; 205mm in width; 4-5 cm long); fine roots to 5 cm diameter; cap of leaf litter and fine roots = 10 cm thick; more compact than zones below; boundary with Zone 2 is abrupt.

Zone 2 (lower plowzone) 10YR 3/3 sandy loam; less clay than Zone 1; contains small bands of reddish (10YR 5/4) sediment, sometimes at top, bottom, and within zone; reddish bands are ~ 5 mm thick; boundary with Zone 3-4 varies from aprubt to diffuse, sometimes defined by thin band of reddish sediment.

Zone 3-4 10YR 3/4 sandy loam (top) to 10YR 4/3-4/4 sandy loam at base; loose; tap roots 2-4 cm in diameter; faint lamellae start to become visible at about the depth of X1; boundary with Zone 5 based on increase in the number and continuity of lamellae; lamellae are 2-4 cm thick, 5-8 cm apart; around the depth of X1 lamellae are < 10 cm long; lamellae are 20-50 cm long at base of zone; boundary with Zone 5 is 10-20 cm.

Zone 5 10YR 4/4 coarse sandy loam; loose but lamellae help hold sediments together; lamellae are mostly continuous but have been interrupted by intrusions (roots, burrows, etc.); lamellae are 103/3, 2-6 mm thick, 4-7 cm apart; boundary with Zone 7 is 5-8 cm.

Zone 7 10YR 3/4 coarse sandy loam; slightly darker than Zones 5 and 8; lamellae are continuous (2-15 mm thick, ~8-9 cm apart); boundary with Zone 8 is 5-8 cm.

Zone 8 10YR 4/4 coarse sandy loam; lamellae are 3-40 mm thick, 3-8 cm apart, continuous except for intrusions; common fine roots.

Feature 9 10YR 3/2 with moderate charcoal flecks; feature appears to have been plow truncated; boundary with Zone 3-4 is 2-3 cm.

Feature 10 10YR 3/3 with a few flecks of charcoal; boundary with Zone 5 is 2-3 cm.

Figure 27. Profile of west wall of Units 1 and 2 (2017) showing Features 9 and 10.

(500.69 m on the site elevation grid). As in plan, the edges of the feature were somewhat indistinct in profile. There was no evidence of distinct vertical or horizontal zones within the feature.

Approximately 9.5 liters of sediment from the south half of the feature was taken as a flotation sample (FS 1722). The remainder of the sediment from the south half was screened through 1/4" mesh (FS 1781). The feature maintained a consistent shape and did not appear to have been substantially damaged by roots, burrows, or other natural disturbances.

Materials recovered from Feature 11 include chipped stone debris, two unrefined biface fragments, fire-cracked rock, burned clay, and a few small pieces of calcined bone. No ceramic debris was recovered. Botanical remains recovered from the flotation samples have yet to be analyzed. Neither of the bifaces is diagnostic.

Figure 28. Feature 11 with the north half removed.

Feature 11 appears to have originally been a round pit about 58 cm in diameter and 55 cm deep. A sample of carbonized nutshell recovered from the flotation sample returned an uncorrected radiocarbon age of 2230 +/- 20 RCYBP (UGAMS 38512).

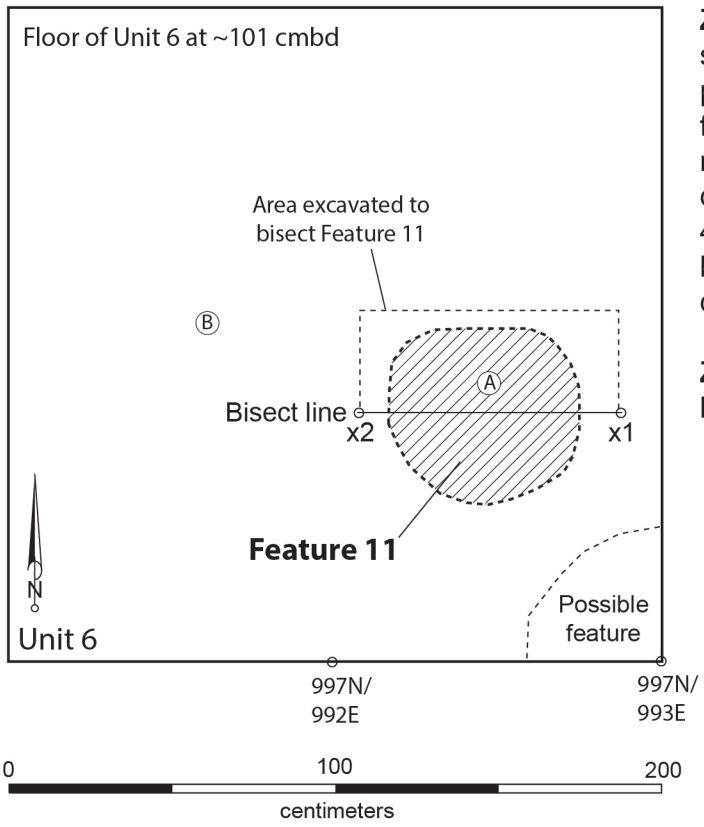
Feature 12

Feature 12 was exposed in plan by the excavation of Unit 4 in the "upstairs" excavation block. The feature was originally recognized in the floor of level 8 (100 cmbd; 501.24 m on the site elevation grid) near the close of the 2017 field school. It was covered with landscape fabric and protected by backfilling of the excavation block until it could be re-exposed, documented, and excavated during the 2018 field school season.

Feature 12 was defined in plan as an oblong, stained area measuring approximately 90 cm by 65 cm (Figure 30). Fire-cracked rock and flecks of charcoal were abundant within the stain. Two concentric zones were discerned a plan view: an inner, darker zone with abundant flecks of a charcoal and an outer, lighter zone with notably less charcoal (but still more than the surrounding matrix).

Feature 12 was excavated by placing a line to bisect the feature across its short axis. The south half of the feature was removed by zone, piece-plotting large artifacts as they were encountered (Figure 31). Based on the size and shape of Feature 12 and the large pieces of fire-cracked rock that were present within it, it was anticipated that the feature would be a shallow basin like those exposed in the machine cut profile (Features 4 and 5). This turned out to be the case, allowing the inner and outer zones of the south half of the feature to be removed without excavating beyond the edges of the feature.

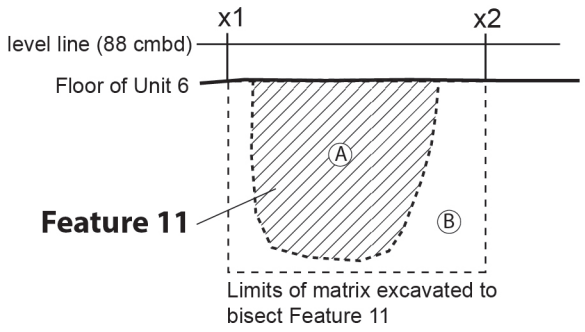
The north profile of Feature 12 shows it to be a shallow basin with a rounded/irregular bottom and steeply sloping sides. It is not clear if the outer zone of the feature (Zone B on the profile drawing) was created when the feature was in use or through later bioturbation. If Zone A is taken as the limits of the feature, Feature 12 was an oblong basin measuring approximately 40 cm x 60 cm in plan with a depth of 14 cm. If Zone A is taken as the limits of the feature, Feature 12 measured approximately 65 cm x 90 cm with a



Zone A Feature fill; 10YR 3/2-3/3 sandy loam; moderate/loose compactness; common/rare charcoal flecks < 2 mm; sparse cultural material visible in plan at depth of definition; common mottles of 10YR 4/3 (irregular, 1-6 cm diameter); boundary with matrix (Zone B) is diffuse (~8-15 cm).

Zone B Matrix; 10YR 3/4-3/6 sandy loam.

Profile Facing South



Zone A Feature fill; 10YR 3/3 sandy loam; moderate/loose compactness; common mottles of 10YR 3/4 (irregular, 1-2 cm diameter); boundary with matrix (Zone B) is diffuse (~3-5 cm).

Zone B Matrix; 10YR 3/4 sandy loam; common mottles of 10YR 3/6 (1-2 cm diameter)

Figure 29. Feature 11 plan and profile drawings.

depth of approximately 19 cm.

Approximately 13 liters of sediment from Zone A in the north half of the feature was taken as a flotation sample (FS 1717). The remainder of the sediment was screened through ¼" mesh. Materials recovered from Feature 12 include chipped stone debris, fire-cracked rock, burned clay, a single unifacial tool, and a small fragment of calcined bone. No ceramic debris was recovered. Botanical remains recovered from the flotation samples have yet to be analyzed.

Feature 11 appears to have originally been a shallow basin, perhaps used for food processing and/or indi-

Figure 30. Photos of Feature 12 prior to excavation (left) and with the southeast half removed (right).

rect heating. A sample of carbonized nutshell recovered from the flotation sample returned an uncorrected radiocarbon age of 3930 +/- 20 RCYBP (UGAMS 38513).

Feature 13

Feature 13 is a possible feature partially exposed in plan view by the excavation of Unit 4 during the 2017 field season (see Figure 1). It is an area of dark sediment defined at the base of level 8 (100 cmbd; 501.24 m on the site elevation grid) just north of Feature 12 and extending past the northern edge of Unit 4. The portion of the stain exposed in Unit 4 appeared to be a portion of an elliptical/circular feature. Unit 12 was placed to the north of Unit 4 during the 2018 field season to fully expose the edges of the feature. Unit 12 did not reach the depth of the feature during the 2018 season, however, and Feature 13 remains undefined and unexcavated.

Feature 14

Feature 14 was a light-colored, circular stain approximately 20 cm in diameter encountered in the northern half of Unit 12. It was defined at 60 cmbd (501.64 m on the site elevation grid). The feature was defined at the base of the upper plowzone and extended into the lower plowzone (Figure 32).

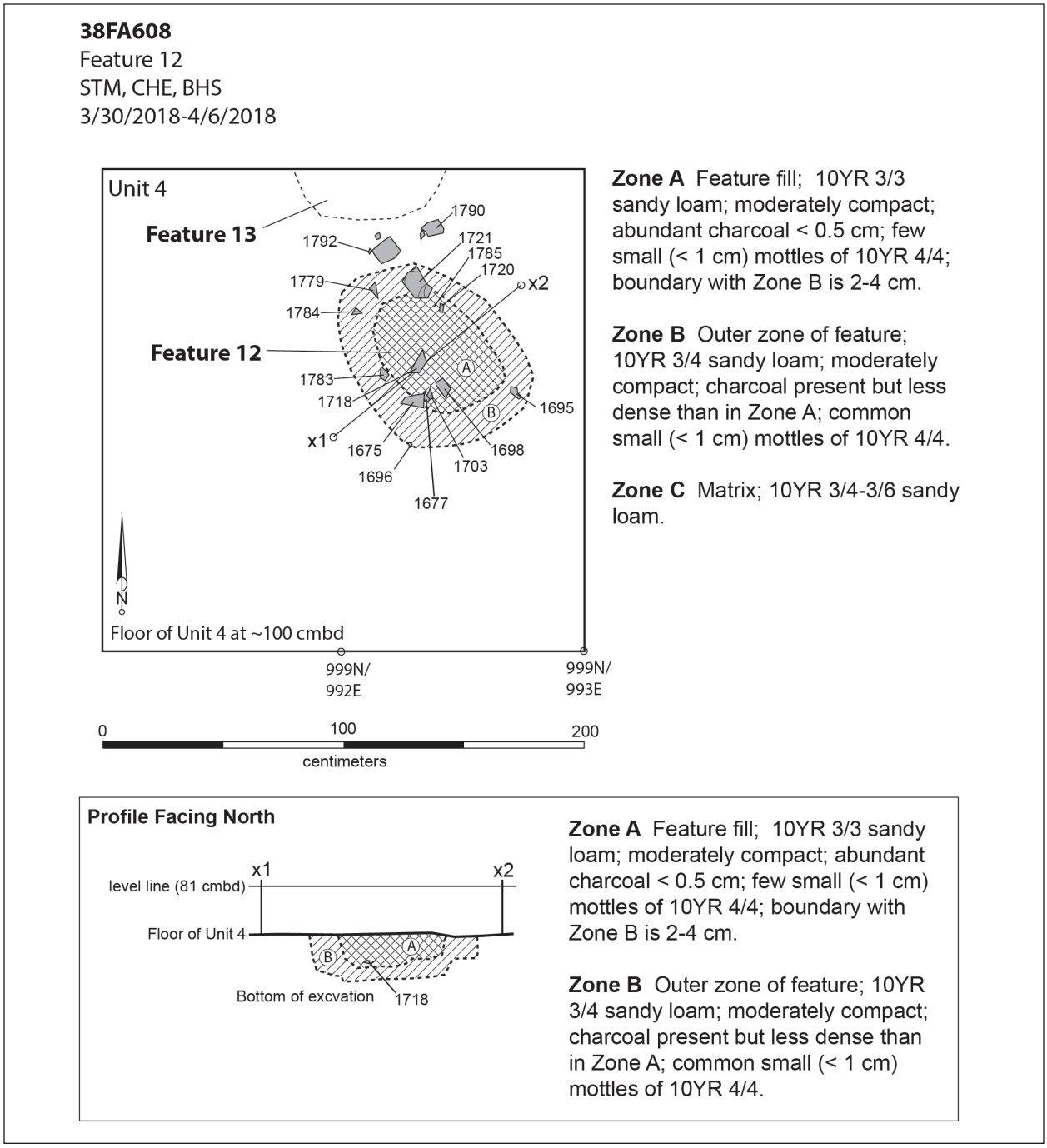


Figure 31. Plan and profile drawings of Feature 12.

The south half of the feature was removed to expose a cross-section. In profile the feature was a shallow (9 cm) pit with sloping sides and a rounded bottom. The fill from all portions of the feature was screened through ¼" mesh (FS 1415). Materials recovered were limited to two prehistoric body sherds and a pebble. The size and shape of this feature, as well as its light color and origination above the lower plowzone, are consist with a historic-era posthole.

Feature 15

Feature 15 is a light-colored stain approximately 18 cm in diameter encountered in the northern half of

Figure 32. Feature 14 with the south half removed.

Unit 12. It was defined at about 60 cmbd (501.64 m on the site elevation grid) at the base of the upper plowzone and was associated with a distinct plow scar that ran north-south across the unit. The stain was still visible at the base of level 4 (approximately 70 cmbd) after the removal of the lower plowzone (Zone 2). The northern half of Unit 12 was not further excavated in 2018 and Feature 15 remains unexplored. The size and shape of this feature, as well as its light color and origination above the lower plowzone, are consist with a historic-era posthole.

Feature 16

Feature 16 is a dark, oblong stain encountered at the base of the lower plowzone in the northern portion of Unit 12. The stain measured approximately 30 cm by 60 cm and extended into the eastern wall of the unit. The northern half of Unit 12 was not further excavated in 2018 and Feature 16 remains unexplored. Given its origination at the base of the lower plowzone, it is likely that Feature 16 is a truncated pit feature or a pocket of unplowed midden.

Feature 17

Feature 17 was poorly-defined feature encountered during the excavation of Unit 13. It was first identified as a dark (10YR 3/4) zone at the base of Level 6 (130 cmbd; 500.94 m on the site elevation grid) adjacent to the area excavated for the removal of Feature 3. A Savannah River point (FS 1682) was plotted within this zone. Unfortunately, the sediment from the dark zone was not screened separately from the sediment from the remainder of the unit at this depth.

At the base of Level 7 (140 cmbd; 500.84 m on the site elevation grid), the core of Feature 17 was an oblong stain measuring approximately 40 cm x 25 cm. The edges of the feature were diffuse and were defined based on the darker color of the interior of the feature, the presence of charcoal flecks, and presence of lamellae in the surrounding matrix. The southwestern edge of the core of the feature abutted the area removed during the excavation of Feature 3. An area of stained sediment lacking charcoal extended from the feature into the north wall of Unit 13.

Feature 17 was excavated by placing a line to bisect the stain along its long axis (Figure 33). The southeast portion of the feature was removed to expose a profile. In profile, the feature was a shallow basin approximately 12 cm in depth (from the depth of definition) with sloping sides and a rounded base. The fill from

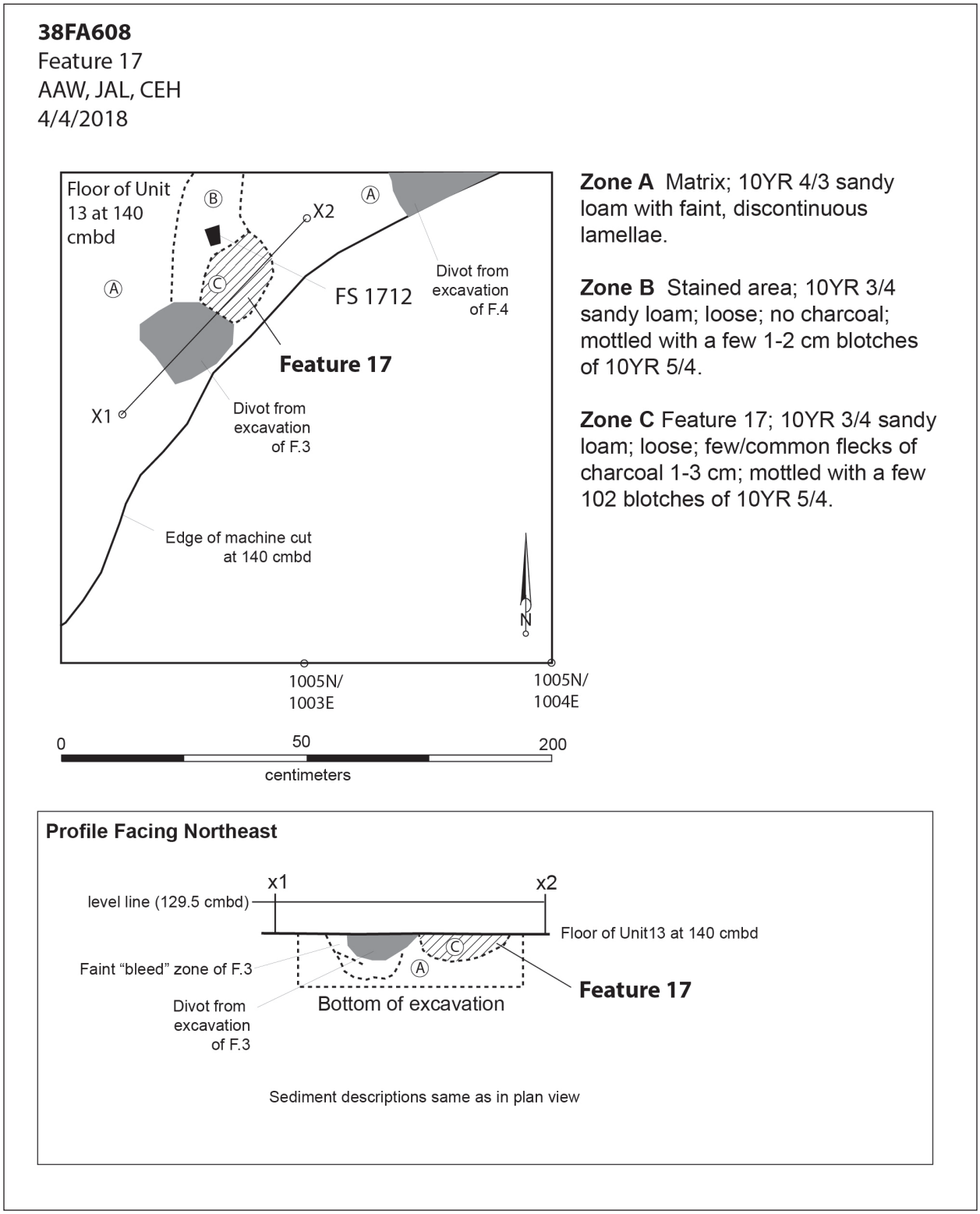


Figure 33. Plan and profile drawings of Feature 17.

both halves of the feature were saved for flotation (FS 1706 and 1710).

Materials recovered from Feature 17 include fire-cracked rock, burned clay, and a single piece of chipped stone debris. No ceramic debris was recovered. Botanical remains recovered from the flotation samples have yet to be analyzed.

The presence of a Savannah River point in the poorly-defined upper portions of the feature (as well as the presence of additional Savannah River points in the levels immediately above the feature) suggests a Late Archaic age. Feature 17 appears to have originated at least 20 cm below Feature 3, suggesting it predates that feature.

Chapter 4

Materials Recovered

The materials recovered from 38FA608 have only undergone basic processing and cataloging at the time of this writing: no comprehensive analysis has been performed on any part of the assemblage.

Initial classification of the materials from 38FA608 has been primarily organizational in nature rather than analytical. Recovered items were separated into one of five classes and various subclasses (Table 7). The keys used for cataloging lithic and ceramic items are shown in Figures 34 and 35. The catalog of materials from 38FA608 was combined with the FS log within a Microsoft Access database. A current catalog of the materials will be provided online as a companion to this document. Note that detailed analysis of the materials from 38FA608 in the future will certainly result in changes to the catalog as errors are corrected and the classification scheme is altered or elaborated.

Table 7. Basic classes and subclasses used to catalog artifacts from 38FA608.

Class	Subclasses
Bone	-
Ceramic	Prehistoric, Historic
Glass	-
Lithic	Chipped Stone, Ground Stone, Other
Metal	-
Other	Burned Clay, Charcoal, Sediment Sample

The purpose of this chapter is to provide a basic accounting of the cultural materials recovered thus far. Raw artifact counts are discussed by class and by provienience. The hafted bifaces comprising a primary means of understanding the sequence of cultural deposits at the site are discussed in greater detail. The ceramic assemblage is very briefly described.

Artifact Counts by Class and Provenience

Raw artifact counts by class and subclass are provided in Table 8. The most plentiful kinds of artifacts by far are lithic debitage, fire-cracked rock, and burned clay.

Bone

The bone assemblage recovered from 38FA608 thus far (Table 9) is limited to small, calcined fragments. Bone fragments were recovered both while screening the sediment from unit/level excavations and while piece-plotting. The bone assemblage identified from features includes just four pieces of bone from Features 11 (n = 3) and 12 (n = 1). No attempts have been made thus far to identify the bone as to taxon. It is probable that the small size and deteriorated condition of most of the bone fragments will prevent confident attribution of most or all of the pieces to specific species or genera.

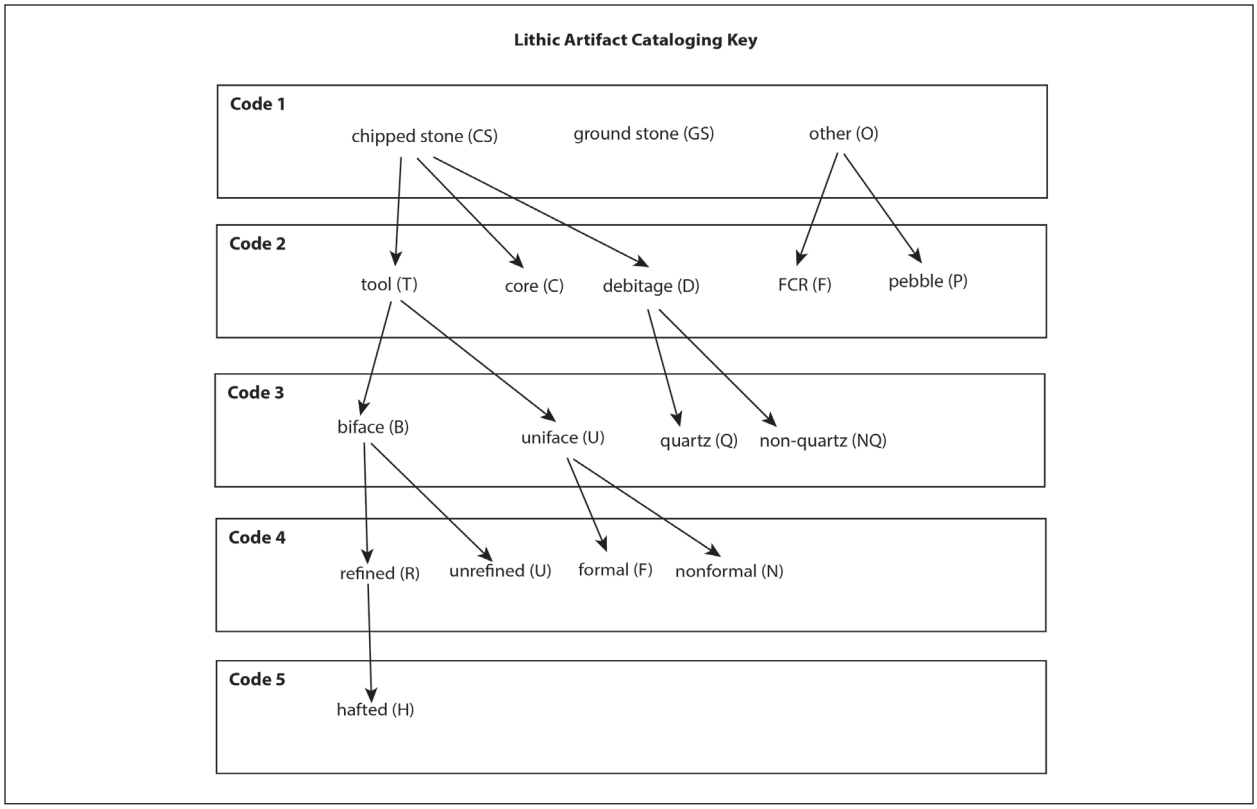


Figure 34. Lithic artifact cataloging key.

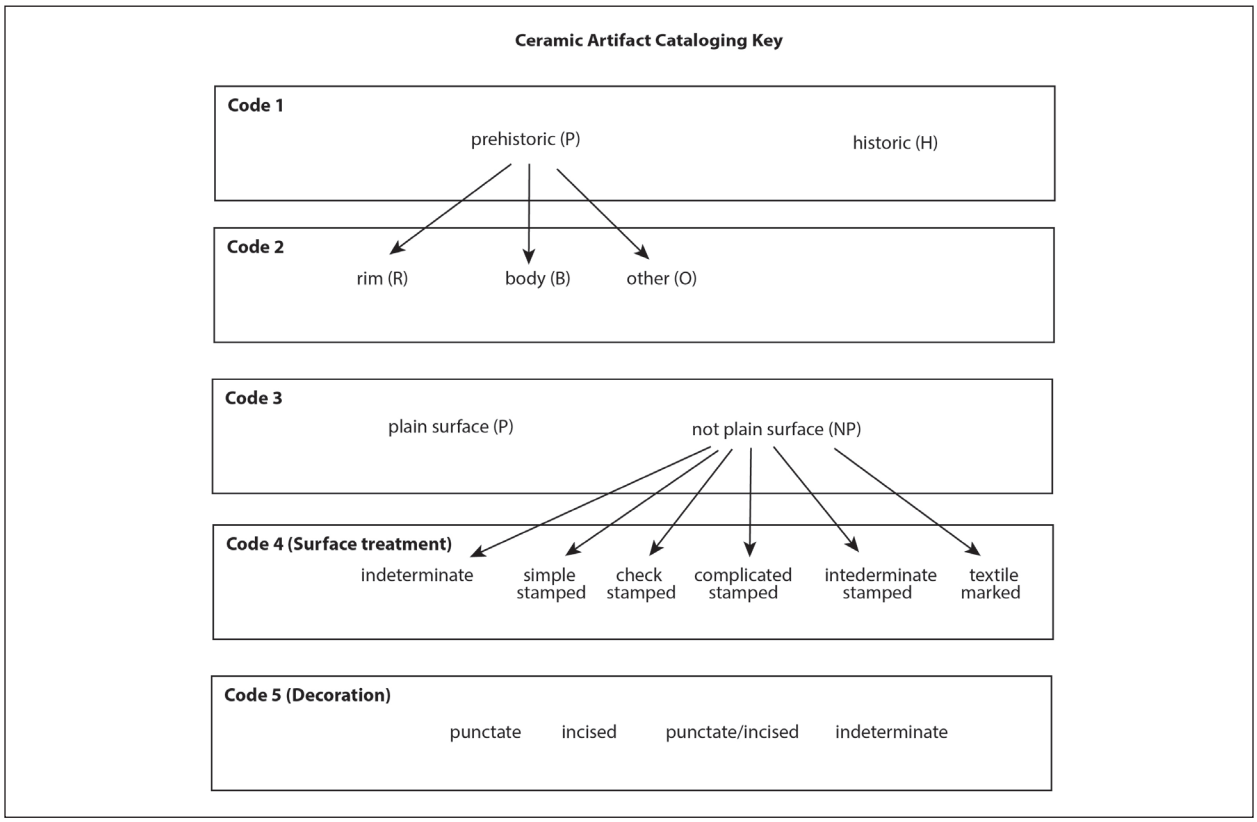


Figure 35. Ceramic artifact cataloging key.

Table 8. Raw artifact counts by class and subclass.

Class	Subclass	Code 1	Number
Bone			183
Ceramic	Prehistoric	Body	803
		Other	93
		Rim	49
Glass	-	-	2
Lithic	Chipped stone	Core	6
		Debitage	7455
		Tool	92
	Groundstone	-	8
	Other	FCR	2773
		Pebble	830
		Soapstone	2
Metal	-	-	93
Other	Burned clay	-	3560
	Charcoal	-	172
	Other	-	13
	Sediment sample	-	12
Total			*16,146*

Table 9. Distribution of bone artifacts by provenience.

Class	Recovery	Provenience Class	Feature No.	Count	Mass (g)
Bone	1/4"	Feature	11	3	0.6
Bone	1/4”	Feature	12	1	0.15
Bone	1/4”	Mixed		2	0.42
Bone	1/4”	Unit		138	28.68
Bone	Piece plot	Unit		39	5.77

Prehistoric Ceramics

Prehistoric ceramic debris has been recovered mainly from unit excavations, both in screened samples and as piece-plots (Table 10). The prehistoric ceramic assemblage includes rim, neck, and body sherds with a variety of surface treatments. The attributes of the ceramic assemblage are briefly discussed further below.

Although ceramic debris is relatively common in the upper zones of the portion of 38FA608 excavated thus far, only a single feature has contained prehistoric ceramic debris. Feature 14, interpreted a historic-era posthole, contained two sherds. These sherds were likely incorporated into the feature fill as the feature was originally excavated through the upper zones of the site.

A single small, grit tempered sherd was recovered from the sediment screened with the portion of Feature

Table 10. Distribution of ceramic artifacts by provenience.

Class	Recovery	Provenience Class	Feature No.	Count	Mass (g)
Ceramic	1/4"	Feature	14	2	16.49
Ceramic	1/4"	Mixed	-	35	127.84
Ceramic	1/4"	Mixed (slump)	-	41	182.03
Ceramic	1/4"	Mixed (slump)	5	1	1.23
Ceramic	1/4"	Profile	-	2	3.48
Ceramic	1/4"	Unit	-	676	1932.65
Ceramic	General surface	Surface	-	8	81.03
Ceramic	Piece plot	Profile	-	3	14.43
Ceramic	Piece plot	Unit	-	177	723.09

5 that slumped off the machine cut wall. The stratigraphic location of Feature 5 suggests it dates to the Late Archaic period. It is likely that the sherd came from other slumped sediments above the feature and was not associated with it.

Glass

Two pieces of historic glass has been recovered from the surface of the disturbed portion of 38FA608.

Lithics

Stone artifacts are the single most common class of artifacts at 38FA608, comprising (by count) over 60 percent of the assemblage. Table 11 does not include mass because mass has not yet been recorded for parts of the lithic assemblage.

While items classified as chipped stone debitage and fire-cracked rock predominate, the assemblage does contain a small assortment of cores, over 90 items classified as bifacial and unifacial tools, several ground-stone tool fragments, and two small pieces of soapstone. The lithic assemblage aslo includes a large number of small, rounded pebbles that, given the alluvial nature of the deposit containing 38FA608, were almost certainly brought to the site by some human mechanism of transport.

The debitage assemblage has not yet been subject to any formal analysis. Chipped stone debitage from the Late/Terminal Archaic component encountered in the “upstairs block” (level 10 of Units 4 and 6) is currently the subject of Robert Lyerly’s M.A. thesis work.

Among the chipped stone, quartz and argillite are the most common materials. Rhyolite, metavolcanic rocks, and chert are also present.

It is important to note that quartz appears in the lithic assemblage both as lithic debitage (the byproduct of flintknapping) and as fire-cracked rock. In many cases it was not possible to reliably specify whether a given piece of angular quartz was produced through intentional lithic reduction activities or through fracturing associated with heating/cooling. A dedicated analysis will likely be necessary to understand the various streams of lithic use at 38FA608, especially with regard to quartz.

Metal

A total of 93 pieces of historic era metal have been recovered thus far from 38FA608 (Table 12). The metal assemblage consists largely of domestic materials such as nail/wire fragments, a piece of a shotgun shell, and nondescript fragments of rusted debris. The large majority of the metal assemblage came from just

Table 11. Distribution of lithic artifacts by provenience.

Code 1	Code 2	Provenience Class	Count
Chipped stone	Core	Profile	1
		Unit	5
	Debitage	Feature	700
		Feature (?)	7
		Mixed	418
		Mixed (slump)	637
		Profile	201
		Surface	95
		Unit	5390
		Unit (?)	1
	Tool	Feature	2
		Feature (?)	1
		Mixed	5
		Mixed (slump)	5
		Profile	3
		Surface	19
		Unit	61
Groundstone	-	Surface	1
		Unit	7
Other	FCR	Feature	143
		Feature (?)	4
		Mixed	238
		Mixed (slump)	232
		Profile	64
		Surface	60
		Unit	2031
	Pebble	Feature	21
		Feature (?)	1
		Mixed	79
		Mixed (slump)	23
		Profile	10
		Surface	2
		Unit	694
	Soapstone	Unit	2

Table 12. Distribution of metal artifacts by provenience.

Class	Recovery	Provenience Class	Unit No	Level No	Count	Mass (g)
Metal	1/4"	Unit	12	1	1	1.29
Metal	1/4"	Unit	3	1	1	1.8
Metal	1/4"	Unit	3 (E 1/2)	1	4	2.87
Metal	1/4"	Unit	4	2	6	10.57
Metal	1/4"	Unit	4	3	1	0.3
Metal	1/4"	Unit	4 (NW 1/4)	1	2	0.38
Metal	1/4"	Unit	4 (SE 1/4)	1	1	6.75
Metal	1/4"	Unit	4 (SW 1/4)	1	1	0.6
Metal	1/4"	Unit	5	2	66	214.62
Metal	1/4"	Unit	5 (NE 1/4)	1	3	106.93
Metal	1/4"	Unit	6	2	4	13.68
Metal	1/4"	Unit	6 (SE 1/4)	1	2	1.23
Metal	1/4"	Unit	6 (SW 1/4)	1	1	1.51

one level of one unit, and no metal artifacts have been discovered below the plowzones.

Other

The “Other” class includes burned clay, charcoal, and sediment samples collected for various purposes.

The burned clay assemble is quite large, as numerous small pieces of burned clay were recovered both as piece-plots and in the screen during the unit/level excavations in the block. This assemblage has not yet been analyzed in any detail.

Charcoal was collected both during the course of piece-plotting and as dedicated samples for the purposes of radiocarbon dating.

Hafted Bifaces

A total of 36 hafted bifaces has been recovered thus far from 38FA608. Many of these tools were recovered in situ, providing insight into the ages of the strata from which they were recovered. This section describes the hafted bifaces recovered through the 2018 field season. Three-dimensional models of these tools are available online at www.broadriverarchaeologicalfieldschool.weebly.com/data.html.

Early Archaic

Two notched Early Archaic points have been recovered from the vicinity of 38FA608 (Figure 36). One of these (366.442) was discovered by the landowner while walking a dirt road to the north of the excavation area. The other (1866.2543) was discovered on the surface by Albert Goodyear in a disturbed area of the site near our excavation units. While this second point was not found in situ, its presence in the immediate vicinity of an area where buried deposits dating to the Middle Archaic have been identified strongly indicates the presence of a buried early Holocene component at 38FA608.

Kirk/Taylor (366.442). This is a broken side or corner notched point made from weathered Coastal Plain chert. Both ears are fractured, making it difficult to determine the origin of the notches. The basal edge is unground. The blade is narrow and appears to have been resharpened. While a subtle left-hand “twist” can be discerned in the blade cross section, no distinct bevel is present. The notched haft and the

Table 13. Hafted bifaces recovered from 38FA608.

Age	FS No	Cat. No	Type	Provenience
Early Archaic (*n* = 2)	366	442	Kirk/Taylor	Surface (dirt road north of excavation area)
	1866	2543	Kirk	Surface (disturbed area adjacent to excavations)
Middle Archaic (*n* = 8)	1816	2497	Morrow Mountain	Unit 13, Level 17 (1/4" screen)
	564	663	Morrow Mountain/ Guilford	Surface (disturbed area adjacent to excavations)
	1014	1695	Morrow Mountain/ Guilford	Unit 10, Level 1
	2	3	Guilford	Slump from Profile Segment A (1/4" screen)
	563	659	Guilford	Surface (disturbed area adjacent to excavations)
	694	764	Guilford	Unit 9, Level 8 (1/4" screen)
	1189	830	Guilford	Collapse of west wall of Unit 9 (1/4" screen)
	1814	2481	Guilford	Unit 13, Level 16 (1/4" screen)
Late Archaic (*n* = 5)	632	729	Savannah River	Unit 4, Level 8 (1/4" screen)
	1619	2183	Savannah River	Unit 13, Level 5 (piece plot)
	1633	2197	Savannah River	Unit 13, Level 5 (piece plot)
	1682	2256	Savannah River	Unit 13, Level 6 (piece plot)
	1691	2269	Savannah River	Unit 13, Level 7 (1/4" screen)
Terminal Archaic (*n* = 4)	631	1490	Mack	Unit 4, Level 7 (piece plot)
	632	731	Mack	Unit 4, Level 8 (1/4" screen)
	774	1319	Mack	Unit 6, Level 8 (piece plot)
	817	1363	Mack	Unit 6, Level 8 (piece plot)
Woodland/ Mississippian (*n* = 4)	416	626	Triangular	Unit 5, Level 6 (1/4" screen)
	1507	2013	Triangular	Unit 3, Level 2/3 interface (1/4" screen)
	1476	1960	Chipped stone ax	Unit 5, Level 7 (piece plot)
	1549	2086	Chipped stone ax	Unit 4, Level 3/4 interface (piece plot)
Indeterminate/ Untyped (*n* = 13)	71	96		Surface (access road at southern end of 38FA608)
	72	99	Morrow Mountain or Mack	Surface (access road at southern end of 38FA608)
	73	106		Slump from Profile Segment C (1/4" screen)
	103	160		Slump at base of Units 1 and 2 (1/4" screen)
	366	441		Surface (dirt road north of excavation area)
	1031	1435	Mack (?)	Unit 6, Level 8 (piece plot)
	1189	829		Collapse of west wall of Unit 9 (1/4" screen)
	1505	1995	Mack (?)	Surface (disturbed area adjacent to excavations)
	1545	2082	Savannah River (?)	Unit 6, Level 9 (piece plot)
	1621	2185	Mack (?)	Unit 6, Level 9 (piece plot)
	1809	2464	Savannah River (?)	Unit 13, Level 13 (1/4")
	1815	2488		Unit 13, Level 17 (piece plot)
	1866	2544	Mack (?)	Surface (disturbed area adjacent to excavations)

Figure 36. Early Archaic projectile points recovered from 38FA608.

weathered condition of the raw material is consistent with an Early Archaic age for this point.

Kirk Corner Notched (1866.2543). Point 1866.2543 is a rhyolite point with a thin, biconvex cross section. The notches were executed from the near the corners of the base. The basal edge is lightly ground. No bevel is apparent. The rhyolite is well weathered.

Middle Archaic

The Middle Archaic assemblage from 38FA608 includes one point typed as Morrow Mountain, two points typed as Morrow Mountain/Guilford, and five points typed as Guilford (Figure 37). The assemblage also includes several untyped points that were recovered in situ from deposits that are Middle Archaic in age. In addition, several fragments of stemmed points recovered from disturbed/surface contexts may also date to the Middle Archaic occupations of 38FA608. Given the presence of a Terminal Archaic Mack component at the site, however, care needs to be taken when assigning ages to out-of-context stemmed points found at the site (discussed further below).

Morrow Mountain (1816.2497). Point 1816.2497 is a thick quartz point with a triangular blade and contracting stem with a triangular shape. It is biconvex in cross section. Pronounced shoulders are present at the blade-haft juncture. The haft edges are unground. This point fits most comfortably within the Morrow Mountain II designation as described by Charles and Moore (2018:38-40). Recovered from level 17 of Unit 13 (499.94 - 499.74 m on the site grid; Zone 8/14), this is the thus far the only Morrow Mountain point recovered in situ from 38FA608.

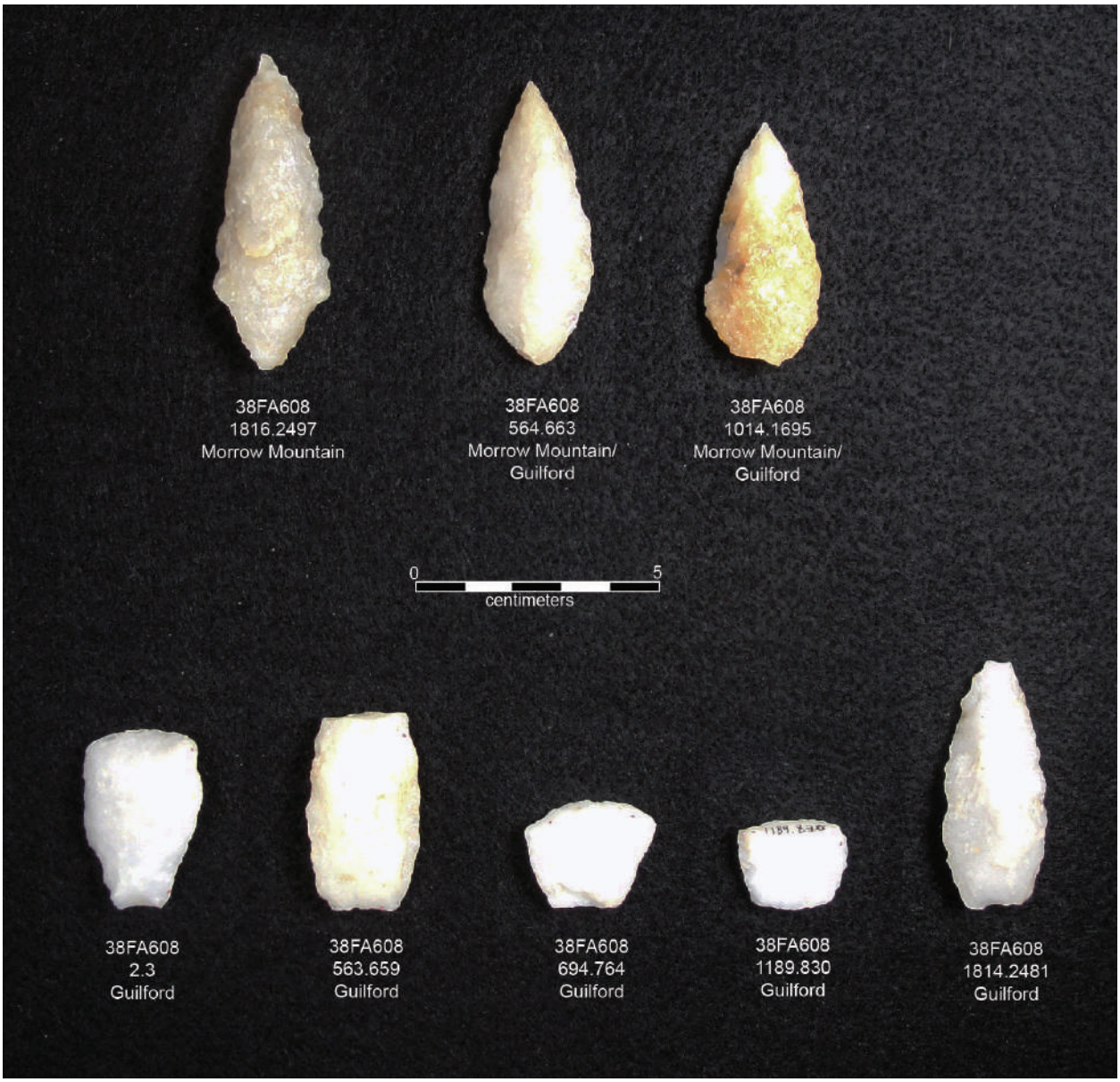


Figure 37. Middle Archaic projectile points recovered from 38FA608.

Morrow Mountain/Guilford (564.663). Point 564.663 is thick quartz point with a pronounced plano-convex cross section. There are no shoulders between the blade edges and the margins of the short, contracting stem. The haft edges are unground. This point fits in the continuum of variation between the Morrow Mountain II and Guilford types (see Charles and Moore 2018:38-40). It was found on the surface in a disturbed portion of the site near our excavation area.

Morrow Mountain/Guilford (1014.1695). Point 1014.1695 is overall similar to 563.663. It is a thick quartz point with a triangular blade and short contracting stem. One edge has a slight shoulder at the blade-haft juncture. The basal edges are unground. A small section of the basal edge appears to be missing. The cross section is biconvex. This point fits in the continuum of variation between the Morrow Mountain II and Guilford types (see Charles and Moore 2018:38-40). It was recovered from level 1 of Unit 10, a unit placed in the "downstairs" portion of the site. It was found within disturbed sediments and was not in situ.

Guilford (2.3). Point 2.3 is a quartz point with a contracting stem and biconvex cross section. The

stem has straight sides and the basal edge is slightly concave. The haft edges are unground. The distal end of the point has been unifacially reworked, presumably to function as a scraper. This point fits comfortably with the Guilford type (see Charles and Moore 2018:45-46). It was recovered from sediment slumped at the base of Profile Segment A of the machine-cut exposure.

Guilford (563.659). Point 563.659 is a quartz point with a contracting stem and biconvex cross section. There is only a slight inflection on one of the edges to indicate the location of the blade-haft juncture. The haft edges are unground, and the basal edge is slightly concave. The blade terminates in a fracture. This point fits comfortably with the Guilford type (see Charles and Moore 2018:45-46). It was recovered from the eroding/disturbed surface near our excavation area at an elevation of about 501 m on the site elevation grid.

Guilford (694.764). Point 694.764 is a stem fragment of a contracting stemmed, quartz point. The lateral haft edges are straight to slightly excurvate. The basal edge is slightly concave. The haft edges are unground. The size and morphology of this stem fragment fit comfortably with the Guilford type (see Charles and Moore 2018:45-46). It was found in Level 8 of Unit 9 (500.42-500.22m on the site grid; Zone 7) and is one of two Guilford points recovered from good context so far.

Guilford (1189.830). Point 1189.830 is stem fragment of a contracting stemmed, quartz point. The lateral and basal haft edges are excurvate and unground. The size and morphology of this stem fragment fit comfortably with the Guilford type (see Charles and Moore 2018:45-46). It was recovered from the sediment that was screened following the partial collapse of the west wall of Unit 9. While the point almost certainly came from the Guilford component that was present in that unit, it was not recovered in situ.

Guilford (1814.2481). Point 1814.2481 is a thick quartz point with a triangular blade and biconvex cross section. It has a contracting stem with slightly excurvate lateral edges and a slightly concave basal edge. There is an inflection at the blade-haft juncture. The haft edges are unground. The distal tip is broken. This point fits comfortably with the Guilford type (see Charles and Moore 2018:45-46). It was recovered from Level 16 of Unit 13 (500.14-499.94 m on the site grid; Zone 8/14) and is one of two Guilford points recovered from good context so far.

Late Archaic

The Late Archaic hafted biface assemblage from 38FA608 (Figure 38) includes five points that fit within the range of variation included in the Savannah River cluster (as discussed by Justice 1987:163-167 and Charles and Moore 2018:53-54). Savannah River points are generally large points with broad blades and relatively short stems. Stems are generally straight-sided, but points with contracting stems and points with flaring stems also occur. All of the Savannah River points recovered from 38FA608 thus far come from excavated contexts.

Savannah River (632.729). Point 632.729 is a complete Savannah River point that was crafted from a spall of argillite. It was shaped with minimal chipping and has a flat cross section: most of both faces of the point are unflaked. The stem is short with contracting sides and slightly concave basal edge. The haft edges are unground. This point was recovered from Level 8 of Unit 4 (in the screen).

Savannah River (1619.2183). Point 1619.2183 has a short stem with contracting sides and a slightly rounded basal edge. The haft edges are unground. The point has a flattened cross section and the blade edges are relatively steep and crudely flaked. The blade has been fractured. The point was made from an unidentified metavolcanic raw material. It was recovered as a piece-plot during the excavation of Level 5 of Unit 13.

Savannah River (1633.2197). Point 1633.2197 is a complete point with a large, triangular blade and a contracting stem. The lateral and basal edges of the haft are straight and unground. The cross section is biconvex and some flake scars extend to the midline of the blade. The point was made from an unidentified metavolcanic raw material. It was recovered as a piece-plot during the excavation of Level 5 of Unit 13.

Savannah River (1682.2256). Point 1682.2256 is a blade fragment that retains a portion of one

Figure 38. Late Archaic projectile points recovered from 38FA608.

shoulder (indicated with the arrow in Figure 38). It has a cross section that varies from biconvex to flattened. This point was recovered from level 6 of Unit 13. The size, morphology, raw material, and manufacturing techniques are similar to those of the two Savannah River points recovered from Level 5 of Unit 13.

Savannah River (1691.2269). Point 1691.2269 was crafted from a spall of metavolcanic raw material. It has a flattened cross section that is the thickness of the original spall: flake removals to shape the point were limited to the edges of the blade and stem. The stem is rectangular with flaring ears and a concave basal edge. The blade has been fractured. The point was recovered from Level 7 of Unit 13.

Terminal Archaic

The Terminal Archaic assemblage from 38FA608 includes several examples of Mack points found in excavated contexts (Figure 39). It may also include some (or all) of the fragmentary stemmed points recovered from disturbed/surface contexts. Given the presence of Middle Archaic (Morrow Mountain and Guilford) components at 38FA608, however, care needs to be taken when assigning ages to out-of-context stemmed points found at the site (discussed further below).

Mack (631.1490). Point 631.1490 is a contracting stem point fashioned from flow banded rhyolite. It has a biconvex cross section, broad blade, and a convex basal edge. The blade shoulders are roughly horizontal. The haft margins are unground. This point was recovered as a piece plot within Unit 4 at the base of Level 7. It is the only rhyolite Mack collected from 38FA608 to date.

Mack (632.730). Point 632.730 is a heavily resharpened quartz point. The point is fully intact, but all that remains is the haft region and a short, triangular blade. The stem contracts to a convex basal edge. The cross section is biconvex. The haft margins are carefully chipped and appear to have been ground. This point was recovered from Level 8 of Unit 4.

Mack (774.1319). Point 774.1319 is a heavily resharpened quartz point. While the haft region is mostly intact, the blade has been reduced to a triangular stub. The stem contracts to a rounded point. It is plano-convex in cross section. This point was recovered from Level 8 of Unit 6.

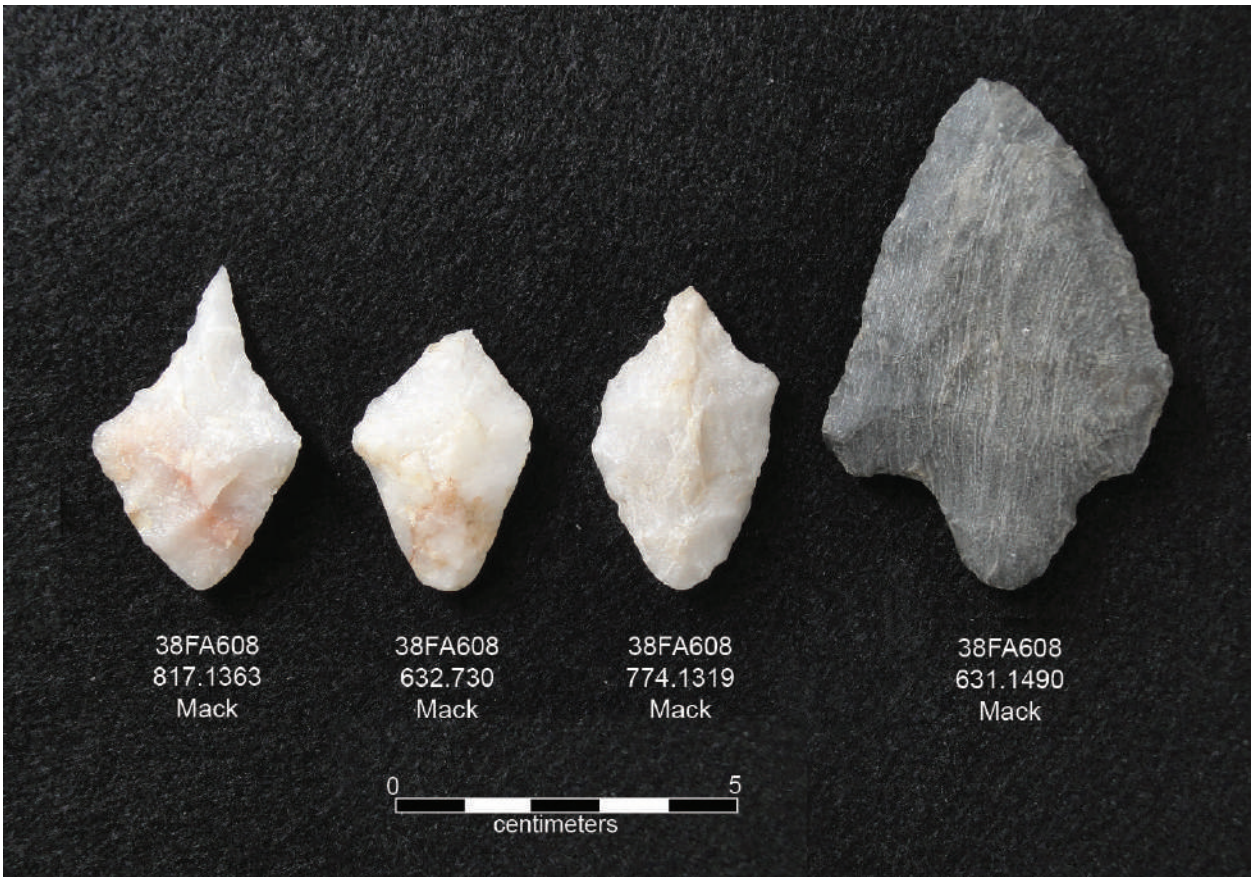


Figure 39. Terminal Archaic projectile points recovered from 38FA608.

Mack (817.1363). Point 817.1363 is a heavily resharpened quartz point. The contracting stem is triangular in shape, terminating in a dull point. The blade has been reduced to a triangle with incurvate edges. It is biconvex in cross section. This point was recovered from Level 8 of Unit 6.

Woodland/Mississippian

The Woodland/Mississippian assemblage from 38FA608 includes two triangular projectile points (Figure 40) and two items classified as chipped stone axes or celts (Figure 41). These axes/celts are identified as being Woodland/Mississippian based on their stratigraphic position.

Triangular (416.626). Point 416.626 is a complete triangular point crafted from quartz. It is roughly equilateral with a concave basal edge. The point is thin with a biconvex cross section. None of the edges is ground. It was recovered from Level 4 of Unit 5 (i.e., within Zone 2 *aka* the lower plowzone).

Triangular (1507.2013). Point 1507.2013 is a fragment of a triangular point crafted from quartz. The point is missing the distal portion of the blade and one of the corners. It appears overall similar in size and shape to point 416.626: what remains of the blade edges suggests an equilateral shape, and the basal edge may have been slightly concave. The point was recovered from sediment screened to clean up a minor collapse of the south wall of Unit 3. That sediment came from levels 2 and 3 of Unit 3, predominantly from Zone 2 (*aka* the lower plowzone).

Axe/Celt (1476.1960). Item 1476.1960 is a chipped stone axe/celt that was crafted from a slab or cobble of metavolcanic rock. Overall, the tool is plano-convex in cross section, having apparently been entirely shaped by chipping the edges of the original slab or cobble. The bit of the axe flares out from the body and terminates in a dull point. The bit is somewhat asymmetrical in cross-section, suggesting classification as a celt may be appropriate. The edges of the sides and the poll are relatively steep and were shaped by chipping. There is no evidence of grinding anywhere on the tool. The tool could have been

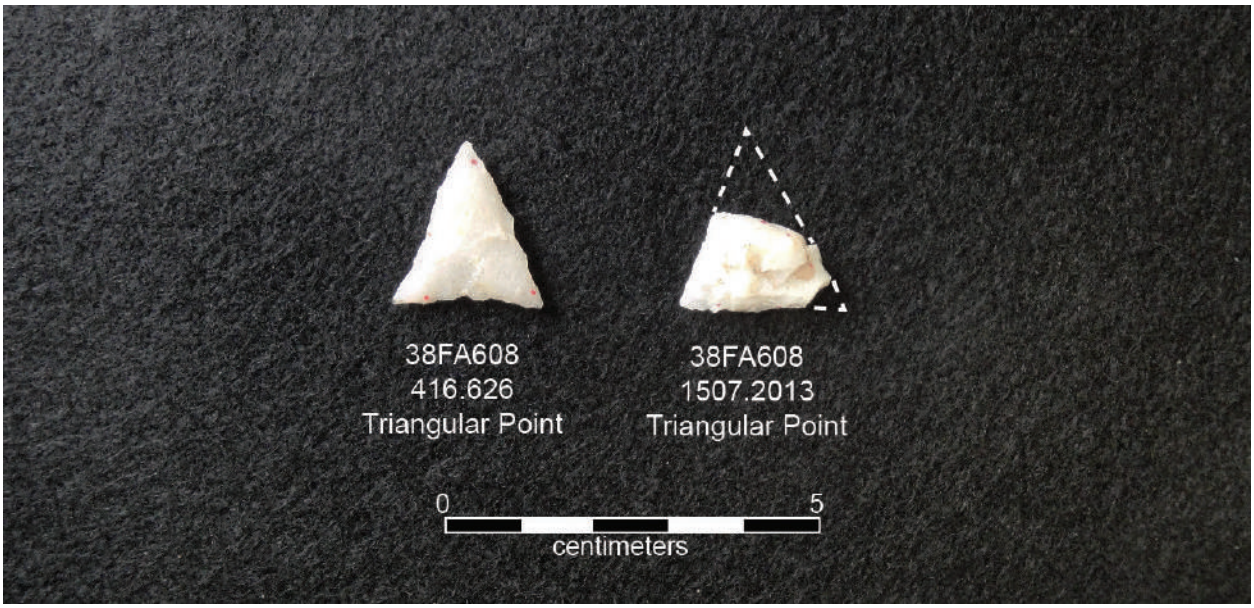


Figure 40. Triangular projectile points recovered from 38FA608.

Figure 41. Woodland/Mississippian chipped stone axes/celts recovered from 38FA608.

hafted or conceivably have been handheld.

This tool was recovered in situ from deposits directly below the lower plowzone (Zone 2), adjacent to and slightly below the large, plow-scarred quartz cobble in Unit 3 that marked the base of the lower plowzone. Given the presence of triangular projectile points in Zone 2 and the presence of a Woodland feature that originated below the depth of this artifact, the axe/celt dates to sometime during the Wood-

land/Mississippian period.

Axe/Celt (1549.2086). Item 1549.2086 is a chipped stone axe/celt that was created from a cobble or slab of metavolcanic rock. The bit edge of the tool is the only completely flaked margin: the other margins retain unflaked and/or fractured surfaces. The scars of the flakes removed to shape the tool do not extend past the midline of the tool. The bit edge is curved. The margin of the proximal end of the tool is a fractured and unflaked, suggesting the poll may have been broken off. There is no groove or waist to facilitate hafting. The cross section is plano-convex.

This tool was covered at the interface of levels 3 and 4 in Unit 3, at the interface of Zones 2 and 3. Its stratigraphic location at the base of the lower plowzone and the unplowed sediments beneath dates the artifact to sometime during the Woodland/Mississippian period.

Indeterminate/Untyped

Thirteen points recovered thus far from 38FA608 have not been assigned to a specific type (Figure 42). While the general ages of some of the points are known based on their stratigraphic position, others were found in disturbed portions of the site. The fragmentary nature of some of these points makes age and type determinations difficult.

Indeterminate 71.96. Point 71.96 is a fragment of of a quartz point. While the correct orientation of the fragment is unclear, it is most likely that this is a fragment of a point with a short, contracting stem and upswept shoulders. If so, the fragment is most consistent with Morrow Mountain.

Indeterminate 72.99. Point 72.99 is a small stemmed point made from quartz. The point appears to have a contracting stem with a rounded basal edge. The blade of the point has been resharpened into a short triangle. This point was recovered from an eroded road surface at the south end of 38FA608 around the time the site was originally discovered. It was interpreted as a Morrow Mountain point at that time, prior to the discovery of the intact Mack component at 38FA608. Given the quartz Mack points excavated in the block (see above) it now seems likely that this point could be related to the Terminal Archaic rather than the Middle Archaic occupations of the site. The triangular resharpening of the blade is similar to that of some of the Mack points recovered in context. A Terminal Archaic age would also be more consistent with the presence of the point on the surface of the site in an area with only shallow disturbance, presuming that the Middle Archaic occupation is buried at a depth similar to that seen in the block. Additional work will be required to determine if a shallowly-buried Mack component is present in this portion of the site.

Untyped 73.106. Point 73.106 is a small, weakly side notched point made from sedimentary rock. The point was shaped by removing shallow flakes from the edges of a thin slab of raw material, leaving unflaked surfaces on both faces. The blade is roughly triangular. The basal edge is unground. The one intact notch is shallow and appears to have been executed by removing a single flake from each face. This point was recovered from slump removed prior to documenting Profile Segment C. Because it was not recovered in stratigraphic context, the point could date to any period that is represented in the exposed stratigraphy (i.e., the Middle Archaic through the Woodland periods).

Untyped 103.160. Point 103.160 is a stemmed point made from quartz. The basal edge of the point is straight and unflaked, suggesting the point was created by reshaping a distal fragment from a larger point. The point was recovered from sediment slumped at the base of Units 1 and 2. Because it was recovered from slumped sediments, no age assignment is possible based on context. The point could date from any period that is represented in the exposed stratigraphy (i.e., the Middle Archaic through the Woodland periods). The overall shape of the point suggests an affinity with the possible Paris Island point described below (1189.829).

Indeterminate 366.441. Point 366.441 is an incomplete quartz point recovered from the disturbed portion of the site adjacent to the excavation area. Two weak “shoulders” are present on the margins of the point, suggesting where the blade begins and the stem ends. The difficulty, however, is determining which portion of the point is the blade and which is the stem. Given the Mack points excavated from the

Figure 42. Indeterminate and untyped projectile points recovered from 38FA608.

block, the orientation of the point as shown in Figure 42 is plausible: the longer portion of the point is the stem and the blade has been resharpened to the point of exhaustion. The basal edge has been fractured.

Indeterminate 1031.1435. Point 1031.1435 is a crudely flaked quartz biface that is discussed here because its shape roughly matches that of the Mack points found in the same deposit (level 8 of Unit 6). In plan view, this tool appears to have a stem that contracts to a point. While the biface is much thicker and cruder than the refined Mack points discussed above, its raw material, overall shape, and archaeological context suggests it belongs to the Mack occupation of the site.

Indeterminate 1189.829. Point 1189.829 is the proximal portion of a stemmed point crafted from quartz. The shoulders are weak and the lateral haft edges flare slightly. The basal edge is slightly convex. The lateral and basal edges of the haft appear to have been ground. The general stemmed configuration of this point suggests a Late Archaic age, with the Paris Island type being perhaps the closest match described by Charles and Moore (2018:56-58). If the Paris Island designation is correct, this point would mark the presence of a component dating to between the Guilford and Savannah River components at 38FA608. The point was recovered from sediments screened after the collapse of the west wall of Unit 9 in 2017, providing no specific stratigraphic information.

Indeterminate 1505.1995. Point 1505.1995 is a broken stemmed point made from quartz. The stem, largely intact, contracts toward a rounded base. The blade portion of the point appears to have been fractured after it worked down to a width less than that of the base. This appears to be a completely exhausted tool. Given the shape of the stem and the reworked nature of the blade, this point may belong to the Mack component of the site. It is also possible, however, that it is related to the Guilford or Morrow Mountain components. The point was recovered from the surface of the disturbed portion of the site adjacent to the excavation area.

Indeterminate 1545.2082. Point 1545.2082 is a quartz point with contracting stem and a triangular blade. The point is rather crudely crafted, with many step fractures creating a “stack” on one face around the blade/haft juncture. The stem may have been broken and reworked. What remains of the

blade/haft juncture suggests that the shoulders were sloping. This point was recovered as a piece-plot from level 9 of Unit 6, a small portion of which was excavated to expose Feature 11 in profile. Its depth of 102 cmbd is slightly lower than the depth of the Mack points from this portion of the site. Its overall configuration suggests it was probably discarded during the Mack occupation.

Indeterminate 1621.2185. Point 1621.2185 is a quartz point with a contracting stem. The point appears to be complete except for a small fracture to the distal tip, but probably heavily reworked. A small remnant of one possible shoulder suggests the location of the blade/haft juncture. If interpreted correctly, this remaining shoulder suggests the stem contracts to a rounded point. The point is biconvex in cross section and not finely flaked. This point was recovered as a piece-plot from level 9 of Unit 6, a small portion of which was excavated to expose Feature 11 in profile. Its depth of 104.5 cmbd is slightly lower than the depth of the Mack points from this portion of the site. Its overall configuration suggests it was probably discarded during the Mack occupation. While it would also fit well within a Guilford assemblage, it appears to be too high within the deposits to be Middle Archaic in age (based on the stratigraphy exposed in Units 9 and 13).

Indeterminate 1809.2464. Point 1809.2464 is a possible fragment of a stemmed point made from metavolcanic raw material. While the fragment is the shape of a short stem with one shoulder intact, minimal modification is discernible. Small flakes have been removed from what would be the basal edge and from one of the lateral edges. The fragment was recovered from level 13 of Unit 13.

Indeterminate 1815.2488. Point 1815.2488 is a quartz biface that appears to be either a fragment of a stemmed point of some kind or a preform. It is not clear which end of the biface is the proximal and which is the distal, and both terminal ends have broken/unflaked surfaces. It was recovered from level 17 of Unit 13, which suggests it is Middle Archaic in age.

Indeterminate 1866.2544. Point 1866.2544 is a quartz point with a contracting stem. It is similar in many ways to point 1505.1995. The blade portion of the point appears to have been fractured after it was worked down a width less than that of the base. The lateral haft margins are convex and the stem contracts to a rounded base. It is biconvex in cross section. Given the shape of the stem and the reworked nature of the blade, this point may belong to the Mack component of the site. It is also possible, however, that it is related to the Guilford or Morrow Mountain components. The point was recovered from the surface of the disturbed portion of the site adjacent to the excavation area.

Prehistoric Ceramics

The prehistoric ceramic assemblage recovered from 38FA608 to date comprises 945 sherds, inlcuding 46 rim sherds. All of the pottery is tempered with sand and/or grit: no fiber- or shell-tempered sherds have been recovered from 38FA608 so far. The assemblage includes two small rim sherds classified as pipe bowl fragments. This section presents a very basic description of the pottery assemblage from 38FA608 and uses information available on the "Guide to Native American Potter of South Carolina" website (www.scpottery.com). No attempt is made in this report to assign individual pieces of pottery to named types.

The majority of the sherds from 38FA608 have no discernable surface treatment (Table 14). Among the body sherds where a particular surface treatment has been identified, complicated stamping predominates, occurring on about 4.4% of the assemblage. Simple stamped and checked stamped sherds are present in lower numbers. A single cordmarked body sherd has been identified thus far. As would be expected, identifiable surface treatments are less common on the rim sherds (surface treatments often do

Table 14. Surface treatment of prehistoric ceramic assemblage recovered from 38FA608.

Vessel portion	No surface treatment	Indeter.	Simple stamped	Check stamped	Complicated stamped	Indeter. stamped	Textile marked
Body (*n* = 899)	722 (80.3%)	94 (10.5%)	11 (1.2%)	18 2.0%)	40 (4.4%)	13 (1.4%)	1 (0.1%)
Rim (*n* = 46)	40 (87.0%)	0 -	0 -	1 (2.2%)	1 (2.2%)	2 (4.3%)	2 (4.3)

Table 15. Occurrence of decoration on prehistoric ceramics recovered from 38FA608.

Vessel portion	No decoration	Incised	Punctate	Incised/punctate	Indeterminate
Body (*n* = 899)	895 (99.6%)	0 -	0 -	1 (0.1%)	3 (0.3%)
Rim (*n* = 46)	37 (80.4%)	3 (6.5%)	1 (2.2%)	5 (10.9%)	0 -

not extend to the rim of the vessel).

Decorated sherds are not plentiful (Table 15). Only a few decorated pieces have been identified among the body sherds. The prevalence of decoration is higher among the rim sherds: incised and/or punctate decorations are present on about twenty percent of the rims.

The range of surface treatment and decorations on the prehistoric pottery from 38FA608 demonstrates that the ceramic assemblage was produced during several different portions of the Woodland and Mississippian periods. An analysis of the stratigraphic distribution of surface treatment and decoration has not yet been conducted.

Simple Stamped Pottery

Simple stamped pottery makes up only a small percentage of the pottery collected thus far from 38FA608: only 11 sherds with a non-plain surface treatment were characterized as simple stamped. Examples are shown in Figure 43.

Simple stamped surface treatments are applied by pressing a wooden paddle carved with longitudinal designs (or other object that can produce similar patterns) into the damp surface of a vessel. The grooves created by this technique can be U- or V-shaped and can vary widely in size and the degree of care taken in application.

In South Carolina, simple stamped surface treatments are most closely associated with pottery from the Late Archaic and Early Woodland periods. Simple stamped wares also occur during later periods, however. None of the simple stamped sherds recovered thus far is decorated, and no analysis of the stratigraphic context of the pottery has been undertaken.

Check Stamped Pottery

Check stamped sherds are about twice as common in the 38FA608 assemblage as simple stamped sherds but half as common as complicated stamped sherds. Examples of check stamped sherds are show in Figure

Figure 43. Examples of simple stamped pottery recovered from 38FA608.

44.

Like other stamped surface treatments, checked stamped surface treatments are applied by pressing a carved wooden paddle into the damp surface of a vessel. The variety of checked stamped designs that can be created using this technique is great. Both the checks and the lands can vary in size, shape, and arrangement.

In South Carolina, check stamped pottery is most closely associated with the Early and Middle Woodland periods.

Complicated Stamped Pottery

Following plain surfacing, complicated stamping is the most common surface treatment among the sherds recovered thus far from 38FA608. Examples of complicated stamped sherds from 38FA608 are shown in Figure 45.

Complicated stamped surface treatments are created by pressing a carved wooden paddles into the damp surface of the vessel. Mississippian-age complicated stamped pottery from the Coastal Plain in this region exhibits numerous curvilinear and rectilinear motifs (e.g., see Anderson 1994:364-365). The designs present on the sherds from 38FA608 appear to be predominately curvilinear and include concentric circles.

Pottery with Punctate/Incised Decoration

The sample of decorated sherds from 38FA608 is small: only eight rims recovered thus far have an identifiable decoration. Five of those are shown in Figure 46.

Figure 44. Examples of check stamped pottery recovered from 38FA608.

Figure 45. Examples of complicated stamped pottery recovered from 38FA608. The sherd in the upper right corner (40.47) is a rim fragment with an incised line on the lip.

Rim decoration on the sherds from 38FA608 includes simple punctate and incised decorations created with a stick, reed, or other small tool. One rim has a series of incised/impressed lines perpendicular to the rim. Others have circular impressions near or on the lip of the vessel. One rim (1361.1802) is castellated.

Incised/punctate decorations are associated with several time periods in South Carolina. The decorations seen on the sherds from 38FA608 appear to be unlike those associated with Late Archaic/Early Woodland Thoms Creek pottery, and presumably date to a later period. No analysis of the stratigraphic contexts of these sherds has yet been performed.

Pipe Bowl Fragments

The cearamic assemblage from 38FA608 includes two small rim sherds identified as probable fragments of pipe bowls (Figure 46). Given the large numbers of smoking pipes known from Mississippian sites and the presence of a siginifcant Mississippian period occupation at 38FA608 (marked by the presence of complicated stamped pottery) it seems likely that the pipe fragments are Mississippian in age.

Figure 46. Examples of decorated rim sherds from 38FA608.

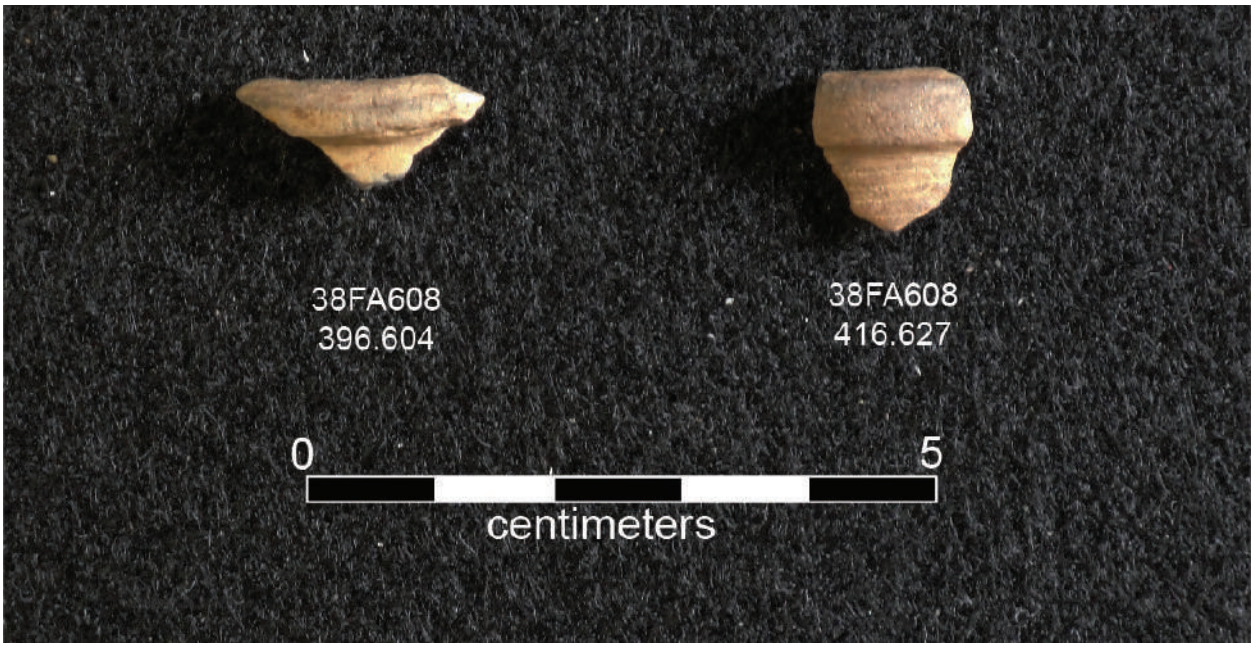


Figure 47. Ceramic pipe bowl fragments from 38FA608.

CHAPTER 5

Radiocarbon and OSL Dates

A total of four radiocarbon dates and one optically stimulated luminescence date have been obtained from deposits at 38FA608. Sample were selected for dating to clarify the natural and cultural stratigraphy at the site.

Radiocarbon Dates

The four radiocarbon dates obtained from 38FA608 thus far are listed in Table 16.

Zone 7 (Beta-475888)

A date of 5170 +/- 30 RCYBP was obtained from a small piece of charcoal collected from Zone 7 in the north wall of profile of Unit 9 (2017). This is the zone, discernible as a subtle grayish zone extending the length of the machine cut, that contained the deposit of quartz chipping debris designated Feature 1. This zone produced Guilford points in both the 2017 and 2018 seasons. The radiocarbon date from this zone is consistent with the Middle Archaic age of the Guilford points it contains, and securely dates the zone to the Middle Archaic period.

Zone 19 (Beta-475889)

A date of 5870 +/- 30 RCYBP was obtained from an isolated piece of charcoal collected from Zone 19 during the excavation of Unit 11 (2017). The Middle Archaic age of this date is unexpectedly young, given that diagnostic Middle Archaic artifacts have been recovered and securely dated over a meter higher in the stratigraphy. While probable cultural materials were present in the deposits immediately above the zone which produced this piece of charcoal, no diagnostic artifacts were among them. If the charcoal sample accurately dates the sediments from which it was obtained, the Middle Archaic deposits ate 38FA608 are quick thick. It seems more likely, however, that the charcoal migrated downward through the deposits through some natural agency. Further work will be undertaken to clarify the age and nature of the deposits in the "basement" portion of the site.

Feature 11 (UGAMS-38512)

A date of 2230 +/- 20 RCYBP was obtained from a piece of carbonized nutshell from the flotation sample from the south half of Feature 11 (excavated in 2018). This date indicates that Feature 11 is Woodland in age, penetrating into the Late/Terminal Archaic midden below rather than originating from it.

Table 16. Radiocarbon dates obtained from 38FA608.

Sample ID	Material	Context	FS No.	$\delta^{13}C$, 0/00	Radiocarbon Age (RCYBP)	+/-	pMC	+/-
Beta-475888	Charcoal	Zone 7	1179	-27.9	5170	30	52.54	0.20
Beta-475889	Charcoal	Zone 19	1318	-27.1	5870	30	48.16	0.18
UGAMS-38512	Charcoal	Feature 11	1722	-24.9	2230	20	75.74	0.19
UGAMS-38513	Charcoal	Feature 12	1717	-24.8	3930	20	61.31	0.17

Feature 12 (UGAMS-38513)

A date of 3930 +/- 20 RCYBP was obtained from a piece of carbonized nutshell from the flotation sample from the north half of Feature 12 (excavated in 2018). This date is consistent with a Late Archaic age for Feature 12.

Optically Stimulated Luminescence Date

A single sample of sand from the lowest stratum (Zone F) exposed in Trench 25 was submitted to the Geoluminescence Dating Research Laboratory at Baylor University for optically stimulated luminescence (OSL) dating. The results as returned are shown in Figure 48. The OSL age of the sand deposit is 22, 730 +/- 1505 years, indicating that Zone F was last exposed to sunlight during the Last Glacial Maximum.

Table 1: Optically stimulated luminescence (OSL) ages on quartz grains from a fluvial sand deposit

Field number/depth (m)	Lab number	Aliquots[a]	Grain Size (μm)	Equivalent dose (Gray)[b]	Over-dispersion (%)[c]	U (ppm)[d]	Th (ppm)[d]	K (%)[d]	H_2O (%)	Cosmic Dose rate (mGray/yr)	Dose rate (mGray/yr)	OSL age (yr)[e]
FS 81/4.5	BG4695	38/40	250-355	71.53 ± 2.65	19 ± 2	2.74 ± 0.01	12.70 ± 0.01	2.42 ± 0.01	20 ± 2	0.12 ± 0.01	3.15 ± 0.16	22,730 ± 1505

[a]Aliquots used in equivalent dose calculations versus original aliquots measured.
[b]Equivalent dose calculated on a pure quartz fraction with about 40-100 grains/aliquot and analyzed under blue-light excitation (470 ± 20 nm) by single aliquot regeneration protocols (Murray and Wintle, 2003). The central age model of Galbraith et al. (1999) was used to calculated equivalent dose when overdispersion values are <25%.
[c]Values reflects precision beyond instrumental errors; values of ≤ 25% (at 1 sigma limit) indicate low dispersion in equivalent dose values and a unimodal distribution.
[d]U, Th and K content analyzed by inductively-coupled plasma-mass spectrometry analyzed by ALS Laboratories, Reno, NV; U content includes Rb equivalent. includes also a cosmic dose rate calculated from parameters in Prescott and Hutton (1994).
[e]Systematic and random errors calculated in a quadrature at one standard deviation. Datum year is AD 2010.

Figure 48. Optically stimulated luminescence date from the deepest sediment yet exposed (Zone F) at 38FA608.

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