PRELIMINARY RESULTS FROM 2024 EXCAVATIONS OF SOAP SUDS ROW AT OLD FORT MEADE (39MD0045), MEADE COUNTY, SOUTH DAKOTA

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for
Deadwood Historic Preservation

February 2025

ABSTRACT

The University of South Dakota (USD), Bear Butte Historic Preservation Commission (BBHPC), and Augustana University Archaeology Laboratory directed an archaeological field school offered through USD in May 2024 to investigate cultural resources on state lands in Meade County in South Dakota. This involved a pedestrian survey and testing of site 39MD0045 in SE1/4 of Section 2, T5N, R5E and N1/2 of NE1/4 of Section 11, T5N, R5E, on property of Meade School District. BBHPC holds the lease of the School Lands and manages the parcel. USD is the lead agency for this project and the parcel was investigated on behalf of the BBHPC to fulfill an Outside of Deadwood grant through the Deadwood Historic Preservation Commission. Project objectives included the identification of precontact and historic properties within the parcel. Pedestrian survey and excavations of a depression at site 39MD0045 was conducted May 13–23, 2024.

This investigation resulted in the evaluation of a previously recorded Historic period site, 39MD0045. The focus of the 2024 excavations was the "Soap Suds Row" portion of 39MD0045, which refers to the housing originally used by laundresses employed by Fort Meade in the late 1800s and early 1900s. The 2024 archaeological work focused on surveying and excavating surface depressions that may represent historic features. Building upon previous 1x1m unit excavations, nine 1x1m units were opened in 2024 to investigate a large depression and possible privy. The diagnostic artifacts recovered date primarily to the 1870s-1910s and include domestic household items, food debris, children's toys, and military clothing.

This information will assist the State of South Dakota in protecting cultural resources within portions of the parcel that is South Dakota state property. This work also advances the broad goal of learning more about the history of Fort Meade and the longer cultural use of the valley of Bear Butte Creek. Additionally, the project is in support of development of a natural and historical park on land formerly included in the Fort Meade Military Reservation, as well as providing an educational experience for South Dakota archaeology students and volunteers.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACKNOWLEDGMENTS

As was the case with the excavations at Soap Suds Row in 2022 and 2023, the 2024 field school was supported by numerous individuals who graciously volunteered their time. Importantly, this project builds upon previous work at 39MD0045 by a multitude of archaeologists. Most notably, this would not have been possible without the volunteer excavations at Soap Suds Row led by Linea Sundstrom. Likewise, Brenda Shierts has been instrumental in all archaeological work at Soap Suds Row and regularly visited the 2024 field school.

We would like to provide our sincere thanks to the Bear Butte Historic Preservation Commission for fostering the development of this project and the involvement of the University of South Dakota (USD). Ross, Jan, and Logan Lamphere were critical members of the field crew and graciously let the field school use the Lamphere Ranch Campground for lodging and as a field laboratory. They also orchestrated an evening barbeque that served as an important group bonding event between the field school students and the archaeological community of the Black Hills.

This project greatly benefited from collaborations with the South Dakota State Historical Society Archaeological Research Center. Katie Lamie and Lynn Griffin provided an extraordinarily helpful workshop to the field school students about artifact cleaning at the Lamphere Ranch and Katie visited USD at the start of the Fall 2024 semester to provide a workshop on artifact cataloging. Alec Anton shared the GIS data he had put together for the 2022–23 volunteer excavations and was instrumental towards getting the geospatial aspects of this project established. Alec Anton and Fidel Martinez-Greer also volunteered their time to assist with 1x1m unit excavations.

Allan Johnson served as a crew chief and generously donated two weeks of his time towards the project. Michael Fosha and Catherine Oberheim volunteered to assist with excavation almost every day of the field school, which was of immense help! Renee Boen and Jana Morehouse also visited the field crew and provided tasty treats!

Additionally, twelve undergraduate students at USD enrolled in this field school and four of these students (Emma Byrne, Elyn Krohn, McKenzie Merchant, and Eva Rindelaub) kindly served as research assistants for this project throughout the 2024–25 academic year. USD's student anthropology club (the Anthropology Program Enthusiasts Societies) organized five events in the Fall 2024 semester focused on processing and analyzing materials collected from the field school, such as Artifact Cleaning Night and Flotation Night.

Finally, this field school was financially supported by an Outside of Deadwood grant from the Deadwood Historic Preservation Commission and by funding from USD's Department of Anthropology and Sociology. We would also like to thank Sue and Doug Tuve for their generous contributions towards anthropology at USD.

Preliminary Results from 2024 Excavations of Laundress Housing at Old Fort Meade (39MD0045), Sturgis, SD

INTRODUCTION

The University of South Dakota (USD), Bear Butte Historic Preservation Commission (BBHPC), and Augustana University Archaelogy Laboratory directed an archaeological field school offered through USD in May 2024 to investigate cultural resources on state lands in Meade County in South Dakota. This involved a pedestrian survey and testing of site 39MD0045 in SE1/4 of Section 2, T5N, R5E and N1/2 of NE1/4 of Section 11, T5N, R5E, on property of Meade School District. BBHPC holds the lease of the School Lands and manages the parcel. USD is the lead agency for this project and the parcel was investigated on behalf of the BBHPC to fulfill an Outside of Deadwood grant that USD received in 2024 from the Deadwood Historic Preservation Commission. Project objectives included the identification of precontact and historic properties within the parcel. Pedestrian survey and excavations of a depression at site 39MD0045 was conducted May 13–23, 2024. This investigation resulted in the evaluation of a previously recorded Historic period site, 39MD0045. The focus of the 2024 excavations was the "Soap Suds Row" portion of 39MD0045, which refers to the housing originally used by laundresses employed by Fort Meade in the late 1800s and early 1900s. The 2024 archaeological work focused on surveying and excavating surface depressions that may represent historic features. Building upon previous 1x1m unit excavations, nine 1x1m units were opened in 2024 to investigate a large depression and possible privy.

ENVIRONMENTAL SETTING

This section presents a general description of the environmental setting of Meade County. The county is part of the larger Belle Fourche Archaeological Region, which spans parts of northwestern South Dakota (Sundstrom 2019). According to Ollia (1978:128), the region's topography are at or close to the surface which has resulted from the Black Hills uplift and the following erosional episodes. The geological age ranges from the Deadwood Formation of the Cambrian Period and the stratigraphy also contains beds of geologics from the Tertiary Period with the White River Group (Ollia 1978:128). In South Dakota, the Deadwood Formation houses light brown to red, course to fine grained sandstones and brownish gray to red sandy and silty shales (Ollia 1978:128). Tall terraces running along the Cheyenne and Belle Fourche Rivers drains the major creeks east of the Black Hills and are covered with old alluvium (Ollia 1978:128-129; Gries 1998). Some terraces contain loess which can contain buried ancient cultural materials (1978:129).

The climate of Meade County is a continental typology with hot summers and cold winters (Ollia 1978:129). The climate is somewhat uniform east of the Black Hills (Ollia 1978:129). Precipitation ranges for 17-21 inches a year in Sturgis and southwest of there, the mean annual temperature is approximately 47° F (Ollia 1978:129). Animals, plants, earthworms, insects, fungi, and bacteria aid in the formation of fertile soils (Ollia 1978:129). The plants are susceptible to climate and the topography of the land which alters the content of organics and the nutrients in the soil (Ollia 1978:129). The nearly level to slightly sloping soils have similar vegetation depending upon the soil type. Steeper topography typically has a thinner A horizon and supports different species of grasses that are very susceptible to erosional effects caused by wind and water runoff (Ollia 1978:129). Prairie dogs and other burrowing rodents and canids can severely affect the natural stratigraphy through their burrowing actions and cause many soils to be intermixed.

The elevation of Southern Meade County ranges from 2,200 feet (670.6 meters) near the Cheyenne River in the east up to 5,400 feet (1,645 meters) amsl (above mean sea level) on some ridges and peaks in the southwest (Ollia:1978:131). The Cheyenne ad Belle Fourche Rivers are streams on the surface that have continuous flow, and the tributary streams that come out of the Black Hills dry up by midsummer (Ollia 1978:131). Small ponds have been created by dams and dugouts to supply water to livestock in the area.

The climate of southern Meade County is semi-arid with cold winters and very hot summers with approximately 82 precent of precipitation falling during spring, summer, and fall (Ollia 1978:131). This is based on data collected between 1952 to 1974 (Ollia 1978:131). Temperature fluctuates greatly to ranging above 90° F in summer on an average of 53 days a year, with five of them over 100° F (Ollia 1978:131). During winter, annual snowfall at Union Center is 22.6 inches and temperatures can drop as low as -20° F (Ollia 1978:132). The growing season averages around 125 days. Snow cover can protect pastures and fields from erosion caused by high winds but can also delay spring fieldwork (Ollia 1978:132). Thunderstorms occur 40 to 45 days a year and hail averages about three times a year with large storms, and 50 mph winds can be present during storms during any month of the year (Ollia 1978:132). Relative humidity varies from 70 percent during the mornings, to 50 percent during the spring and summers in Meade County (Ollia 1978:132).

Table 1. Specific Soil Associations Mapped near 39MD0045.

Map Unit Symbol	Soil Associations	General Description of Associations
2	Nunn-Satanta-Zigweid association	Deep, well drained, nearly level to strongly sloping, loamy soils that formed in alluvium (Ollia 1978).
3	Blackpipe-Savo-Manvel association	Moderately deep and deep, well drained, nearly level to moderately steep, silty soils over siltstone or shale (Ollia 1978).
5	Canyon-Lakoa-Maitland association	Shallow and deep, well drained, moderately sloping to steep, loamy soils over sandstone, siltstone, or shale (Ollia 1978).
6	Citadel-Vanocker association	Deep, well drained, hilly to steep, silty and loamy soils over limestone, sandstone, or shale (Ollia 1978).
8	St. Onge-Keith association	Deep, moderately well drained and well drained, nearly level to gently sloping, loamy and silty soils that formed in alluvium and in loess (Ollia 1978).
10	Kyle-Pierre-Hisle association	Deep and moderately deep, well drained and moderately well drained, nearly level to strongly sloping, mainly clayey soils over shale (Ollia 1978).
13	Grummit-Pierre association	Shallow and moderately deep, well drained, gently sloping to steep, clayey soils over acid shale (Ollia 1978).

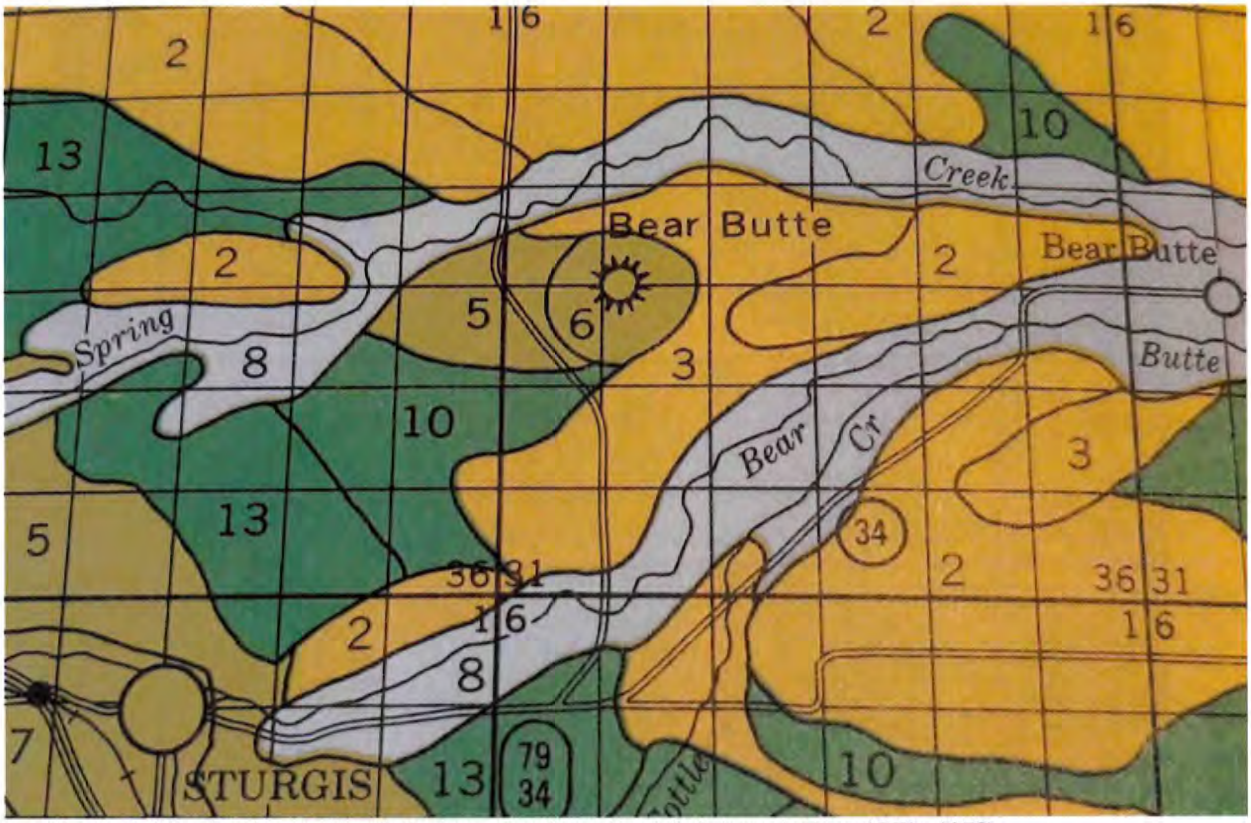

Figure 1. Meade County South Dakota, Southern Part Soil Associations (Ollia 1978).

Specific soils and associations mapped in the area of 39MD0045 are identified in (Table 1; Figure 1) (Ollia 1978). These soils typify heavily farmed and livestock grazed deposits exhibiting shallow topsoils disturbed by erosional effects, cultivation (Ap horizons), livestock grazing, rodents, and development. Very ancient cultural resources are present in buried contexts due below a meter-deep with a buried A horizon at the site.

The specific soil mapped at 39MD0045 is Altvan loam (mapped soil AIA) (Ollia 1978:12) (Figure 2). This soil series is characterized by well drained, nearly level to gently sloping, loamy soils that are moderately deep over gravelly sand (Ollia 1978). Altvan soils formed in loamy sediments on upland hillslopes and terraces (NRCS 2025). Clay content is 20-35% with 0-15% gravel, and depth to secondary calcium carbonates is 41 to 97 centimeters (16 to 38 inches) (NRCS 2025).

Figure 2. Soils Mapped at 39MD0045 (NRCS 2025).

Table 2. Soap Suds Row (39MD0045) Subsurface Testing table.

Test No.	Type	Test Diameter (cm)	Mapped Soil (Map Code) and Geomorphological Correlate	Horizon Depths (cmbs)	Horizon Munsell Results	Cultural Resources
ST1	Shovel test	50	Altvan loam 0 to 2 percent slopes (AIA) *Loamy Terrace*	0-40 (Ap)	Brown (10YR3/3) silt loam, granular structure, moist, friable, few pebbles	Positive Level 2 (20-30 cmbs) • 3 Pieces of Flat Colorless Glass
ST2	Shovel test	50	Altvan loam 0 to 2 percent slopes (AIA) *Loamy Terrace*	0-10 (Ap) 10-20 (BA) 20-30 (Bt)	Very dark brown (7.5YR 2.5/2) silt, granular structure, moist, friable, gradual boundary Dark yellowish brown (10YR 4/4) sandy silt, granular structure, moist, friable, few pebbles, gradual boundary Dark yellowish brown (10YR 4/3) mottled with brown (10Y/R 5/3) sandy silt, granular structure, moist, friable, few pebbles	Positive Level 1 (0-10 cmbs): • 12 fragments of whiteware (one maker mark, one w/ writing) • 3 shards of colorless glass Level 3 (20-30 cmbs): • One colorful rock that looked like glass

The Altvan soil series (NRCS 2025) is fine loam that is moderately deep to sand or gravelly sand, well-drained, and form in loam sediments on uplands and terraces. These soils (map unit

AIA) typically exhibit an Ap-A-BA-Bt-Bk-C-2C profile and are associated with uplands and stream terraces (NRCS 2025). The setting is a slightly sloping to nearly level terrace.

The purpose of subsurface evaluations was to document plow zone depth, verify the accuracy of mapped soils, evaluate the geomorphological potential for buried cultural resources within the 39MD0045 area, and to compensate for reduced levels of ground surface visibility. Ultimately, the placement of subsurface tests was dictated by a number of factors, including project boundaries, landform and mapped soils, and weather that day during subsurface testing, which was pouring rain.

Crew chiefs, (Allan Johnson and Aaron Mayer) each excavated one round 50-cm-diameter subsurface shovel tests. This was done to instruct the USD students how to excavate a shovel test according to the South Dakota state standards. All subsurface tests were excavated in arbitrary 10-cm levels except that the plow zones were each excavated as a single level regardless of thickness (Figures 3–4; Table 2). Soil matrix from each test was sieved through standard 1/4-inch hardware mesh. Standard dimensions and GPS coordinates of each subsurface test were recorded, and soils information was obtained through the use of Munsell® Soil Color Charts (2000). Tests were all backfilled immediately following data recordation. Artifacts were collected and recorded.

The Level III investigations in support of the excavation incorporated surface survey and subsurface evaluative components that conformed to governing state (SHPO 2021) and federal (Advisory Council on Historic Preservation 2012; National Park Service [NPS] 1991) standards for the survey, management, and protection of cultural resources. Survey work was accomplished for the purpose of assessing the potential for locating buried archaeological deposits and cultural materials (Sundstrom 2019).

Figure 3. ST1 at 50cmbs.

Figure 4. ST2 at 50cmbs.

PREVIOUS INVESTIGATIONS

This work builds upon archaeological work and volunteer excavations in 2022-2023 led by Linea Sundstrom in the Soap Suds area, which excavated a privy and a potential log structure. A background records search was conducted on August 19, 2024, by A. DeLuca, South Dakota State Historical Society, Archaeological Research Center (ARC), Rapid City, South Dakota (Appendix I). Search results revealed that 55 cultural resource investigations (Alex 1978; Armitage 2004; Blyth et al. 2009; Braun 1994; Broce 2022; Bruce 2009; Buechler 1988, 1992, 1994, 2001, 2006, 2013, 2015, 2019; Calhoun 2009; Carpenter 2008, 2013, 2017a, 2017b; Clark 1977, 1980, 1981a, 1981b, Clark and Goheen 1979; Clark and Schley 1978; Crawford 2007; Kimball 2019; Mayer 2019; Ramirez 2021; Rogers 2000; Schley 1977; Scott 2019; Shierts 2009a, 2009b, 2014, 2015a, 2015b, 2016, 2018a, 2018b, 2019, 2020, 2022; Shierts and Petersen 2012; Walker-Kuntz 2005, 2006; Williams 1999, 2002a, 2002b, 2003, 2004a, 2004b, 2004c, 2006a, 2006b) were previously conducted within one mile of the APE (see References). A portion of the project area was previously excavated by Sundstrom (2024; Sundstrom and Burgess 2023). Twenty-eight previously recorded archaeological site are within one mile of the project area (39MD0005; 39MD0024; 39MD0030; 39MD0042; 39MD0043; 39MD0045; 39MD0081; 39MD0293, 39MD0369; 39MD0375; 39MD0375; 39MD0672; 39MD0923; 39MD0923; 39MD0924; 39MD0925; 39MD0926; 39MD0927; 39MD0928; 39MD0929; 39MD0930; 39MD0931; 39MD0932; 39MD0933; 39MD0934; 39MD0937; 39MD3002; 39MD3002.103; 39MD3002.1898; 39MD3002.2206). Eighty-four structures and districts are located within a mile of 39MD0045 Soap Suds Row.

FIELD WORK

Testing for the evaluation of the 39MD0045 site was conducted May 12-23, 2024, as an archaeological field school directed by USD, BBHPC, and the Augustana University Archaelogy Laboratory. Key personnel included Tony Krus, Allan Johnson, Aaron Mayer, and 12 undergraduate students from USD enrolled in the field school.

Volunteer work conducted at 39MD0045 in 2022–2023 involved the excavation of three 1x1m units to investigate a large depression that Sundstrom (2024; Sundstrom and Burgess 2023) tentatively concluded may represent the remnants of a cellar and a collapsed structure. Six 1x1m test units (XU 9–14) were placed in 2024 to further understand the material cultural and architectural remnants associated with this depression. An additional three 1x1m units were placed in 2024 to excavate an associated potential privy pit on the terrace edge (XU 15–17). Two shovel tests measuring 50 cm (1.6 ft) in diameter were excavated near these units to a depth of 40-50 cm (1.3-1.6 ft) below surface (bs) as a training exercise for the field school students.

Continuing the methodology of the previous volunteer excavations, the field school students excavated units at arbitrary 5cm levels and completed unit level forms to carefully document findings. Field journals describing day-to-day project activities and findings were completed by the 12 undergraduate USD students, Tony Krus, and Aaron Mayer. Quarter inch screens were used to process all excavated matrix and piece plots were provided to artifacts of intrinsic interest. Soil samples were also taken and processed for flotation from key archaeological contexts.

Photo documentation was conducted for each arbitrary level, site feature, and shovel test. A survey-grade Trimble GPS was used to record the spatial location of test units, datums, and shovel tests. The top center of stakes in the northwest corner of each unit served as unit datums for XU 9–15 and XU 17. Due to the sloping terrace edge, the top center of a stake in the southwest corner of XU 16 served as the datum for that unit. No paleontological resources were observed in the project and the only evidence of Prehistoric period cultural resources come from several lithic flakes. While no new site components were identified, the boundary for 39MD0045 was updated for the state's site form.

PRELIMINARY RESULTS

The 2024 field school expands upon the findings from the 2022-23 volunteer excavations of the "Soap Suds Row" portion of 39MD0045, which refers to the housing originally used by laundresses employed by Fort Meade in the late 1800s and early 1900s. These volunteer excavations and results are reported in two excavation reports written by Linea Sundstrom (2024; Sundstrom and Burgess 2023). Six 1x1m test units (XU 9–14) from the 2024 field school expand upon three 1x1m test units (XU 4–6) placed by Sundstrom (2024; Sundstrom and Burgess 2023) to excavate a potential structural depression (Figure 5). The 2022-23 volunteer excavations placed an additional five 1x1m units (XU 1–3, 7–8) to excavate a privy depression on the terrace edge nearby this potential structure. To build upon this work, the 2024 field school excavated three 1x1m units to investigate a second privy depression in the general vicinity and Figure 5 provides a map of this unit placement. The 2024 field school resulted in a total of nine 1x1m excavation units yielding 118 bags of artifacts collected by arbitrary unit level or as piece plots. Tables summarizing test unit findings are presented in Appendix II and Appendix III lists the 51 artifacts were collected as piece plots. The results of Aaron Mayer's botanical analysis are presented in Appendix IV. Artifact cataloging and analysis is still ongoing, but the preliminary results expand upon Sundstrom's (2024; Sundstrom and Burgess 2023) findings regarding Soap Suds Row.

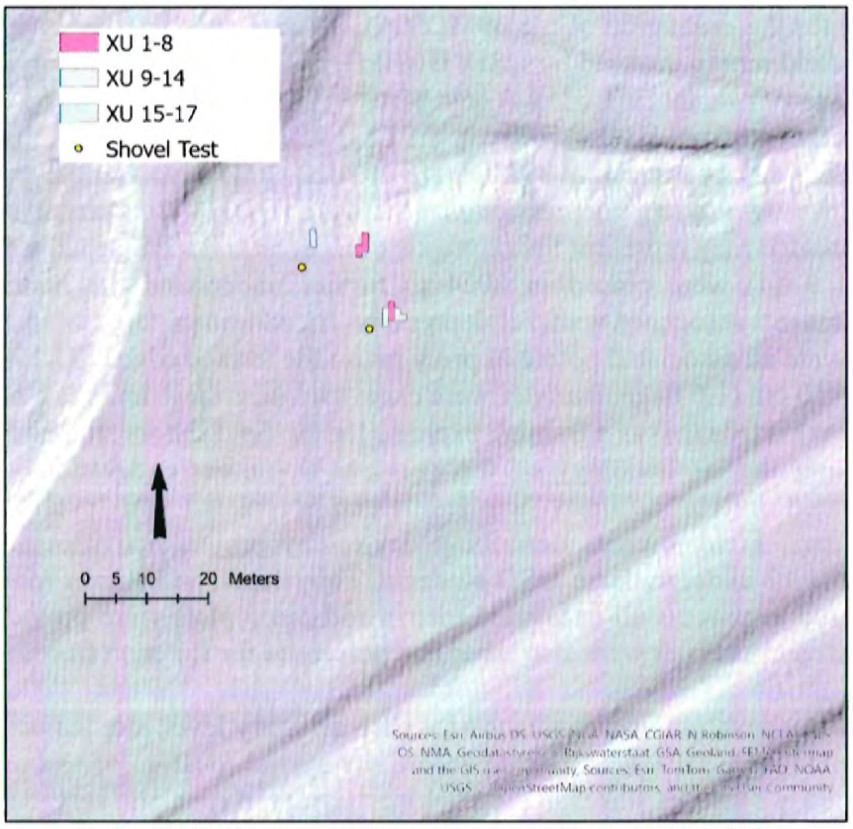

Figure 5. Unit locations for the 2025 excavations at 39MD0045.

Figure 6. Feature 7 in XU 12–14.

The 1x1m test units (XU 4–6) excavated above the potential structural depression by the 2022-23 volunteer teams revealed two especially notable features: 1) "a concentration of household debris associated with several logs" (Feature 7; Sundstrom 2024:16), and 2) a feature directly below Feature 7 represented by "a vertical plank wall and an associated trench marking the back wall of a subsurface cellar or icehouse" (Feature 9; Sundstrom 2024:16). Six 1x1m test units (XU 9–14, Figures 5) were placed by the 2024 field school on the western and eastern sides of XU 4–6 to better understand these two features and further assess to what extant this surface depression may represent an original structure from Soap Suds Row.

Feature 7 showed up prominently in XU 13, beginning in Level 5 (20–25 cmbd; Figure 6), as a continuation of the parallel deteriorated logs encountered by the 2022-23 volunteer excavations in XU 6. Large wood fragments were also encountered in the lowest level (Level 8, 35–40 cmbd) excavated of two adjacent units (XU 12 and XU 14); although, these do not appear to be *in situ*. The only other feature encountered in XU 9–14 was a shallow concentration of cut cattle bone and broken bottle glass (Feature 12) in Level 6 (25–30 cmbd) of XU 10, potentially a small waste deposit.

While artifact cataloging is still ongoing, almost all of the diagnostic artifacts identified in XU 9–14 appear to be from the late 19th century. The most temporally secure artifacts identified thus far are:

- A fragment of an E. C. Dewitt Company "One Minute Cough Cure" bottle dated to the 1890s from Level 4 (15-20cmbd) of XU 11 (Figure 8).
- Approximately half of a late 1800s bottle of "Dr. Shoop's Family Medicines" (PP-19) from Level 7 (30-35cmbd) of XU 11 (Figure 8).
- A fragment of a late 1800s Adolphus Busch Glass Manufacturer Co. bottle (PP-20) from Level 6 (25-30 cmbd) of XU 10 (Figure 7). Fragments belonging to a second 1800s Adolphus Busch Glass Manufacturer Co. bottle (PP-38) were recovered from Level 8 (35-40 cmbd) of XU 12.
- A bullet case was recovered from Level 7 (30–35cmbd) of XU 11. Catherine Oberheim (Washington Department of Archaeology & Historic Preservation) has tentatively identified a date of manufacture around the late 1800s.

Additional artifacts of intrinsic interest from XU 9–14 include:

- A fragment of a cast iron oven plate (PP-15) from Level 5 (20-25cmbd) of XU 10.
- A metal buckle (PP-22) from Level 7 (30-35 cmbd) of XU 12.
- A decorative jewelry pendant from Level 8 (35–40cmbd) of XU 11 (Figure 9).
- A piece of chalk (PP-28) from Level 8 (35-40 cmbd) of XU 12.
- A crushed pail (PP-31) from Level 8 (35-40 cmbd) of XU 10.
- A rubber shoe fragment (PP-37) from Level 8 (35-40 cmbd) of XU 10 (Figure 10).
- A door hinge (PP-40) from Level 8 (35-40 cmbd) of XU 10.
- A white four-hole button from Level 8 (35-40 cmbd) of XU 10 and a shell button from Level 5 (20–25 cmbd) of XU 11.

Overall, the late 19th century artifact assemblage from XU 9–14 aligns with the findings of Sundstrom (2024; Sundstrom and Burgess 2023) that this depression may relate to architecture that was part of the original Soap Suds Row; although, plenty of questions remain. The 2024 field school did not excavate to depths necessary to encounter the subsurface cellar (Feature 9) of this depression and, therefore, was not able to further delineate the larger shape of the cellar. A major goal of the upcoming 2025 field school by USD at Soap Suds Row will be to further excavate XU 9–14 deeper to gain a better understanding of this cellar feature. It is also unclear if the parallel logs that comprise Feature 7 are *in situ* or if they have been redeposited from their original location.

Sundstrom (2024) speculated that the artifact assemblage and archaeological contexts for this depression may have belonged to Rose Courtney; however, plenty of work remains to be done to uncover more of Feature 7 to gain a better understanding of the structure's architecture.

Figure 7. Fragment of an Adolphus Busch Glass Manufacturer Co. bottle (PP-20) from XU 10.

Figure 8. Fragment of an E. C. Dewitt Company "One Minute Cough Cure" bottle from XU 11.

Figure 9. Decorative jewelry pendant from XU 11.

Figure 10. Rubber shoe fragment (PP-37) from XU 10.

Figure 11. Base of Level 8 in XU 15. Feature 11 soils are visible in the northeastern quadrant of XU 15.

Three 1x1m test units (XU 15–17; Figure 5) were excavated to bisect a surface depression on the terrace edge that was similar in morphology to that privy excavated by the 2022-23 volunteer excavations in XU 1–3 and XU 7–8. The primary goal of assessing a second privy depression was to create a more robust sample of temporally diagnostic features near one another to assess social and historical changes through time at Soap Suds Row.

XU 15–17 bisected this pit feature (Feature 11), which was delineated by dark and burnt soils (Figure 11; Appendix II). Several artifacts within the burnt soils were also clearly warped extreme heat and this was especially apparent with a pail (PP-46) filled with charred debris (Figure 12). The burnt matrix within PP-46 resembles what Sundstrom (2024; Sundstrom and Burgess 2023) had previously referred to as "funky foam," which she speculated may be a solid substance produced from soap making. Artifacts and cut cattle bones were present throughout the Feature 11 soils and a concentration of metal artifacts was designated as Feature 10. Feature 10 showed up most prominently in Level 2 (30–35cmbd) of XU 16 and consisted of a cluster of metal artifacts that is speculated to be components of a laundry wringer. A profile of the pit soils encountered in XU 15 is shown in Figure 13.

The lack of stratigraphy between the Feature 11 fills suggest that filling may have occurred in a relatively short period of time, perhaps even within a single event. There is little evidence to suggest that Feature 11 functioned as a privy prior to the infilling of waste. Feature 11 is tentatively interpreted as a waste pit, where a fire was created prior to final filling.

Figure 12. Burnt pail (PP-46) from Feature 11 in XU 15.

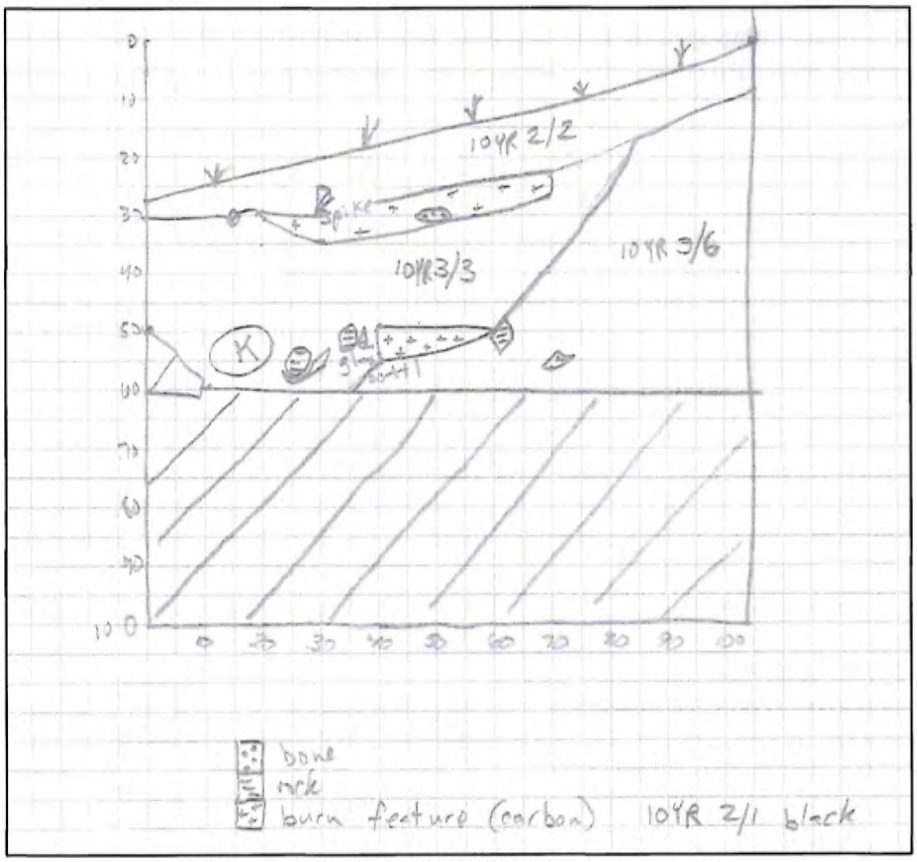

Figure 13. Soil profile of XU 15's eastern wall.

Figure 14. Ceramic pipe fragment from XU 17.

While artifact cataloging is still ongoing, almost all of the diagnostic artifacts identified in XU 15–17 appear to be from the late 19th century. The temporally diagnostic identified thus far are:

- Two ceramic pieces with Johnson Bros. maker's marks from XU 16 that were likely manufactured in the late 1800s.
- A late 1800s ceramic pipe fragment with straight diagonal cockles (Figure 14) from Level 1 (0–5 cmbd) of XU 17.
- A nearly complete standard diatonic harmonica (Figure 15), which were mass produced in the late 1800s. This harmonica (PP-39) was encountered in Level 1 (0–5 cmbd) of XU 17.
- Three military buttons from XU 15–17 dating to the 1800s were encountered. Two additional brass Horstmann Philadelphia military buttons belonging to general staff were encountered in Level 1 (0–5 cmbd) of XU 17 and there were manufactured from 1893-1947.
- Glass fragments and a stopper were recovered in XU 16 that appear to belong to a bottle of Madame A. Ruppert's Face Bleach (Figure 16), which was produced in the 1890s.
- Fragments of a late 1800s Adolphus Busch Glass Manufacturer Co. bottle (PP-35) from Level 1 (0–5 cmbd) of XU 17.
- A glass fragment potentially from a bottle of Burnett's Cocaine Hair Tonic was encountered in Level 2 (30–35cmbd) of XU 16 (Figure 17), which appears to have been produced approximately between 1870–1909.
- Fragments of a bottle of sewing machine oil produced by the Singer Manufacturing Company were encountered in Level 4 (40–45cmbd) of XU 16 (Figure 18), which appears to have been produced in the late 1800s.
- Fragments of a possible 1800s French muscat wine bottle were recovered from Level 2 (30–35cmbd) of XU 16.

- Fragments of a glass saltshaker (PP-36) with "US QMD" embossed on the base, indicating that it was produced by the U.S. Quartermaster Department prior to the Department's reorganization in 1912.
- Fourteen bullet cases were recovered from XU 15–17. Catherine Oberheim (Washington Department of Archaeology & Historic Preservation) has tentatively identified several of these as ammunition cases that were manufactured around the late 1800s.

Additional artifacts of intrinsic interest from XU 15–17 include:

- Three chandelier crystals (PP-3) were encountered in Level 2 (5–10cmbd) of XU 15 (Figure 19).
- A horseshoe (PP-6) in Level 3 (10–15cmbd) of XU 15 (Figure 20).
- Two pieces of potential clothing were encountered in XU 15–17. Specifically, 1) 2) A small heel piece (PP-12) in Level 4 (40–45cmbd) of XU 16 (Figure 21), and 2) A decorative metal strap (PP-48) from Level 1 (0–5 cmbd) of XU 17.
- A set of toy cast iron horses (PP-07, PP-08) were represented by four artifacts found in XU 15 (Figure 22).
- A doll leg recovered from Level 6 (25–30cmbd) of XU 15 (Figure 23).
- A potential gaming piece or white collar button was recovered from Level 4 (40–45cmbd) of XU 16.
- A pencil fragment (PP-51) and a piece of slate (PP-50) recovered from Level 1 (0–5 cmbd) of XU 17.
- A nearly complete metal key (PP-32) recovered from Level 1 (0–5 cmbd) of XU 17.
- Fragments of fifteen additional non-military buttons were recovered from XU 15–17 and three of these are crafted from shell.

Similar to XU 9–14, the late 19th century artifact assemblage from XU 15–17 provide further evidence that the pit represented by Feature 11 may have been a part of Soap Suds Row. The diverse assemblage of different artifact types, ranging from children's toys to clothing to beauty products, matches-up nicely with what one would expect to find associated with laundress housing. It is especially surprising that the 2022-23 volunteer excavations did not encounter any children's toys or pencils. The presence of these artifacts from the 2024 excavation provides further evidence towards Sundstrom's (2024) historical research suggesting that the laundresses were tasked with childcare duties and children's education.

Figure 15. Harmonica fragments (PP-39) from XU 17.

Figure 16. Glass fragments and a stopper from XU 16 that are potentially from a bottle of Madame A. Ruppert's Face Bleach.

Figure 17. Glass fragment potentially from a bottle of Burnett's Cocaine Hair Tonic from XU 16.

Figure 18. Fragment of a Singer Manufacturing Company bottle from XU 16.

Figure 19. Chandelier crystals (PP-3) from XU 15.

Figure 20. Horseshoe (PP-6) from XU 15.

Figure 21. Heel piece (PP-12) from XU 16.

Figure 22. Cast iron toys (PP-07, PP-08) from XU 15.

Figure 23. Doll leg from XU 15.

SUMMARY AND CONCLUSIONS

USD, the BBHPC, and Augustana University Archaeology Laboratory directed an archaeological field school offered through USD in May 2024 to investigate cultural resources on of a previously recorded Historic period site (39MD0045) in Meade County in South Dakota. BBHPC holds the lease of the School Lands and manages the parcel. USD is the lead agency for this project and the parcel was investigated on behalf of the BBHPC to fulfill an Outside of Deadwood grant through the Deadwood Historic Preservation Commission. While artifact analysis is still ongoing, the preliminary results of this work yielded numerous artifacts and archaeological findings that provide insight into the lives of the laundresses that resided at Soap Suds Row. An Outside of Deadwood grant application has been submitted to the Deadwood Historic Preservation Commission to fund a 2025 USD field school at Soap Suds Row and this proposal is currently under review. The 2025 USD field school will focus on expanding the existing 1x1m test units to further understand the architecture of the Soap Suds Row structures and excavate nearby privy depressions to diachronically compare social changes through time. To prepare for this future work, several of the 1x1m test units were left open to 1) Further assess in 2025 if the structure represented by Feature 7 is round or square, and 2) Assess the depth of artifact deposits in Feature 9. This information will assist the State of South Dakota in protecting cultural resources within portions of the parcel that is South Dakota state property. This work also advances the broad goal of learning more about the history of Fort Meade and the longer cultural use of the valley of Bear Butte Creek. Additionally, the project is in support of development of a natural and historical park on land formerly included in the Fort Meade Military Reservation, as well as providing an educational experience for South Dakota archaeology students and volunteers.

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Appendix I

39MD0045 Archaeological Record Search

Laundress Housing at Old Fort Meade, Meade County			
A.DeLuca 08/19/2024			
Sites			
Site No.	**Description**	**NR Status Recommended**	**SHPO Determination**
39MD0005	Middle Archaic artifact scatter; Late Archaic artifact scatter; nonfarm ruins	Eligible	Eligible
39MD0024	American Indian artifact scatter	Unevaluated	
39MD0030	American Indian artifact scatter	Unevaluated	
39MD0042	American Indian artifact scatter	Not eligible	Not eligible
39MD0043	Late precontact artifact scatter; Late Archaic artifact scatter	Unevaluated	
39MD0045	American Indian artifact scatter; Euro-American artifact scatter	Unevaluated	
39MD0081	American Indian rock art; late precontact artifact scatter	Register	Register
39MD0293	Euro-American artifact scatter	Not eligible	Not eligible
39MD0369	American Indian stone circle; unknown cairn	Unevaluated	
39MD0375	Euro-American earthwork	Eligible	Eligible
39MD0672	Euro-American rock art	Unevaluated	Unevaluated
39MD0923	American Indian cairn; American Indian artifact scatter; American Indian depression; Euro-American isolated find	Unevaluated	Unevaluated
39MD0924	Unknown cairn	Unevaluated	
39MD0925	Unknown cabin	Unevaluated	
39MD0926	Unknown cairn	Unevaluated	
39MD0927	Unknown depression	Unevaluated	
39MD0928	Unknown cairn	Unevaluated	
39MD0929	Unknown cairn	Unevaluated	
39MD0930	Unknown cairn	Unevaluated	
39MD0931	Euro-American isolated find	Not eligible	
39MD0932	Euro-American isolated find	Not eligible	
39MD0933	Unknown cairn	Unevaluated	
39MD0934	Unknown depression	Unevaluated	

39MD0937	Unknown cairn	Unevaluated	
39MD3002	Fort	Register	Register
39MD3002.103	Euro-American fort	Eligible	Register
39MD3002.1898	Euro-American rock art	Unevaluated	
39MD3002.2206	Euro-American fort, artifact scatter	Not eligible	
Surveys			
Archive No	**Author(s)**	**Year**	**Report Title**
AMD-0023	Alex, Lynn M.	1978	A Cultural Resources Survey of a Proposed Northwestern Bell Telephone Cable, T5N, R5E, Section 3 on the Old Fort Meade Military Reservation in Meade County, South Dakota. No CIS
AMD-0039	Buechler, Jeffrey V.	1988	A Short Format Report of an Intensive (Class 111) Cultural Resource Inventory Survey of Proposed Expansion of the Sturgis Wastewater Treatment Facility in Meade County, South Dakota. Project No. 88-36
AMD-0062	Buechler, Jeffrey V.	1992	An Intensive (Class III) Cultural Resources Inventory Survey of Proposed Water Treatment Facility Construction at Fort Meade in Meade County, South Dakota. Project No. 92-17
AMD-0075	Braun, Kurt	1994	An Intensive Cultural Resources Survey of a Proposed Road Reconstruction of Junction Avenue to the City Limits in Sturgis, Meade County, South Dakota. SDDOT Project No. M 7701(2)PCEMS 299H. CIS No. 902
AMD-0076	Buechler, Jeffrey V.	1994	A National Register of Historic Places Evaluation of the Lithic Artifact Scatter Associated with Site 39MD81 in the Fort Meade National Register District of Meade County, South Dakota. Project No. 94-20
AMD-0084	Clark, Jerry	1981	Cultural Resources Class III Inventory Report for the City of Sturgis Sewer Line R/W across Fort Meade, T5N, R5E, Sections 1, 2, 10 & 11, Meade County, South Dakota. Report No. 629. Project No. M-50250
AMD-0103	Williams, Barry G.	1999	A Class III Cultural Resource Survey of National Public Lands Day Pipeline, T5N, R5E, Section 2 in Meade County, South Dakota
AMD-0120	Buechler, Jeffrey V.	2001	A Short Format Report of an Intensive (Class III) Cultural Resources Inventory Survey of Parking Lot Development and Access Road Construction or Improvements Adjacent to Fort Meade, Meade County, South Dakota. Project No. 01-22

AMD-0133	Williams, Barry G.	2002	A Level III Cultural Resource Survey of the Proposed Old Fort Meade Cemetery Parking Lot, T5N, R5E, Section 11 in Meade County, South Dakota
AMD-0136	Williams, Barry G.	2002	A Level III Cultural Resource Survey of the Proposed North of 79 Parking Lot, T5N, R5E, Section 11 in Meade County, South Dakota
AMD-0145	Williams, Barry G.	2003	A Level III Cultural Resource Survey of the Proposed Sheep Dog Trials, T5N, R5E, Section 12 at Fort Meade in Meade County, South Dakota
AMD-0172	Williams, Barry G.	2004	A Level III Cultural Resource Inventory for Fort Meade Bug Trees, 2003, T5N, R5E, Sections 10, 11, 14, & 15, Meade County, South Dakota
AMD-0173	Williams, Barry G.	2004	A Level III Cultural Resource Survey of Four Spring Maintenance Projects at Fort Meade, South Rim Spring (Cliff Shelf), North Rim Spring (Surprise), Spur Tank Spring (Coyote) and Deep Hole Spring (Aspen), Meade County, South Dakota
AMD-0203	Walker-Kuntz, Patrick	2005	One Hundred Acre Class III Cultural Resource Inventory with Metal Detection at Fort Meade, Meade County, South Dakota
AMD-0235	Walker-Kuntz, Patrick	2006	Fort Meade 270 Shovel Test Investigations for the Bureau of Land Management, Meade County, South Dakota
AMD-0245	Buechler, Jeffrey V.	2006	A Cultural Resources Survey and Test Excavations at Five Back Country Interpretive Sign Road Pull-outs in the Fort Meade National Register District in Meade County, South Dakota. DRS Project No. 06-42
AMD-0253	Williams, Barry G.	2004	Class III Inventory Report of the Survey of the Proposed National Guard Training Exercises Areas, Meade County, South Dakota. BLM Project No. 04-MT040-10
AMD-0254	Williams, Barry G.	2006	Class III Pedestrian Survey of Timbered Area of Fort Meade and Highway 79 Fire Area, Meade County, South Dakota. BLM Project No. 06-MT040-08
AMD-0255	Williams, Barry G.	2006	Class III Pedestrian Survey of the Fort Meade Post Prescribed Burn and Site Evaluation and Duff Removal of 39MD668, Meade County, South Dakota. BLM Project No. 06-MT040-09
AMD-0257	Armitage, Charles	2004	Cultural Resource Inventory: Natural Resources Conservation Service Soil Judging Competition 2004: Private and BLM Land, T2N, R7E, Section 29, T4N, R6E, Sections 7, 17, 19 and T5N, R5E, Sections 12, 13, 14, Meade Co, SD. Project No. 04NRCS02

AMD-0258	Rogers, Steven	2000	Architectural Inventory of Fort Meade VA Buildings for National Register Eligibility, Meade County, South Dakota. BLM Project No. 06-MT040-13
AMD-0259	Clark, Jerry	1977	Class III Pedestrian Survey of T5N-R5E, Sections 1, 2, 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, 26 and T6N, R5E, Sections 35, 36, Meade County, South Dakota. BLM Project No. 06-MT040-15
AMD-0270	Crawford, Rachel	2007	Level III Cultural Resources Inventory of Golden West Telecommunication, Inc.'s Sturgis VA Work Order #0705P116 Buried Cable Route Project, Meade County, South Dakota. QSI Project No. SD0775
AMD-0304	Carpenter, Mark	2008	Level III Cultural Resources Inventory of the Bear Butte Road Realignment, T5N, R5E, Section 3, Meade County, South Dakota. QSI Project No. SD0866. BLM Project 09-MT-040-01.
AMD-0310	Shierts, Brenda A.	2009	Level III Cultural Resource Inventory of a National Public Lands Day Footbridge over Bear Butte Creek, Meade County, South Dakota. BLM Project No. 09-MT040-09
AMD-0313	Calhoun, Emily	2009	Level III Cultural Resources Inventory of the Bear Butte Creek Riparian Restoration Project, T5N, R5E, Section 11, Meade County, South Dakota. QSI Project No. SD0975
AMD-0316	Shierts, Brenda A.	2009	Level III Cultural Resource Inventory of a Centennial Trailhead Water Trough in the Fort Meade Recreation Area, Meade County, South Dakota. BLM Project No. 09-MT040-15
AMD-0320	Bruce, Terri	2009	An Intensive Cultural Resources Survey of SDDOT Emergency Road Repair and Slope Stabilization Project No. P7701(03), PCN 02JE, and the Protection of National Register of Historic Places Eligible Rock Art Site, 39MD135, Sly Hill Road, Meade Co, SD. CIS2372
AMD-0322	Blythe, Ashley, Mark Goodyear, and C.J. Truesdale	2009	Class III Inventory of a 30 Meter (100 Foot) Corridor of the Fort Meade Scenic Byway (MCFO#: MT-020-09-385, SDFO#: 09-MT-40-12) in Sections 11, 14, 13, 23 & 24, T5N, R5E, Meade County, South Dakota
AMD-0331	Clark, Jerry	1981	Cultural Resources Class III Inventory Report for Fort Meade Stockwater Pipelines, T5N, R5E, Sections 3, 10, 11, 14 & 23, Fort Meade, Meade County, South Dakota. BLM Project No. 06-MT040-12-632

AMD-0332	Clark, Jerry and Andy Goheen	1979	Cultural Resources Class III Inventory Report for a BLM Proposal to Issue a Recreation and Public Purpose Lease to Muzzle Loaders of the Black Hills, T5N, R5E, Section 11, Fort Meade, Meade County, South Dakota. BLM Project No. 06-MT040-12- 308
AMD-0333	Clark, Jerry	1980	Cultural Resources Class III Inventory Report for a Proposed Right-of-Way for the City of Sturgis for Construction of a Baseball Field, T5N, R5E, Section 12, Fort Meade, Meade County, South Dakota. BLM Project No. 06-MT040-12-455
AMD-0335	Clark, Jerry and Tom Schley	1978	Cultural Resources Class III Inventory Report for a Right-of-Way for MDU Proposed Pipeline Construction, T5N, R5E, Section 11 & 15, Fort Meade, Meade County, South Dakota. BLM Project No. 06-MT040-12-715
AMD-0339	Schley, Tom	1977	Cultural Resources Class III Inventory Report for Stables Pipeline for Livestock, T5N, R5E, Section 11, Fort Meade, Meade County, South Dakota. BLM Project No. MT-020-6-7-2-234
AMD-0386	Shierts, Brenda A., and Tammy L. Peterson	2012	Field Assessment Information for the Fort Meade Artillery Bunker, Meade County, South Dakota. BLM Project No. 12-MTO40-14
AMD-0392	Buechler, Jeffrey V.	2013	A Level III Cultural Resources Inventory Survey of the Bureau of Land Management's Prescribed Burn North Unit J within the Fort Meade Historic Military Reserve, Meade County, South Dakota. DRS Project No. 12-14. BLM Project No. 12-MTO40-10
AMD-0409	Shierts, Brenda A.	2014	A Level III Cultural Resource Survey of the Proposed Grind Trail in Fort Meade, Meade County, South Dakota. BLM Project No. 14-MTO40-29
AMD-0421	Shierts, Brenda A.	2015	A Level III Cultural Resource Survey of an Erosional Cut Near the City Sewer Lagoons, (Sturgis), Meade County, South Dakota. BLM Project No. 14-MTO40-33
AMD-0423	Carpenter, Mark	2013	Level III Cultural Resources Inventory of the South Dakota Army National Guard Fort Meade Training Areas, Meade County, South Dakota. QSI Project No. SD3912002. BLM Project No. 12-MT040-11
AMD-0430	Shierts, Brenda A.	2015	A Level III Cultural Resource Survey of the Fort Meade Recreation Area Proposed Trails Project in Meade County, South Dakota. BLM Project No. 15-MTO40-16

AMD-0440	Buechler, Jeffrey V.	2015	A Cultural Resource Inventory Survey of the Fort Meade Trail for the City of Sturgis on the Fort Meade Historic Military Reserve in Meade County, South Dakota. DRS Project No. 15-31. BLM Project No. MT040-04
AMD-0448	Shierts, Brenda A.	2016	A Level III Cultural Resource Survey of the Recreational and Public Purpose (R&PP) Lease for the Muzzle Loader Shooting Range in Fort Meade, Meade County, South Dakota. BLM Project No. 16-MTO40-13
AMD-0463	Carpenter, Mark	2017	Level II and III Cultural Resources Inventory of the City of Sturgis Sanitary Sewer and Water Treatment System Upgrades, Meade County, South Dakota. T5N, R5E, Sections 1-6,8-11,15,16, 21 and 22. QSI Project No. SD3917022
AMD-0469	Carpenter, Mark	2017	Subsurface Testing of the Proposed City of the Sturgis Additional Sanitary Sewer Pipeline Corridor in 39MD0081, Meade County, South Dakota, T5N, R5E, Sections 10 and 11. Project No. SD3917031. QSI Project No. 17-MTO41-20
AMD-0479	Shierts, Brenda A.	2018	Level III Cultural Resource Inventory of a VA Slump Repair and Pipeline Reroute along Bear Butte Road in the Fort Meade National Historic District, Meade County, South Dakota. BLM Project No. 18-MTO40-6
AMD-0484	Shierts, Brenda A.	2018	A Level III Cultural Resource Survey of a Proposed New Trail on City Land and a Centennial Trail Reroute on BLM in the Fort Meade National Historic District Site 39MD3002, Meade County, South Dakota. BLM Project No. 18-MTO40-25
AMD-0494	Scott, Lindsay D.J.	2019	Construction Monitoring of the City of Sturgis Sanitary Sewer Interceptor, Meade County, South Dakota. T5N, R5E, Sections 2, 10, & 11. QSI Project No. SD3919003
AMD-0496	Buechler, Jeffrey V.	2019	A Cultural Resources Inventory Survey of CenturyLink's Fiber Optic Cable Project on the Fort Meade Historic Military Reserve in Meade County, South Dakota. DRS Project No. 19-03
AMD-0497	Kimball, Lori	2019	A Letter Report of a Cultural Resource Investigation & Assessment of Effects to National Register Listed Sites 39MD81 and 39MD3002, the Fort Meade Historic District, for Emergency Repair and Replacement of a Water Pipeline, Meade County, SD

AMD-0502	Shierts, Brenda A.	2019	A Level III Cultural Resource Survey of the Proposed Veterans Administration Fibercom Line in the Fort Meade Historic District Site 39MD3002 Meade County, South Dakota. BLM Project No. 20-MT040-03
AMD-0524	Shierts, Brenda A.	2020	A Level I and III Cultural Resources Survey of the Proposed Horse Soldier Road Reconstruction Project in the Fort Meade Historic District 39MD3002, Meade County, South Dakota. BLM Project No. 20-MTO40-04
AMD-0546	Ramirez, Lina	2021	Level III Cultural Resource Inventory of the Luman Sturgis Cable Exchange, Meade County, South Dakota, T5N R5E, Section 3. QSI Project No. SD3921059. BLM Project No. 21-MTO40-31
AMD-0558	Shierts, Brenda A.	2022	Level III Cultural Resource Inventory and Subsurface Testing of the Fort Meade Camp Fechner Trailhead Vault Toilet, Meade County, South Dakota. BLM Report No. 22-MT040-28
AMD-0582	Broce, Loretta	2022	Level III Cultural Resources Inventory of the Sturgis Rodeo Grounds Grading, Gravel Surfacing, & Erosion Control Project, Fort Meade Historic District, Meade County, South Dakota, T5N, R5W, Sections 1 & 12, Quality Services, Inc. Project # SD3922026
WSD-0533	Mayer, Aaron J.	2019	An Intensive Cultural Resources Survey of Eleven Proposed Areas for the South Dakota Department of Transportation Projects NH 0079(111), PCN 05TR and NH 0034(189)35, PCN 05TQ, Butte and Meade Counties, South Dakota. CIS No. 3386
Investigations			
Archive No	**Authors (s)**	**Year**	**Report Title**
Monitoring AMD-0522	Shierts, Brenda A.	2020	A Cultural Resource Monitor Report For the Veteran Administration Waterline and Fibercom Installation, Fort Meade, Meade County, South Dakota. BLM Project No. 20-MTO40-21
Historic District			
Ref Num	**Name**		
100002467	Fort Meade Veterans Administration Hospital		
73001747	Fort Meade Historic District		
Structures			
SHPO ID	**Category**	**Eligibility**	**NR Status**
MD00000035	Building	Unevaluated	
MD00000039	Building	Unevaluated	
MD00000052	District	NR Eligible	NR listed
MD00000055		Not Eligible	
MD00000057	Site	Unevaluated	

MD00000184	Building	Unevaluated	
MD00000198	Building	Unevaluated	
MD00000200	Building	Unevaluated	
MD00000203	Building	Unevaluated	
MD00100001	District	NR Eligible	NR listed
MD00100002	District	NR Eligible	NR listed
MD00100003	District	NR Eligible	NR listed
MD00100004	District	NR Eligible	NR listed
MD00100005	District	NR Eligible	NR listed
MD00100006	District	NR Eligible	NR listed
MD00100007	District	NR Eligible	NR listed
MD00100008	District	NR Eligible	NR listed
MD00100009	District	NR Eligible	NR listed
MD00100010	District	NR Eligible	NR listed
MD00100011	Building	NR Eligible	NR listed
MD00100012	District	NR Eligible	NR listed
MD00100013	District	NR Eligible	NR listed
MD00100014	Building	NR Eligible	NR listed
MD00100015	District	NR Eligible	NR listed
MD00100016	District	NR Eligible	NR listed
MD00100017	Building	NR Eligible	NR listed
MD00100018	District	NR Eligible	NR listed
MD00100019	District	NR Eligible	NR listed
MD00100020	District	NR Eligible	NR listed
MD00100021	District	NR Eligible	NR listed
MD00100022	District	NR Eligible	NR listed
MD00100023	District	NR Eligible	NR listed
MD00100024	District	NR Eligible	NR listed
MD00100025	District	NR Eligible	NR listed
MD00100026	District	NR Eligible	NR listed
MD00100027	District	NR Eligible	NR listed
MD00100028	District	NR Eligible	NR listed
MD00100029	District	NR Eligible	NR listed
MD00100030	District	NR Eligible	NR listed
MD00100031	District	NR Eligible	NR listed
MD00100032	District	NR Eligible	NR listed
MD00100033	Building	NR Eligible	NR listed
MD00100034	District	NR Eligible	NR listed
MD00100035	District	NR Eligible	NR listed
MD00100036	District	NR Eligible	NR listed
MD00100037	District	NR Eligible	NR listed
MD00100038	District	NR Eligible	NR listed
MD00100039	District	NR Eligible	NR listed
MD00100040	District	NR Eligible	NR listed
MD00100041	District	NR Eligible	NR listed
MD00100042	District	NR Eligible	NR listed
MD00100043	Site	NR Eligible	NR listed

MD00100044	District	NR Eligible	NR listed
MD00100045	District	NR Eligible	NR listed
MD00100046	District	NR Eligible	NR listed
MD00100047	District	NR Eligible	NR listed
MD00100048	District	NR Eligible	NR listed
MD00100049	District	NR Eligible	NR listed
MD00100050	District	NR Eligible	NR listed
MD00100051	Building	NR Eligible	NR listed
MD00100052	District	NR Eligible	NR listed
MD00100053	District	NR Eligible	NR listed
MD00100054	District	NR Eligible	NR listed
MD00100055	Building	NR Eligible	NR listed
MD00100056	District	NR Eligible	NR listed
MD00100057	Building	NR Eligible	NR listed
MD00100058	Building	NR Eligible	NR listed
MD00100059	District	Not Eligible	
MD00100060	District	Not Eligible	
MD00100061	District	Not Eligible	
MD00100062	District	Not Eligible	
MD00100063	District	Not Eligible	
MD00100064	District	Not Eligible	
MD00100065	District	Not Eligible	
MD00100066	District	Not Eligible	
MD00100067	District	Not Eligible	
MD00100068	District	Not Eligible	
MD00100069	District	Not Eligible	
MD00100070	Structure	Not Eligible	
MD00100071	District	Not Eligible	
MD00100072	District	Not Eligible	
MD00100073	District	Not Eligible	
MD00100074	District	Not Eligible	
MD00100075	Structure	Not Eligible	

Appendix II
Unit Summary Tables

TU	Results	Level	Depth (cmbd)	Munsell	Color	Texture	Artifacts/Comments
09	Positive	01	0-5	10YR3/4	Dark Yellowish Brown	Silt Loam	- Little pebbles - 2 pos. Lithics - 1 tiny piece of metal
	Positive	02	5-10	10YR3/4	Dark Yellowish Brown	Silt Loam	- 1 machine cut nail - 3 glass fragments - 1 lithic - 20> wood fragments
	Positive	03	10-15	10YR 3/4	Dark Yellowish Brown	Silt Loam	- Lots of rocks - 10> wood fragments - 1 ceramic fragment - 2 lithics - 2 glass fragments - 1 misc. Metal frag. - 2 fragments of bone
				10YR5/8	Yellowish Brown	Silt	
	Positive	04	15-20	10YR3/2	Very Dark Brown	Silt Loam	- Larger rocks - 2 fragments of metal - 1 ceramic fragment - Misc. Structural rocks - 5 wood fragments - 1 glass frag.
	Positive	05	20-25	10YR3/4	Dark Yellowish Brown	Silt Loam	- Rocks - Misc. Rocks - 5 wood fragments
	Positive	06	25-30	10 YR3/4	Dark Yellowish Brown	Silt	- Decrease in rocks from previous levels - Wood fragments 5> - 2 metal fragments
				10YR4/4	Dark Yellow Brown	Silt	
	Positive	07	30-35	10 YR3/4	Dark Yellowish Brown	Silt	- 1 misc. metal
				10YR4/4	Dark Yellow Brown	Silt	
	Negative	08	35-40	10YR4/4	Dark Yellow Brown	Silt	- Minimal rocks
				10YR3/4	Dark Yellowish Brown	Silt	
	Negative	09	40-45	10YR4/4	Dark Yellowish Brown	Silt	
	Negative	10	45-50	10YR4/4	Dark Yellowish Brown	Silt	- Minimal rocks
	Positive	11	50-55	10YR4/4	Dark Yellowish Brown	Silt	- Minimal rocks - 1 glass frag. - 3 misc. metal fragments

TU	Results	Level	Depth (cmbd)	Munsell	Color	Texture	Artifacts/Comments
10	Positive	01	0-5	10YR3/2	Brown Grayish	Silt Loam / granular dry	- Unmodified rock - Minimal pebbles - Misc. Metal frags
	Positive	02	5-10	10YR3/3	Brown	Silt Loam / granular dry	- Misc. Metal frags. - Small pebbles - Misc. wood
	Positive	03	10-15	10YR3/2	Brown Grayish	Silt Loam / granular dry	- 2 large rocks - Misc. wood
	Positive	04	15-20	10YR3/2	Brown Grayish	Silt Loam / granular dry	- Crushed metal can - Cut stone - 3 glass frags. - 5> bone frags. - 5> Misc. Metal frags - 5 Misc. Rocks - 3 burnt wood frags - pp. 11: 1 crushed metal can - pp. 17: 1 cut stone
	Positive	05	20-25	10YR3/2	Very Dark Brown / Grayish Brown	Silt Loam / granular dry	- Misc. Wood and charcoal flakes - 10> bone frags. - 15> misc. Metal frags. - 10> structural nails and stakes - 10> misc. Wood frags (burnt and unburnt) - 10> glass frags. - Misc. Rocks (slate and chert) - 2 ceramic frags. - Metal wire - Metal can top or bottom - Large stone piece w/ writing - Cut stone - pp. 15: stove plate with writing
	Positive	06	25-30	10YR3/4	Dark Yellowish	Silty / granular	- Glass bottle bottom - Unmodified rock - 5> bone frags. - 5> misc. Glass shards - 1 ceramic lid - 10> Misc. Metal pieces - 3 metal nails - 1 metal stake - Misc. Metal wire frags. - 10> frags. Of burnt and unburned wood - 3 misc. Rocks (sandstone)
							- 15> bone frags - 1 brick frag - 1 burnt wood frag - Twisted metal wire - 1 clothes pin spring? - 8 nails - 5 flat metal frags - 3 glass frags - pp. 20: glass bottle bottom with writing

	Positive	07	30-35	10YR2/2	Very Dark Grayish Brown	Silty Loam	- 5 flat metal frags - 3 glass frags - pp. 20: glass bottle bottom with writing - Large rocks - 10 > frags. of burnt and unburned wood - 5> Misc. Metal wire frags. - 10> metal nails - 10> misc. Metal frags. - 10> glass shards - 1 piece of ceramic - 10> bones and frags. (bone cluster) - pp. 24 ceramic piece with makers mark and gold leaf - pp. 27 metal tin - pp. 29 black fabric
	Positive	08	35-40	10YR2/2	Very Dark Brown	Silt	- 25> bones and frags. - Cut brick fragment - Large twisted wire - Eggshell frags. - Metal bucket handles - misc. Rocks - 20> misc. flat metal frags - 2 ceramic shards (1blue) - Bird bone - 10> Charcoal fragments - 1 chert frag. - 5> thin metal wire frags. - 30> glass shards (flat, curved, and ornate) - 1 curve metal wire frag. - 1 root piece(?) - 1 metal chain (jewelry?) - 30> misc. Burnt and unburned wood frags. - 30> misc. Structural nails and stakes - Button - glass or melamine - pp. 31 pail (crushed) - pp. 33 medicine bottle base - pp. 37 shoe heel - pp. 40 door hinge - pp. 42 unspent bullet

TU	Results	Level	Depth (cmbd)	Munsell	Color	Texture	Artifacts/Comments
11	Positive	01	0-5	10YR3/3	Brown	Silty loam / Granular Dry	- Quarter-sized pebbles - 2 metal nails - 1 metal tac - 6 pieces of glass (1 w/ writing)
	Positive	02	5-10	10 YR3/2	Brown	Silt / granular wet	- Quarter size pebbles - 3> baseball sized rocks - 4 bone fragments - 5> glass shards (1 piece milk glass) - 3 ceramics fragments - 1 misc. rock (chert) - 5 metal nails
	Positive	03	10-15	10 YR3/2	Brown	Silt / Granular wet	- 4 bone fragments - 2 brown ceramic shards - 1 misc. metal wire piece (bucket handle?) - 6 glass shards (2 w/ designs) - 2 metal nails, 3 metal tacks
	Positive	04	15-20	10 YR2/2	Brown	Silt / Granular wet	- Misc. rocks - 1 bone frag (sun bleached?) - 3 fossilized(?) bone frags. - 2 wood frags. - 1 spent bullet - 10> misc. metal - 5> metal nails - 10> glass shards (1 w/ writing)
	Positive	05	20-25	10 YR2/2	Brown	Silt / Granular wet	- Misc. rocks - 6 bone fragments - 2 pieces of porcelain - 4 pieces of ceramics (1 w/ writing) - 10> glass shards (flat, ornate, curved, colored, colorless) - 10> metal nails - Misc. flat metal frags. - pp. 16 cavalry button
	Positive	06	25-30	10 YR2/2	Brown	Silt / granular wet	- 5 glass shards + 2 milk glass shards - 1 white, pearlescent button - 1 metal button - 1 metal clothing clasp - 6 misc. rocks - 1 spent bullet casing - >10 metal nails - Misc. metal tacks - >1 metal screw - 1 fish vertebrae - 1 wood fragment - 1 metal piece w/ writing - Misc. thin metal wire frags. - 1 Tobacco lip label - 1 metal safety pin - 6 misc. metal frags - >5 bone frags.
	Positive	07	30-35	10 YR3/2	Brown	Silt / Granular wet	- Medicine bottle base - Beer bottle cap - Pocket knife base - 1 Fabric piece - 1 bullet casing - 3 misc. rocks (1 chert) - 2 metal buttons - >20 metal nails - 10> misc. flat metal - >10 glass shard (1 w/ writing) - 4 misc. wood frags (burnt and unburned) - 2 frags. Of potential chalk - 7 ceramic shards - 15-20 bones and bone fragments - pp. 19: medicine bottle base

							- pp. 21 beer bottle cap - pp. 23 pocketknife base
	Positive	08	35-40	10 YR 3/2	Brown	Silt / Granular Wet	- 1 larger rock - 7 metal eyelets - 1 jewelry pendant - 1 large metal can w/ frags - 10 nails - 9 glass shards - 2 ceramic frags - 1 unburnt wood frag - 2 misc. rocks - 6 metal frags - 2 pieces of metal wire - 10> nails - 10 bone frags
	Positive	09	40-45	10 YR 2/2	Brown	Silt / granular wet	- 10> glass fragments - 3 small metal wire pieces - ½ of a safety pin - 1 metal button - 5 pieces flat metal frags - 1 ceramic frag - 1 unknown circular metal piece - 1 piece of lead - 6 pieces of wood - 15> nails - 11 bone frags

TU	Results	Level	Depth (cmbd)	Munsell	Color	Texture	Artifacts/Comments
12	Positive	01	0-5	10YR 4/3	Brown	Silty loam	- 10>wood fragments - 2 metal stakes machine cut - metal fragments - 3 charcoal fragments - 2 pieces of glass - 1 piece of ceramic - metal button
				10TR 4/4	Dark yellowish brown	Silt clay	
	Positive	02	5-10	10YR 4/3	brown	Silty loam	- 10> wood fragments - 5> charcoal
				10YR 4/4	Dark yellowish brown	Silt clay	
	Positive	03	10-15	10YR 4/3	brown	Silt	- 10> wood fragments - 2 stone flakes - 1 fragment of bone - 1 piece machine cut nail - 2 pieces of glass
				10YR 4/4	Dark yellowish brown	Silt clay	
	Positive	04	15-20	10YR 4/3	Dark brown	Silty loam	- 10> wood fragments - 1 rock - machine cut stake - 1 piece glass
				10YR 4/4	Dark yellowish brown	Silt clay	
	Positive	05	20-25	10YR 4/3	brown	silt	- 10> wood fragments - 10> chard wood fragments - 5> charcoal - 1 glass shard - 2 metal fragments
				10YR 4/4	Dark yellowish brown	Silty clay	
	Positive	06	25-30	10YR 4/3	brown	Silty loam	- 5 glass shards - 10 > wood fragments - 3 bone fragments - 3 pieces misc. metal - pp. 22 buckle - pp. 25 metal can
				10YR 4/4	Dark yellowish brown	Silt loam	
	Positive	07	30-35	10YR 4/3	brown	Silty loam	- 8 misc. metal pieces - 10> wood fragments - 2 rocks - chard paper - 1 bone fragment - 3 glass shards - pp. 26 link
				10YR 4/4	Dark yellowish brown	silt	
	Positive	08	35-40	10YR 4/3	brown	Silty loam	- 10> wood fragments - 2 fragments of chard wood - 1 seed - 5 pieces funky foam (soap residue) - 9 bone fragments - 1 flat piece of metal - 16 misc. metal pieces - 3 wire pulled nails - 2 machine cute nails - 1 piece of ceramic - 20 glass shards - pp. 28 chalk - pp. 34 can - pp. 38 glass bottle

TU	Results	Level	Depth (cmbd)	Munsell	Color	Texture	Artifacts/Comments
13	Positive	01	0-5	10 YR 3/2	Very Dark Brown	Silt / loam	- Rocks - Unidentified botanicals - Possible cigar butt? - Portion of cow manure - 1 shoe tac - 5 misc. metal frags. - 3 glass frags - 2 chert frags - 1 misc. rock w/ texture - 1 metal wire - 2 bone frags - Possible daub?
	Positive	02	5-10	10 YR 3/2	Very Dark Brown	Silt / Loam	- 4 glass frags - 20> bone frags - 1 metal staple - 1 metal nail - 3 misc. metal frag - 1 chert flake - 1 misc. rock - 1 ceramic frag - 1 charcoal frag - 1 large wood frag
	Positive	03	10-15	10 YR 3/2	Very Dark Brown	Silt / Loam	- 3 glass frags - 1 large ceramic frags - 2 flat metal frags - 10> wood frags - 6 nails - 3 misc. rocks - 5 charcoal frags - 6 bone frags - 3 chert pieces
	Positive	04	15-20	10 YR 4/3	Brown	Silty/ Clay	- 1 metal eyelet - 1 ceramic frag - 5 metal nails - 2 flat metal frags - 1 metal wire piece - 5> misc. burnt rocks - 1 thin metal piece - 8 glass frags - 4 chert pieces - 8 wood frags - 3 bone frags
	Positive	05	20-25	7.5 YR 3/2	Dark Brown	Silty / Clay	- 1 machine cut nail - 7> misc. flat metal - 5 glass frags - 10> bone frags - Large misc. rock - 1 metal cap - 1 large flat metal piece - 2 small flat misc. metal pieces - 5> nails - 5 brick pieces - 3 burnt bone frags - 1 ceramic piece - 1 possible lead writing piece - 15> glass frags - 5> burnt wood frags - 10> wood frags - pp. 18 calvary button
	Positive	06	25-30	7.5 YR 3/2	Dark Brown	Silty / Clay	- 1 charcoal frag - 2 pieces of bone
	Positive	07	30-35	7.5 YR 3/2	Dark Brown	Silt / Clay	- 3 bone frags - 3 wood frags - 2 pieces of funky foam (substance from soap-making?) - 1 large metal button - 1 potential pumpkin seed

							- 7 metal nails - 3 misc. metal pieces - 5 glass frags

TU	Results	Level	Depth (cmbd)	Munsell	Color	Texture	Artifacts/Comments
14	Positive	01	0-5	10YR 5/3	brown	silt	- 1 screw - 4 glass shards - 3 debitage - 2 wood fragments
	Positive	02	0-10	10YR 3/2	brown	Silt	- Small pebbles - 3 glass shards - 2 debitage - 1 ceramic shard - 3 rocks - 5> wood fragments
	Positive	03	10-15	10YR 3/2	brown	silt	- 7 wood fragments - 3 debitage fragments
	Positive	04	15-20	10YR 4/3 10YR 4/4	brown Light brown	Silt silt	- 1 wood fragment - 2 rocks - 1 wire pulled nail - small pebbles
	Positive	05	20-25	5YR 3/2 10YR 4/4	brown Light warm brown	Silt Silty clay	- Small pebbles - 5> wood fragments - 1 debitage fragment
	Positive	06	25-30	10YR 3/3 10Y 4/4	brown Light brown	Silty clay Silt clay	- 1 small wood stick - Small pebbles - 1 wood fragment - 1 rock
	Positive	07	30-35	10YR 4/3 10YR 4/4	brown Warm brown	Silty clay Silty clay	- 10> wood fragments - 1 metal tool piece/ machine fragment - Small pebbles
	Positive	08	35-40	10YR 4/3	brown	Silty clay	- Fabric pieces - 4 charcoal pieces - 2 metal fragments - 1 glass shard - 5> wood fragments

TU	Results	Level	Depth (cmbd)	Munsell	Color	Texture	Artifacts/Comments
15	Positive	01	0-5	10 YR 2/1	Black	Silty/clay. Dark loam w/ roots	- 5> glass frags - 5 metal nails - 1 metal tool/machine frag? - 2 bone frags - 10> ceramic frags, some with detail - 2 chert pieces
				10 YR 2/2	Very Dark Brown	Silty clay	
	Positive	02	5-10	10 YR 2/2	Very Dark Brown	Silty clay	- 3 ceramic frags - 2 bone frags - 1 chert lithic - 1 potential knapped glass piece - 6 glass frags - 3 metal nails - 1 metal screw - 1 metal button - 5> misc. metal - 5> charcoal frags - pp. 1 bone cluster (3 count) - pp. 2 charred pit - pp. 3 chandelier crystals (3)
		02	5-15				- ½ shell button - 2 pieces of charcoal - 1 wood frag - 7> ceramic frags - 4 eggshell frags - 3 chert frags - 5> metal nails - 1 metal wire piece - 10 glass frags - 6 unburnt bone frags - 10 burnt bone frags - 20> metal frags
	Positive	03	10-15	10 YR 3/3	Dark Brown	Silt / loam	- 1 chert piece - Misc. rock - 4 bone frags - ½ melamine? Button - ½ button - 1 piece of slate - 10> glass shards - 15> burnt wood frags - 20> flat metal frags - 10> ceramic frags - 1 metal disc (washer?) - 1 ornate metal piece - 1 metal hanging hook - 10> nails - 5 metal nails - 1 piece of chalk - 10> flat metal frags - pp. 4 decorated blue transferware - pp. 6 horseshoe
				10 YR 2/2	Very Dark Brown	Silt Clay Loam	
	Positive	04	15-20	10 YR 2/2	Very Dark Brown	Silt Clay Loam	- 15> metal nails - 1 burnt seed - 10> burnt wood frags - 20> glass frags, 1 w/ writing - 20> flat metal frags - 1 metal jar lid - Shell frag (w/ opalescence) - 5> small metal pieces - 15> burnt and unburnt wood frags

							- 2 spent bullet casings - 3 misc. rocks, 1 cute - 1 chert piece with substance - 15> ceramic frags - pp. 5 white ware bowl w/ rim
	Positive	05	20-25	10 YR 2/2	Very Dark Brown	Silt Clay Loam	- Knife (silver?) - 20> flat metal pieces - 10 misc. rocks (potential bricks) - 1 metal calvary button - 1 wood button - 1 ceramic button - 1 metal safety - ¼ ceramic button - 1 shell/opalescence button - 1 metal button - 2 metal eyelets - 1 clothing snap - 15> ceramic white ware frags - 5> slate frags - 10> charcoal frags - Small rodent mandible frag - 10> glass frags - 9 burnt wood frags - 20> metal nails - 1 metal piece staked through wood frag - 10> bone frags - pp. 7 toy horse
	Positive	06	25-30	10 YR 4/3	Dark Yellowish brown	Fine, silty clay	- 3 metal buttons - 2 metal button frags - 3 metal buttons - 1 wood button fragment - 4 ceramic buttons - Cloth covered button remnants - 2 small calvary buttons - 3 metal aglets - 10> bone frags - 20> burnt wood frags - 30> glass frags - 20> ceramic frags - 50> metal nails - 1 spent bullet casing - 4 organic metal pieces - 2 misc. rocks - 1 metal mesh piece - 1 metal cog - 1 metal hook - 1 metal square - 1 metal clothing snap - 1 stake - 1 bolt - 1 chalk piece - 15> flat metal frags - 2 slate frags - Doll leg - 4 metal eyelets - pp. 8 toy horse
				10 YR 4/4	Dark Yellow Brown	Loose	
	Positive	07	30-35	10 YR 4/4	Dark Yellowish Brown	Silty clay	- 10> glass frags - 20> burnt wood frags - 20> metal frags - 2 misc. rocks - 2 halves of a whole button
				10 YR 2/2	Black – Very Dark Brown	silty	

							- 2 metal buttons - 1 eyelet - 1 snap button - 7 metal frags - 1 horseshoe frag - 15 ceramic frags (2 w/ writing) - 2 chert pieces - 20> metal nails - 10 bone frags - 1 spent bullet casing - 1 slate frag - pp. 13 unspent bullet - pp. 14 metal knife
	Positive	08	35-40	10 YR 4/4	Dark Yellowish Brown	Silty/clay	- 1 charcoal frag - 1 possible. Lead piece - 1 possible tin can lid - 4 metal mesh frags - 2 suspender 'o' ring - 1 nail w/ metal fused through it - 15> nails - 15> bone frags of various degrees of burnt - 20> flat metal frags - 8 burnt wood frags - 4 bolts - 9 ceramic frags - 10> glass frags - 6 misc. rocks
				10 YR 2/1-2	Black / Very Dark Brown	Silty	
	Positive	09	40-45	10 YR 4/4	Dark Yellowish Brown	Silty/clay	- 1 misc. rock - 3 bolts - 10> nails - 10> metal mesh frags - 3 10> burnt bone frags - 5 glass frags - 10> flat metal frags - 10> burnt wood frags - 2 slate frags - 1 bone frag
				10 YR 2/1-2	Black / Very Dark Brown	Silt	
	Positive	10	45-50	10 YR 4/4	Dark Yellowish Brown	Silty/clay	- 30> flat metal frags - 1 broken blue bead - 3 misc. rocks (structural?) - 2 roots/stems - 4 fabric frags - 2 ceramic frags - 10> metal mesh frags - 5 bone frags - 15> burnt wood frags - 1 glass bottle stopper - 9 glass frags - 1 eggshell frag - 1 staple? - 5 nails - 1 piece of substance from soap making (funky foam?) - 2 metal cans
				10 YR 2/2	Very Dark Brown	Silty	
				2.5 YR 4/6	Red	silty	
	Positive	11	50-55	10 YR 4/4	Dark Yellowish Brown	Clayish /Silt	- 10 (large) bone frags - 1 metal mesh frag - 10> burnt wood frag - 13 frags of material possibly made from soap making? - 1 lead ball - 1 piece of milk glass - 11 glass frags - 3 bolts - 10> nails - 20> pieces of flat metal
				10 YR 2/2	Very Dark Brown	Silt	

							- 3 burnt bone frags - pp. 46 metal can fragments

TU	Results	Level	Depth (cmbd)	Munsell	Color	Texture	Artifacts/Comments
16	Positive	01	0-30	10YR 2/1 10YR 3/3	black Dark brown	Clay silt Clay silt	- 1 metal calvary button - Bullet casing - 30> wire pulled nails - 1 metal tack - 50>machine cut square nails - 50> glass shards - 2 pieces of rock debitage - 20> pieces of slate - 20> charcoal - 14 ceramic shards - 1 small glass bottle base - 13 piece wood - 7 chard wood frags - 7 ceramic transferware shards - 1 grey glazed transferware - 31 bone fragments - 50> misc. metal pieces - 1 bullet tip - Metal clasp - 1 metal stake - 1 piece metal mesh - 1 seed - 1 large cylinder - Metal button - 1 metal washer - 1 metal link - 3 porcelain shards - 2 plastic button fragments - 1 crystal - 1 bottle neck - 1 large bottle base - 3 machine part fragments - 1 screw - 1 buckle - 1 milk glass shard - 1 glass bottle stopper/top - 1 brick fragment - 1 metal pull/ handle
	Positive	02	30-35	10YR 3/3	dark brown	Silty loam	- 1 horseshoe - 20> charcoal - 1 wire pulled stake - 1 plastic button - 19 slate fragments - 20> glass shards - 35 machine cut nails - 2 screws - 20> flat metal pieces - 7 brick fragments - 13 wood fragments - 3 rocks - 20 ceramic shards - 8 transferware ceramic shards - 20> bone fragments - 1 metal strip - 1 metal stake - 23 wire pulled nails - 1 chalk piece - 1 glass bottle neck - 1 butter knife - 1 round metal lid? - Machine parts within Feature 10 soils
	positive	03	35-40	10YR 2/1 10YR 3/3	black Dark brown	Silt loam Silty clay loam	- 1 metal machinery or tool fragment - 1 metal ribbed piece - 9 transferware ceramic pieces - 20> ceramic shards - 1 milk glass shard

							- 40> wire pulled nails - 6 screws - 100> metal pieces - 6 brick fragments - Opalescent button - 1 metal button - 2 plastic or ceramic buttons - 20> wood fragments - 1 screw in metal piece - 3 spent bullets - 1 lead bullet end - 1 plum seed - 40> machine cut nails - 50> glass shards - 23 burnt bone fragments - 50> bone fragments - 20> charcoal pieces - 30> burnt wood fragments - 5 misc. metal pieces - 2 stakes - 1 metal strip - Folded flat metal strip - 8 slate fragments - 1 metal hinge with attached wood - 1 tack - 1 buckle - 11 metal wire pieces - 1 large wire pulled stake - 1 glass bottle neck - pp. 9 biface
	Positive	04/05	40-50	10YR 2/1	black	Silty loam	- 20> glass shards - Plastic game piece or button - 1 metal gear - 1 piece funky foam - 1 seed - 10 wood fragments - 20> burnt wood - 20> charcoal pieces - 30> bone fragments - 1 large metal strip - 3 brick fragments - 2 spent bullet cases - 1 debitage - 3 transferware ceramic pieces - 5 whiteware ceramic pieces - 30> metal fragments - 3 metal buttons - 1 garter belt/ suspender piece - 1 metal eyelet - 1 machine cut stake - 1 screw - 13 wire pulled nails - 30> machine cut nails - Metal cap to wood handled tool - 1 large metal link - 1 chard seed - pp. 10 cut bone (rib) - pp. 12 small boot heel
				10YR 3/3	Dark brown	Silt clay loam	
	Positive	06	50-55	N/A	N/A	N/A	- 3 chalk pieces - 1 porcelain shard - 2 glass shards - 4 bone fragments - 1 metal handle - 1 misc. metal machine piece - 1 clothes pin close metal piece - 43 metal fragments - 4 wood fragments - Two and a quarter inch metal bolt with washer - 1 four inch metal bolt with washer

							- 3 wire pulled nails - 48 machine cut nails - 7 misc. metal pieces - 10 charcoal pieces

TU	Results	Level	Depth (cmbd)	Munsell	Color	Texture	Artifacts/Comments
17	Positive	01	0-5	10 YR 4/4	Warm, light brown	Silt / moist granular	- 1 glass bottle bottom - 60> glass frags - 15> ceramic frags - 4 misc. rocks - 1 potential brick frag - 10> burnt bone frags - 20> bone frags - 2 "belt" holders (metal teeth) - 1 possible can opener fragment - 6 nails - 10> flat metal frags - 5 misc. rocks - 5 pieces of chert - 1 lead writing piece - 1 lithic - 7 pieces of substance possibly from soap-making - 4 small spent bullets - 1 medium spent bullet - 1 large spent bullet - 7 brick frags - 4 seed frags - 10> metal tacks - 1 shiny metal piece w/ writing - 3 wire frags - 15> burnt wood frags - 20> slate - 1 snap/game piece? - 1 metal cog - compressed wood? Knob frag - 4 bolts - 20> nails - 30> flat metal frags - 1 rectangular can frag - 2 calvary buttons - 1 complete white button - 2 halves of melamine button - 1 safety pin - 1 twisted snap - 1 eyelet - 3 metal buttons - 1 potential garter holder (metal) - Cowry shell - 1 ceramic pipe frag - 1 metal handle - 1 door hinge - 4 sliding lock mechanism frags - pp. 30 fragmented plate (7 frags) - pp. 32 – key (2 frags) - pp. 35 – broken bottle (13 frags) - pp. 36 – glass saltshaker pieces (2 frags) - pp. 39 – fragmented harmonica - pp. 41 – bucket (2 frags)
				10 YR 3/2	Brown	Silt / moist granular	

							- pp. 43 – 1 horseshoe - pp. 44 – 1 vial top - pp. 45 – 1 bottle top - pp. 47 – 1 spoon frag - pp. 48 – 2 clothing straps - pp. 49 – 1 knife frag - pp. 50 – 1 clothing strap - pp. 51 – pencil fragment

Appendix III
Piece Plot Summary Table

Piece Plot #	Date Recorded	Class (H/P)	Material	Unit	Description	Quantity
PP-01	5/15/2024	H	Bone	XU 15	cluster of bone in NE corner of unit	3
PP-02	5/15/2024	H	botanical	XU 15	cherry or prunes sp.	1
PP-03	5/15/2024	H	Glass/crystal	XU 15	chandelier or lamp crystal	1
PP-04	5/17/2024	H	ceramic	XU 15	plate rim w/ blue transferware	1
PP-05	5/17/2024	H	Whiteware	XU 15	bowl rim	1
PP-06	5/17/2024	H	Metal	XU 15	horseshoe	1
PP-07	5/17/2024	H	Metal	XU 15	toy - horse+ rider - trophy	2
PP-08	5/19/2024	H	Metal	XU 15	toy horse (iron?)	1
PP-09	5/19/2024	P	lithic	XU 16	light gray calcedony biface	1
PP-10	5/19/2024	H	bone	XU16	cut bovine bone	2
PP-11	5/19/2024	H	Metal	XU 10	Crushed Can	1
PP-12	5/19/2024	H	Leather/Metal	XU 16	Boot (small) heel w/ press nails	1
PP-13	5/19/2024	H	Unspent Bullet	XU 15	Unspent Bullet	1
PP-14	5/19/2024	H	Metal	XU 15	Rusted Butter Knife	1
PP-15	5/20/2024	H	Metal	XU 10	Large Stove (?) piece w/ writing	1
PP-16	5/20/2024	H	Metal	XU 11	Cavalry Button	1
PP-17	5/20/2024	H	Stone	XU 10	Cut Stone	1
PP-18	5/20/2024	H	Metal	XU 13	Cavalry Button	1
PP-19	5/20/2024	H	Glass	XU 11	Medicine Bottle Base	1
PP-20	5/21/2024	H	Glass	XU 10	A.B. Bottle Base	1
PP-21	5/21/2024	H	Glass	XU 11	Bottle Top	1
PP-22	5/21/2024	H	Metal	XU 12	Metal Buckle for Clothing	1
PP-23	5/21/2024	H	Metal	XU 11	Pocket Knife Part	1
PP-24	5/21/2024	H	Ceramic	XU10	Vessel Base	1
PP-25	5/21/2024	H	Metal	XU 12	Crushed Can	1
PP-26	5/21/2024	H	Metal	XU 12	Link?	1
PP-27	5/21/2024	H	Metal	XU 10	Canister Bottom	1

PP-28	5/22/2024	H	Rock	XU 12	Chalk?	1
PP-29	5/22/2024	H	Fabric	XU 10	Black Fabric	1
PP-30	5/22/2024	H	Ceramic	XU 17	Fragmented Plate	7
PP- 31	5/22/2024	H	Metal	XU 10	Crushed Pail	1
PP-32	5/22/2024	H	Metal	XU 17	Key	2
PP-33	5/22/2024	H	Glass	XU 10	Bottle Base	1
PP-34	5/22/2024	H	Metal	XU 12	Can	1
PP-35	5/22/2024	H	Glass	XU 17	Broken Bottle	13
PP-36	5/22/2024	H	Glass	XU 17	Glass Saltshaker Fragments	2
PP-37	5/22/2024	H	Rubber/Leather	XU 10	Shoe Piece	1
PP-38	5/22/2024	H	Glass	XU 12	Bottle Fragments	22
PP-39	5/22/2024	H	Metal	XU 17	Harmonica?	1
PP-40	5/22/2024	H	Metal	XU 10	Door Hinge?	1
PP-41	5/22/2024	H	Metal	XU 17	Bucket	1
PP-42	5/22/2024	H	Bullet	XU 17	Unspent Bullet	1
PP-43	5/22/2024	H	Metal	XU 17	Horseshoe	1
PP-44	5/22/2024	H	Glass	XU 17	Vial Top	1
PP-45	5/22/2024	H	Glass	XU 17	Bottle Top	1
PP-46	5/22/2024	H	Metal	XU 15	Can	1
PP-47	5/22/2024	H	Metal	XU 17	Spoon Fragment	1
PP-48	5/22/2024	H	Metal	XU 17	Clothing Strap	2
PP-49	5/22/2024	H	Metal	XU 17	Knife Fragment	1
PP-50	5/22/2024	H	Metal & Slate	XU 17	Worked Metal & Slate	2
PP-51	5/22/2024	H	Lead?	XU 17	Pencil Fragment	1

Paleoethnobotany and Plants at Soapsuds Row (39MD0045) and the Analysis of a Bulk Soil Sample from Excavation Units 15 and 16.

By: Aaron J. Mayer, MA, RPA 17284

Paleoethnobotanical research has the challenge of helping to understand social and political roles of plants. Plant use can show what plants were available to people in the past, yet some studies can go even further and indicate transitions of crop production and the importance of changing economies (Hastorf 1999).

Many modes of entry can bring a macroremain into the archaeological record. Pearsall (2010) cites possible means of macroremain preservation such as the burning of dung, cooking spillage, trash disposal into hearths and fires, and other means of accidental and intentional fires. Ritual and ceremonial offerings, idiosyncrasy, boredom, frustration, conflict, accidents, children and youth tossing in fuel and other items, are all other possible modes of entry that macrobotanicals and artifacts can enter into a hearth in the archaeological record. All of these and other methods lead to preservation and are sometimes left in primary deposits *in situ* and can indicate the relationships of past human and plant relationships and may even indicate some landscape use (Pearsall 2010).

Floatation is a vital part of the recovery process of macrobotanical remains. Using this process macrobotanicals are released from their soil matrix and floated up out of the water where they can be extracted and recovered (Figure 1). Since the charred and uncharred remains are usually more buoyant than the soil they are trapped in they can easily be collected from the surface of the water using a fine mesh screen to sieve them out.

This recovery method can be done in the field by using a nearby and adequate water source. If water cannot be utilized near a site the heavy soil samples must be transported to another site or processed at a suitable laboratory or shop.

The benefit of floatation is that many botanicals are small or less than 2 mm and cannot usually be seen in the soil of excavation units by archaeologists using their naked eye. Pearsall (2010) cites inexperience and careless workers as reasons why some excavators may even recover less small material due to insufficient shovel, pick, or trowel technique. As to which is more efficient in recovery, many archaeologists are left to determine methods by their own individual expertise and excavation methods and research and site plans. Dry and delicate botanical remains may be damaged or destroyed by the introduction of water. Water logged botanicals recovered from lake or stream beds may be destroyed if left to dry. Yet floatation can yield all sizes of macrobotanical remains depending upon screen size desired (Pearsall 2010).

Once the drying process of the macrobotanicals has been completed the arduous and time-consuming lab work of sorting and identification can take place. The floatation samples contain other materials from the floatation procedure such as modern botanicals (i.e., roots, stems, twigs, and modern seeds), light fraction, and other materials that are buoyant. These are strained out of the soil samples and float up out of the machine into the sample bag. The macrobotanicals must be sorted out of these other materials.

Soil being measured in one-liter by USD student Jay Erickson.

USD APES students bagging and tagging heavy fraction from the 1/16-inch screen (left to right: Emma Byrne, McKenzie Merchant, Ben Livermont, and Patty Rarick observes.

Examining for < 2 mm artifacts in light fraction.

Figure 1. Floatation using bucket method at USD.

Pearsall (2010:100) stresses that the transfer of vital provenience data onto lab forms and sample bags and should be checked and double-checked. Samples are screened with geologic sieves for 2 mm, 1 mm, and 0.5 mm (Figure 2). The sorted contents are then placed in labeled plastic bags. The University of Missouri lab sorts out all charred material from the >2 mm division such as

wood charcoal, nut shells fragments, large seeds, corn cob and kernel fragments, tuber fragments, and palm pits, according to the site analyzed (Pearsall 2010). All charred material is separated from the floatation sample and then seeds were separated and sorted into genus and species if possible. Wood charcoal generally is only collected in <2 mm sieve size because it breaks into disparate parts and can be very time consuming to sort >1 mm completely.

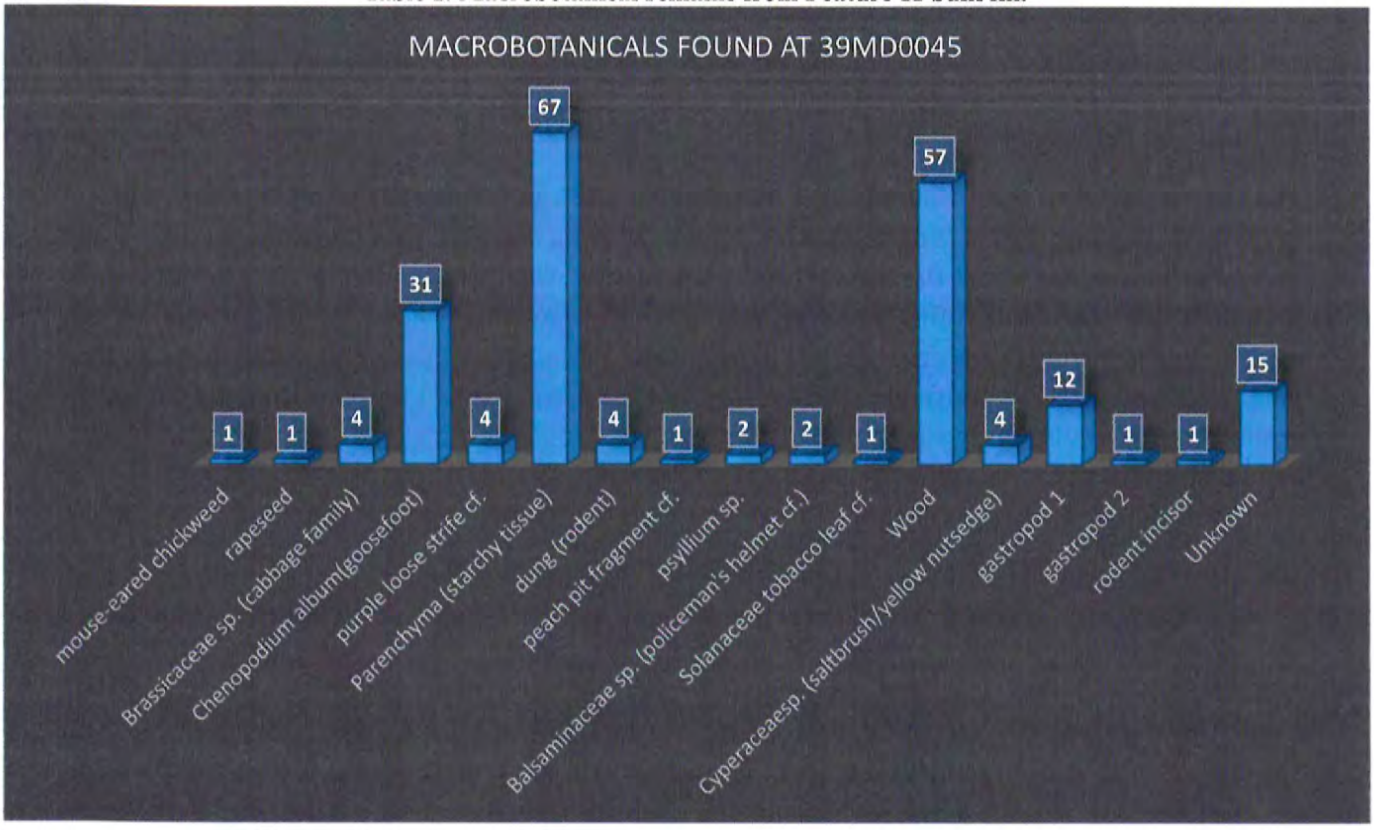
Figure 2. Geologic sieves (from left to right: 2 mm, 1 mm, 0.5 mm, >0.5 mm bottom catch).

The floatation light fraction samples are sorted under a low power dissecting microscope with separate microscope lights (Figure 3). The >2 mm, >1 mm, and >0.5 mm divisions are all individually sorted in small flat trays. Usually the sample was spread out in the tray and the glass petri dish and sorted with a finely haired paint brush in 1 cm strokes horizontally across the tray, separating scanned material from the yet to be scanned. Macrobotanicals are picked out with the paintbrush and set aside for future specific sorting later. Less than 0.5 mm divisions are usually scanned but not thoroughly sorted due to the small size, small particle dust, and the focus needed can cause eye strain.

Figure 3. 20X Low powered microscope.

Aaron J. Mayer of the Augustana University Archaeology Laboratory conducted the study of plant remains from the burn feature, summarized in Table 1.

Table 1. Macrobotanical remains from Feature 11 bulk fill.



Parenchyma was charred starchy tissue that was found in the macrobotanical sample (Figure 4 and Macrobotanical Data Sheet). This could indicate burning of potato peels or a local gathered root tuber from the area. It appears a small piece of a rolled tobacco leaf from a cigar was located in the sample. Burned wood was the second most common item that was in the bulk Feature 11 one-liter soil sample. Four charred *Cyperaceae* sp. seeds were recovered from site 39MD0045. They look like either saltbrush or yellow nutsedge seeds. In the case they were saltbrush seeds it would be indicative of a marsh area near Soap Suds Row, the small gastropod and snail shells also indicate a moist environment at one time. If the saltbrush was being utilized for basketry or mats the plant remnants could have been burned to rid the living area of the chaff. If the seeds are yellow nutsedge then these plants may have been being used to supplement food for diet and would explain the parenchyma occurring in the fire. Perhaps some prairie collection of plant foods was taking place. Some of the 1 mm goosefoot seeds were charred but they were probably in the ground during the multiple burn events at Feature 11.

The oddest apparent botanical looks like a *Balsaminaceae* sp. seed. It appears to be policeman's helmet (a forget-me-not flower) which is a plant from China and the Himalayas that was introduced to Britain in 1839 and then spread to many household gardens (Dickinson 2014:154). If this could be Rose Courtney's cabin, could someone have grown or left flowers at the site after the structure burned?

References:

Dickinson, Richard. 2014. *Weeds of North America*. University of Chicago Press, Chicago, Illinois. Print.

Hastorf, Christine A. 1999. *Recent Research in Paleoethnobotany*. Journal of Archaeological Research. 7:55-103.

Pearsall, Deborah. 2001. *Paleoethnobotany: a Handbook of Procedures*, 2nd edition. Walnut Creek: Left Coast Press.

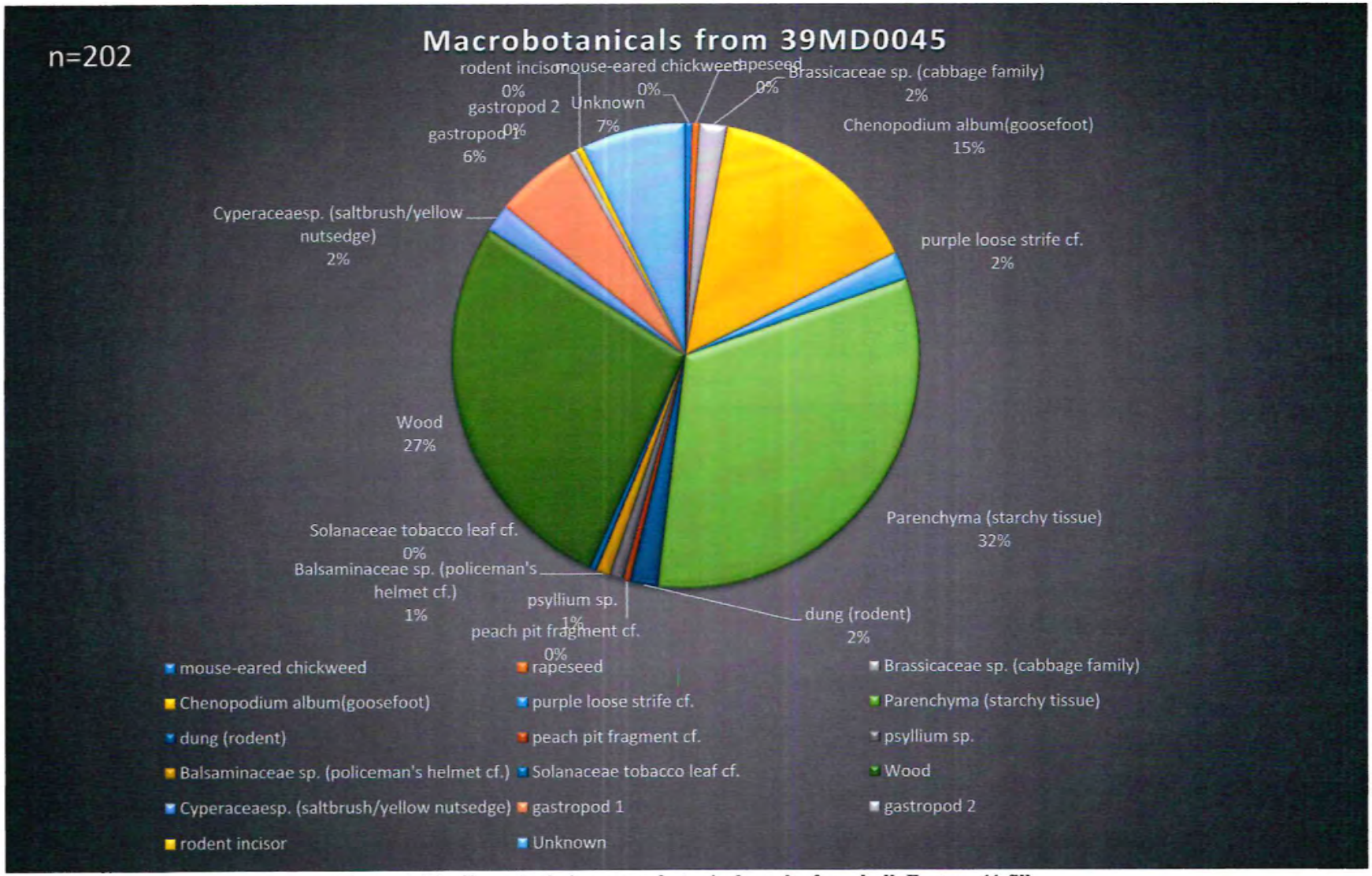


Figure 4. Pie Chart depicting macrobotanical results from bulk Feature 11 fill.

UNIVERSITY OF SOUTH DAKOTA

Grants Accounting
414 E Clark St, Slagle 203
Vermillion, South Dakota 57069

INVOICE

Deadwood Historic Preservation Commission
City of Deadwood
108 Sherman Street
Deadwood, South Dakota 57732

Invoice Number	**24C016-01**
Invoice Date	**2/10/2025**
USD Fund #	24C016
USD Grant ID	UA24C0016
USD Project ID	24-9860
Grant End Date	2/28/2025

2024 Archaeological Excavations

Orig. Budget	Inv Period: 03/01/2024 - 02/28/2025	Current Inv Activity	Cum Activity TD	Balance
$0.00	Salary	$ -	$ -	$ -
$0.00	Benefits	$ -	$ -	$ -
$3,760.00	Travel	$ 4,219.06	$ 4,219.06	$ (459.06)
$0.00	Contractual	$ 1,325.00	$ 1,325.00	$ (1,325.00)
$2,490.00	Supplies	$ 705.94	$ 705.94	$ 1,784.06
$0.00	Capital/Tech/Software	$ -	$ -	$ -
$0.00	Grants/Subsidies/Tuition	$ -	$ -	$ -
$6,250.00	**Direct Total**	**$ 6,250.00**	**$ 6,250.00**	**$ -**
$0.00	Indirect	$ -	$ -	$ -
$6,250.00	**TOTAL**	**$ 6,250.00**	**$ 6,250.00**	**$ -**
$9,050.00	**USD COST SHARE**	**$ 9,050.00**	**$ 9,050.00**	**$0.00**

Total Due This Invoice	**$ 6,250.00**

Not Final Invoice unless specified

Total Budget	$	6,250.00
Expended	$	6,250.00
Remaining	$	-

Remit to:
University of South Dakota
Grants Accounting 203 Slagle
414 East Clark Street
Vermillion, SD 57069

grants.inv@usd.edu
phone 605-658-3644

Please Reference the USD Invoice #
Make Checks Payable to 'The University of South Dakota'

By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 & Title 31, Sections 3729-3730 & 3801-3812).

Authorization _____ Date 2/10/2025

Shayla Sorensen, Grant Specialist, Grants Accounting, USD | shayla.sorensen@usd.edu | (605) 658-3644

MATCH SUMMARY

MATCH - TRACKED WITH LOCATION CODE

Cost Share Summary Fund/Name/Posn/Date	Salary/Benefits	Total
24C016	**7,040.46**	**7,040.46**
237T01	**7,040.46**	**7,040.46**
Krus, Anthony Michal	7,040.46	7,040.46
UE6837	**7,040.46**	**7,040.46**
4/21/24	840.87	840.87
5/21/24	840.88	840.88
6/21/24	134.66	134.66
6/30/24	40.92	40.92
7/21/24	122.79	122.79
8/21/24	163.32	163.32
9/21/24	979.40	979.40
10/21/24	979.40	979.40
11/21/24	979.40	979.40
12/21/24	979.40	979.40
1/21/25	979.42	979.42
Total	**7,040.46**	**7,040.46**
FEB MATCH*	**979.42**	**979.42**

*not in system yet due to timing of report

WORK STUDY MATCH (NOT TRACKED WITH LOCATION CODE)

Name	Hours (see nxt pg)	Hourly rate
Merchant, McKenzie	111.50	15
	TOTAL	**1,672.50**

MATCH GRAND TOTAL **9,692.38**

Merchant, McKenzie - Work Study Hours 2024

Date	**Hours**	**Hours Total = 111.5**
5/13	5pm-10pm	5
5/14	4-10pm	6
5/15	7:30-8am, 3:30-10:30pm	8.5
5/16	7-8am, 4:30-10:30pm	7
5/17	7-8am, 5-10:30pm	6.5
5/18	8-9am, 4:00-10:30pm	7.5
5/19	8-9am, 4:30-10:30pm	7
5/20	7-8am, 4:30-11pm	8
5/21	7-8am, 4:30-10:30pm	7
5/22	7-8am, 4:30-12:30am	9
5/23	7-11am	4
8/12	8:30am-12:30pm	4
8/13	8:30am-12:30pm	4
8/14	8:30am-12:30pm	4
8/15	8:30am-12:30pm	4
8/19	8:30am-12:30pm	4
8/20	8:30am-12:30pm	4
8/21	8:30am-12:30pm	4
8/22	8:30am-12:30pm	4
8/23	8:30am-12:30pm	4

FZRGDTL 9.0 MC:5.0.4 Board of Regents RUN DATE
10-FEB-2025

Grant Detail Report RUN TIME
03:05 PM

01-MAR-2024 to 28-FEB-2025

Grant: UA24C0016 2024 Archaeological Excavations PMSC: - Not Defined -
PI: Krus, Anthony
Start Date: 03/01/2024 End Date: 02/28/2025 Expense End Date: None Termination Date: None

Fund: S 24C016 2024 Archaeological Excavations
Idc Basis: IDC Rate: IDC Charge: IDC Distribute:

ORGN CODE	ACCT CODE	PROG CODE	CURRENT PD ACTIVITY	CUMULATIVE BUDGET	DESC			TRANS DATE	DOC CODE
220120	530250	03	2,984.22	0.00	Grant - Accrued Revenue			05/31/2024	G0030402
220120	530250	03	2,719.94	0.00	Grant - Accrued Revenue			06/30/2024	G0030584
220120	530250	03	75.00	0.00	Grant - Accrued Revenue			09/30/2024	G0031126
Acct Total:	530250		5,779.16	0.00	ITD:	5,779.16			
53 Grant Revenue			5,779.16	0.00	ITD:	5,779.16	Remaining:	-5,779.16	
50 Revenues			5,779.16	0.00	ITD:	5,779.16	Remaining:	-5,779.16	
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Acct Total:	730000		0.00	3,760.00	ITD:				
220120	733010	03	1,469.94	0.00	05 2024 Fleet			06/14/2024	FT001340
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220120	744460	03	50.00	0.00	Frontier Precision Inc			06/07/2024	I2352603
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Acct Total:	750000		0.00	2,490.00	ITD:				
220120	755048	03	180.76	0.00	Krus, Anthony Michal.			05/02/2024	I2340028
220120	755048	03	54.34	0.00	Krus, Anthony Michal.			05/14/2024	I2344046
Acct Total:	755048		235.10	0.00	ITD:	235.10			
220120	755208	03	347.66	0.00	Recode I2386820 to grant 24C016			02/01/2025	J0282936
Acct Total:	755208		347.66	0.00	ITD:	347.66			
220120	755248	03	123.18	0.00	Recode I2414284 to grant 24C016			02/01/2025	J0282936
Acct Total:	755248		123.18	0.00	ITD:	123.18			
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70 Expenses			6,250.00	6,250.00	ITD:	6,250.00	Remaining:	0.00	
Fund Total:	24C016		-470.84	6,250.00	ITD:	6,250.00	Remaining:	0.00	

Fund Direct Expenditure Total: 6,250.00

Fund Indirect Expenditure Total: 0.00

Fund Non Cap Total: 0.00

Fund Cap Total: 0.00

Fund Transfers Total:	0.00				
Fund Revenue Total:	5,779.16				
Fund Expenditure Total:	-6,250.00				
Grant Total: UA24C0016	-470.84	6,250.00 ITD:	6,250.00 Remaining:	0.00	
Grant Direct Expenditure Total:	6,250.00				
Grant Indirect Expenditure Total:	0.00				
Grant Non Cap Total:	0.00				
Grant Cap Total:	0.00				
Grant Transfers Total:	0.00				
Grant Revenue Total:	5,779.16				

* * * REPORT CONTROL INFORMATION - Release: 9.0 MC:5.0.4 * * *

Parameters have been entered via Job Submission.

Parameter Name	Value	Source	Message
Parameter Seq No:	4799726		
Grant Code:	UA24C0016	Entered	
PMSC Code:	%	Entered	
Start Date:	01-MAR-2024	Entered	
End Date:	28-FEB-2025	Entered	

ATTACHMENT II

South Dakota State Archaeological Permit

south dakota
STATE HISTORICAL SOCIETY
DEPARTMENT OF EDUCATION

April 9, 2024

Dr. Tony Krus
University of South Dakota
414 E. Clark Street
Vermillion, SD 57069

RE: Request for State Permit under the Archaeological Exploration Act (SDCL 1-20) and the Cemetery and Burial Records Act (SDCL 34-27) to conduct cultural resources investigations and testing within State School and Public Lands, Meade County, for the period of *2024*.

Dear Dr. Krus:

The Archaeological Research Center (ARC), a program of the South Dakota State Historical Society, has received your request for a state permit to conduct a cultural resources investigation, including excavation, collection, and intensive study, for work associated with the Soapsuds Row Archaeological Project, Meade County, South Dakota. The project will be led by Dr. Tony Krus of the University of South Dakota. The proposed project area of potential effects, as it relates to state lands, is in Sections 2 and 11, T5N R5E on the USGS 7.5' Fort Meade Quadrangle. Please consider this letter as your notice to proceed under Permit No. **SP-24-003** under SDCL 1-20 and SDCL 34-27 with the following stipulations:

1. Excavation methodology should follow the State Historic Preservation Office's 2021 Guidelines for Complying with Federal and State Preservation Laws (available here: https://history.sd.gov/preservation/docs/2021%20Revised%20Guidelines%20Final.pdf).
2. All diagnostic surface artifacts and any subsurface artifacts recovered are to be collected to be curated at the ARC, per your curation agreement provided by the ARC Repository Manager.
3. Should any archaeological features be identified, the project's Principal Investigator is authorized to recover data and address the features archaeologically at their discretion. Please contact our office with questions.
4. Please send a copy of the draft report for this office to review. Upon receipt, we will have 15 business days to review and comment.

5. Per SDCL 1-20-33, once a final draft of the report is complete, please follow the Supplemental Guide for Submitting Reports and Data to ARC. Further information about this process can be found on our website or by contacting our Records Archaeologist, Megan Ostrenga, at 605-394-1939.

Thank you for your continued support in the identification and protection of the cultural resources of South Dakota. Please do not hesitate to contact me with any questions or concerns during your project.

Sincerely,

Cassie Vogt, MS
State Archaeologist
605.209.1443
cassie.vogt@state.sd.us

ATTACHMENT III

South Dakota Archaeological Research Center Curation Agreement

South Dakota
State Historical Society

ARCHAEOLOGICAL RESEARCH CENTER
937 E. North St., Ste. 201
Rapid City, SD 57701
P.O. Box 1257
Rapid City, SD 57709-1257
Ph. 605.394.1936

CURATION AGREEMENT

Curation Information

Agreement #: **84**

Agreement Period from: **March 26, 2024** to **December 31, 2024**

Contact Information

Name: **Dr. Tony Krus**
Institution/Company: **The University of South Dakota, Anthropology Department**
Address: **414 E. Clark St., East Hall 311**
City/State/Zip: **Vermillion, SD 57069**
Ph.: **314-973-3978**
E-mail Address: **Tony.Krus@usd.edu**
Year Graduated: **2013**
Institution Name and Location: **Indiana University**
Degree/Department: **Ph D, Anthropology**

The individual named above requested a curation agreement with the South Dakota State Historical Society-Archaeological Research Center for one calendar year. During the term of the agreement, the individual named above, as the representative for the Institution/Company, agrees to deliver archaeological collections that are collected by the Institution/Company within the State of South Dakota to the South Dakota State Historical Society-Archaeological Research Center, for curation. If the project exceeds the time period for this agreement and collections have not been submitted when the agreement expires, the agreement must be renewed and the annual fee paid for the next calendar year and all following years until the collection(s) is submitted. The signatory agrees to comply with the terms of the *Requirements for Submitting a Collection to the State Archaeological Research Center* when collecting, cataloging, packaging, and delivering collections to the Center. The signatory agrees to submit complete collections, that is, all artifacts, field and lab documents, photographic media, maps, disks, correspondence, and any other material related to the collection. The signatory is responsible for obtaining collections under conditions and methods which conform to generally accepted archaeological methodology. Agreements are valid during a calendar year, January 1-December 31, and the fee is based on current Administrative Rules of South Dakota.

Special Provisions: Payment for the $250 annual fee for this curation agreement was waived at the discretion of Cassie Vogt, State Archaeologist, as part of the upcoming USD Field School at Soap Suds Row.

Signed: Katherine Zamir Date: 03/26/2024
ARC Representative

Signed: Tony Krus Date: 3/26/2024
For the Firm