
10-1971

Exploratory Excavations at Fort Hawkins, Macon, Georgia: An Early Nineteenth Century Military Outpost

Richard F. Carrillo

Follow this and additional works at: https://scholarcommons.sc.edu/archanth_books



Part of the [Anthropology Commons](#)

Recommended Citation

Carrillo, Richard F., "Exploratory Excavations at Fort Hawkins, Macon, Georgia: An Early Nineteenth Century Military Outpost" (1971). *Research Manuscript Series*. 13.
https://scholarcommons.sc.edu/archanth_books/13

This Book is brought to you by the Archaeology and Anthropology, South Carolina Institute of at Scholar Commons. It has been accepted for inclusion in Research Manuscript Series by an authorized administrator of Scholar Commons. For more information, please contact digres@mailbox.sc.edu.

Exploratory Excavations at Fort Hawkins, Macon, Georgia: An Early Nineteenth Century Military Outpost

Keywords

Excavations, Macon, Georgia, Archeology

Disciplines

Anthropology

Publisher

The South Carolina Institute of Archeology and Anthropology--University of South Carolina

Comments

In USC online Library catalog at: <http://www.sc.edu/library/>

EXPLORATORY EXCAVATIONS AT FORT HAWKINS, MACON, GEORGIA:
AN EARLY NINETEENTH CENTURY MILITARY OUTPOST

by

Richard F. Carrillo

#14

Prepared by the
Institute of Archeology and Anthropology
University of South Carolina
October, 1971

TABLE OF CONTENTS

	Page
INTRODUCTION.	1
ACKNOWLEDGEMENTS.	4
HISTORICAL BACKGROUND	6
DESCRIPTION OF FORT HAWKINS SITE.	7
ARCHEOLOGY OF FORT HAWKINS - 1936	9
INTERPRETATION OF 1936 EXCAVATIONS.	13
ARCHEOLOGY OF FORT HAWKINS - 1971	15
The East Palisade.	15
The South Palisade	20
The West Palisade.	29
INTERPRETATION OF ARCHEOLOGICAL DATA.	30
The East Palisade.	32
The South Palisade	34
The West Palisade.	36
EAST, SOUTH, AND WEST PALISADE COMPARISONS.	37
ARTIFACT DISCUSSION	38
SUMMARY	41
RECOMMENDATIONS	41
PROPOSED ARCHEOLOGICAL BUDGET EXPLANATION	43
PROPOSED BUDGET FOR MAJOR ARCHEOLOGICAL INVESTIGATIONS OF FORT HAWKINS	44
BIBLIOGRAPHY.	45

LIST OF FIGURES

FIGURE		Page
1.	Archeological Plan of Fort Hawkins Excavations	Jacket
2.	Sketch of Fort Hawkins by E. I. Irvine	8
3.	View of Reconstructed Blockhouse	10
4.	1936 Excavations by Gordon R. Willey	10
5. & 6.	1936 Excavations by Gordon R. Willey	11
7.	1936 Excavations by Gordon R. Willey	12
8.	Excavations as Seen From Top of Reconstructed Southeast Blockhouse	12
9.	Willey's map of 1936 Excavations	16
10.	Willey's map of 1936 Excavations	17
11.	Palisade Ditch and Posts in Unit 17	19
12.	Palisade Ditch and Posts in Unit 17 After Drying	19
13.	Palisade Ditch and Post Mold in Unit 4	21
14.	Profile of Brick Floor and Fill in Unit 13 (A&B)	22
15.	Profile of East Wall of Unit 14	23
16.	Brick Floor and Foundation in Unit 6 (Feature 8)	24
17.	Ceramics from Unit 6 (Feature 8) and Unit 13B	26
18.	Brick Floor in Unit 13B	27
19.	End of Palisade Ditch in Unit 25	27
20.	Artifacts From General Excavations of Fort Hawkins	38

INTRODUCTION

Fort Hawkins was established in 1806 as a frontier military fort by the United States Army to deal with the Indians and was abandoned in 1821 (Butler 1879:59-60 and Dollar MS). The area where this fort was located is a historic site of local, state, and national significance. The absence of firm historical documentation with which to establish a definite plan or sketch of Fort Hawkins made it impossible to complete the information necessary to establish this fort on the list of the National Register of Historic Sites.

In November, 1970, a study was initiated by the Institute of Community and Area Development, University of Georgia, for which Stanley South, Archeologist with the Institute of Archeology and Anthropology, University of South Carolina, acted as consultant. Mr. South was asked to submit a proposed plan for archeological investigation of Fort Hawkins. The study was conducted at the request of Dr. Louis De Vorse, Assistant Professor of Geography, University of Georgia, who, being an historical geographer, has conducted detailed historical research on Fort Hawkins, and Mr. John Waters, Assistant Professor of Environmental Design, and Project Director.

The study revealed that no building plans or sketches had ever been found which could substantiate the exact dimensions of this structure. Therefore, it was proposed that a two-week archeological investigation be conducted that would essentially determine the original dimensions of the fort, heretofore unknown, except by descriptions which tended to vary between four (Bryan MS) and fourteen acres (Butler 1879:60). The archeological work was proposed to; (1) Expose the palisade ditch and trace its

extent as nearly as possible, (2) locate the northwest blockhouse ruin, and (3) determine the overall configuration of the fort.

The nature of the archeological investigation would be essentially architectural in design. The palisade ditch would be revealed, in its existing locations, specifically through archeological techniques. Any important features located such as wells, cellarholes, refuse pits, interior structures, etc. would be mapped, but not excavated.

On the basis of the information gathered from such an exploratory excavation, plans could be formulated as to whether or not a major archeological investigation would be feasible or desirable. This would enable information to be gathered regarding intramural structures and associated features which would add to, and further enhance, the historic interpretation of this important early nineteenth century site.

In August 1971 plans were made with the writer to begin archeological investigations. One and a half days were spent in consultation with Mr. Stanley South and Dr. Robert L. Stephenson, Director, Institute of Archeology and Anthropology, University of South Carolina, Columbia, who were acting as advisors for the project.

Upon arrival in Macon, Georgia, two days were spent arranging the logistics for the project. This initial work was done in conjunction with Mr. C. R. Rader, Chairman of the Fort Hawkins Commission, and coordinator of the project.

The project was funded by the Bibb County Commission. The City of Macon co-operated by supplying vital equipment and supplies, and performing services necessary to the archeological project.

The actual excavation was conducted from August 16 to August 27 with a crew of six men. The time from August 30 to September 30 was spent at the Institute of Archeology and Anthropology, University of South Carolina, assisted by staff members of the Institute, analyzing the excavated material and preparing this report.

The proposed goals of the two-week investigation were achieved, mainly locating the palisade ditch and tracing its extent as nearly as possible. This was accomplished along three sides; the east, south, and west sides of the fortified area. The north palisade wall and the northwest block-house were destroyed when Woolfolk Street was constructed. From the information retrieved, it can be stated that the architectural dimensions of Fort Hawkins were definitely smaller than had previously been assumed.

Other unexpected features were found while searching for the palisade ditch which shed more light on the significance of the nineteenth century structure. The relationship of these architectural features is discussed in further detail within the archeological section.

The plan showing the area of archeological research (Figure 1) is contained in an envelope in the back cover of this report and all references are made to this within the archeological section.

ACKNOWLEDGEMENTS

The Fort Hawkins archeological project could not have taken place had it not been for a few devoted persons who were willing to give of their valuable time and effort to put forth their abilities thereby enabling the project to get off the ground.

Initial thanks go to Mr. John Waters, Assistant Professor, School of Environmental Design and Dr. Louis De Vorsey, Chairman of the Department of Geography, both of the University of Georgia, and responsible for initiating the project. Special thanks are extended to Dr. De Vorsey for providing information regarding research he had made, the photographs of the 1936 excavations (originals or negatives on file at the Southeast Archeological Research Center, Macon, Georgia), and for making himself available for assistance.

Thanks are extended to the citizens of Macon, who were always ready to put forth to make the outcome of the project successful, especially those affiliated with the Macon city government, from Mayor Ronnie Thompson's office on down. Special thanks is extended to Mr. C. R. Rader, Chairman of the Fort Hawkins Commission and Project Coordinator, for taking time from his busy schedule whenever his services were required, and to Mr. John McKay, member of the Fort Hawkins Commission, who has for years concerned himself with the history of Macon and maintains a special interest in Fort Hawkins.

I wish to express my gratitude to the personnel of the National Park Service's Southeast Archeological Research Center and Ocmulgee National Monument, Mr. Bernard Berg of the Monument who provided me with historical data and photographs of the original blockhouse, and Mr. Richard Faust, Chief, Archeological Research, who offered the use of the Research Center facilities and made equipment available for our use. I am deeply grateful

to Mr. Jack Walker, Archeologist, who took time to come to the site every day making himself available to provide technical assistance.

Finally, I would like to express my sincere thanks to Dr. Robert L. Stephenson, Dr. John D. Combes, Assistant Director, and the rest of the staff of the Institute of Archeology and Anthropology for providing the manpower and facilities necessary for completion of this report. Special thanks are extended to Mr. Stanley South, the highly knowledgeable archeologist, who guided me from the initial stages of the project through the completion of this report.

HISTORICAL BACKGROUND

The historical research for Fort Hawkins has been extensively done by Dr. De Vorse and will continue. This research was called upon to aid in the archeological excavations, but need not be detailed in this report as it will appear in a larger report of future work on the site. For the present purposes only a brief historical description of the site that pertains directly to the archeology is presented here.

Fort Hawkins was built by the United States Army in 1806 to serve as a trading center, and a place where negotiations could be conducted with the Creek Indians. It was named for Benjamin Hawkins, a former North Carolina senator, who was the then Indian Affairs Agent and the person most instrumental in conducting relations between the government and Creek Indians during the first quarter of the nineteenth century (Butler 1859:59-60). By 1821, the military and trading functions for which the fort had been constructed were ended and it was closed by the army. The fort continued to be occupied as a settlement which eventually led to the present day city of Macon (Butler 1879:77-78).

The fort was described, a half century after its abandonment by the army, as follows:

One hundred acres of ground were, for many years, reserved for the uses of the fort. The fortifications consisted of two large block houses, surrounded by a strong stockade. The stockade was built of posts of hewn timber, fourteen feet long, and fourteen inches thick; they were sunk in the ground four feet, with port holes for a musket in every alternate post. The area within the stockade was fourteen acres. There were four long houses, one in the centre of each side of the stockade, their front forming part of the stockade to the width of each house, about 20 feet. These houses were used for soldiers' quarters, provisions, and for the factory goods to be sold to the

Indians, and peltries received in return. In the centre surrounded by oaks, were the officers' quarters (Butler 1879:60).

The above description by John C. Butler and a sketch drawn by E. D. Irvine (Figure 2; taken from a sketch in Butler's Historical Record of Macon and Central Georgia, page 61) indicate that Fort Hawkins consisted of a stockaded fort enclosing 14 acres with two blockhouses located at opposite ends. Inside there were four buildings built in the center of each of the four walls which served as integral portions of the stockade and were approximately 20 feet in width. Located in the central area of the stockade was a building used as the officers' quarters.

DESCRIPTION OF THE FORT HAWKINS SITE

Fort Hawkins elementary school is presently located on the site where Fort Hawkins once stood. This area consists of the northern half of a city block (437 feet square) which is owned almost entirely by the Bibb County Board of Education. The present streets bordering the block are; Woolfolk Street on the north, Fort Hill Street on the west, Maynard Street on the east, and on the south Emery Highway.

The northern half of the block constitutes the crest of a high hill which is flat probably as a result of grading for the playground. A brick retaining wall is situated along the north and east sides of the block encompassing the northeast quarter. Fill was apparently removed from the center (of the playground) and deposited around the edges of the hill to level the playground. It appears that along the crest of the hill, on the south side, there has been considerable filling over the years. Along the north and west sides, there appears to have been a natural dropoff, now broken by street cuts.

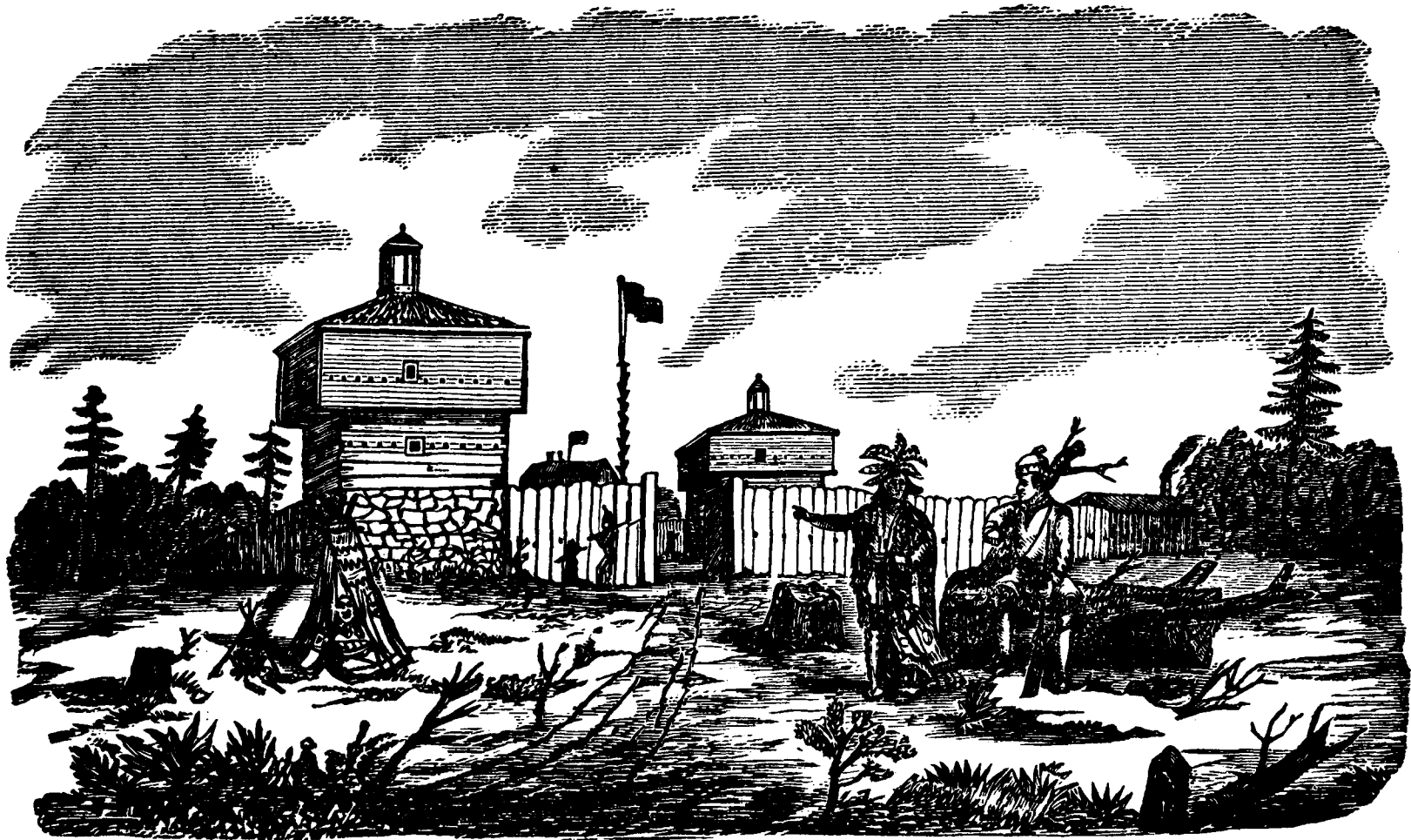


FIGURE 2

Sketch of Fort Hawkins drawn by E. I. Irvine, Macon, Georgia. (Taken from Butler 1879:60).

Situated at the crest of the hill at the southeast corner of the Fort Hawkins schoolyard is a large, imposing, reconstructed concrete blockhouse (Figure 3). Surrounded by a chain link fence 60 feet square the concrete blockhouse was built in 1936-37 by the Nathaniel Macon Chapter of the Daughters of the American Revolution through the Works Progress Administration and was supposedly reconstructed on the location where the original southeast blockhouse once stood (South MSa).

ARCHEOLOGY AT THE FORT HAWKINS SITE - 1936

In 1936, while work was progressing on the reconstruction of the southeast blockhouse, a series of archeological tests were conducted to determine whether the blockhouse was being built on the original site and to locate the stockade (Figures 4, 5, 6, 7).

A two-week investigation was carried out by Gordon R. Willey who was at that time working on the major archeological project being conducted at Ocmulgee National Monument.

The excavation consisted of a series of trenches dug perpendicular to (the direction of) the palisade ditch. The results of the excavation indicated that the reconstructed blockhouse was located on the original site and a row of partially decomposed palisade posts was found projecting from the north and west sides of the blockhouse.

It was found that the palisade extended 105 feet from the blockhouse along the east side before it suddenly ended. It was relocated ten feet farther north, where it continued for 20 more feet before it was interrupted once more by a 20 foot gap with the wall, once again, continuing on the other side (Willey MS).



FIGURE 3

Reconstructed southeast blockhouse.
View to the east.

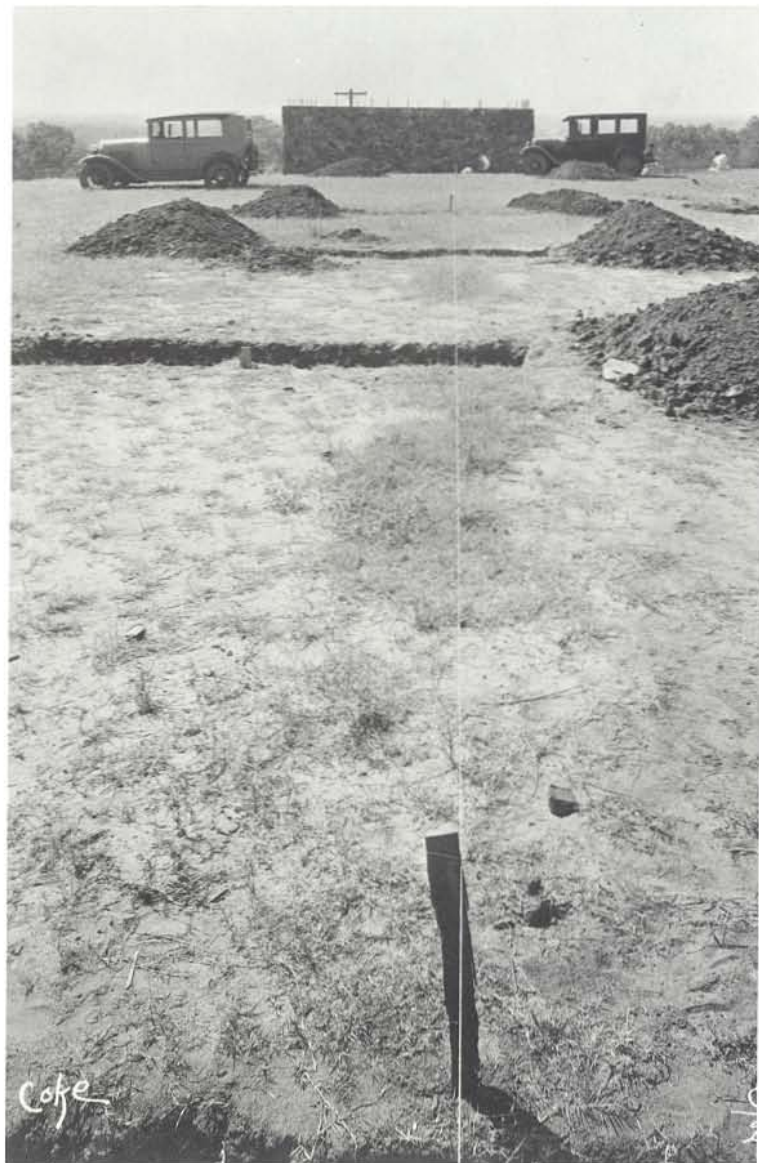


FIGURE 4

1936 excavations: View of excavation along
south palisade.



FIGURE 5

1936 excavation: Posts along south palisade projectory from west side of blockhouse.



FIGURE 6

1936 excavation: Posts and profile and palisade ditch. View unknown.

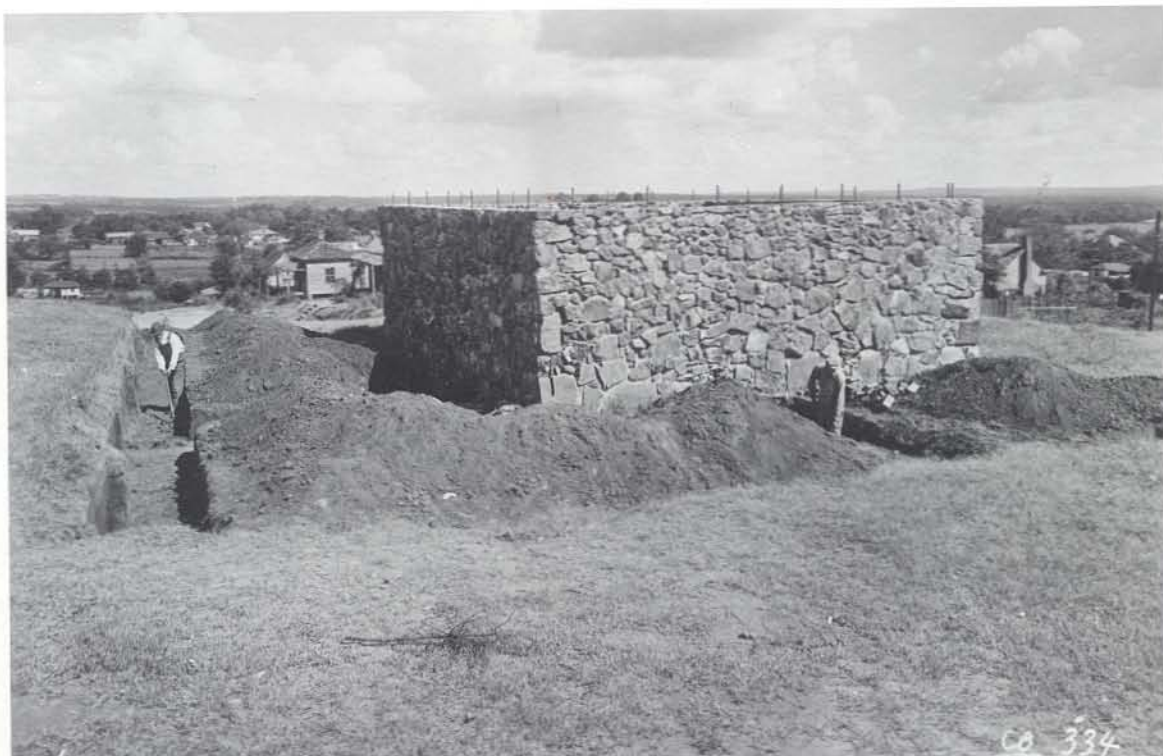


FIGURE 7

Reconstructed basement of blockhouse and excavation. View to the southeast.



FIGURE 8

Slot trenches along east palisade as seen from top story of southeast blockhouse.

Although the excavation conducted in 1936 did reveal that the reconstructed concrete blockhouse was located on the cellar foundations of the original corner blockhouse with evidence of the original stockade radiating from the north and west walls, the data available did not allow for the positioning of the stockade line. This in itself was justification to require additional archeology.

INTERPRETATION OF 1936 EXCAVATIONS

On the basis of Willey's data, South (MSa) made the following interpretation:

Willey indicated that the wall extended a distance of 90 feet from the north face of the blockhouse at which place a ten foot gap occurred. From this, Willey suggested that this could represent a gate. Past the ten foot gap Willey encountered a 20 foot row of posts followed by another gap of 20 feet. Willey postulated that this area had been scraped, thereby causing the 20 foot gap. It was found that with no profile or plans of this area, it was impossible to determine whether it had actually undergone a removal of posts as Willey suggests, or whether this was a gap where a structure had been located. In his description of Fort Hawkins, Butler (1879:60) states:

That there were four long houses, one in the centre of each side of the stockade, their fronts forming part of the stockade to the width of each house, about twenty feet.

South (personal communication) suggests that if logs were laid horizontally, as was usually the case when buildings of this period were constructed, this type of architectural design would not necessitate a palisade ditch. Therefore, one could postulate that if this gap represents

the section of the structure which was incorporated into the palisade wall, an equal distance, to that between the blockhouse and the center of the gap (120 feet) north would probably locate the northeast corner of the stockade. The distance of 240 feet from the blockhouse would situate the northeast corner of the palisade wall in the area where Woolfolk Street is presently located.

Therefore, by the interpretation of Willey's data, and the topography of the land, South conjectured that the fort would have been 240 feet square, or slightly over an acre in size, provided that it was square. Although the hypothesis did not correlate with Butler's description that the stockade encompassed an area of 14 acres, nor with Bryan's interpretation that it had been four acres in size, it did conform with the terrain. Thus, South stated that the area where Fort Hawkins school now stands is located in the original stockaded area of Fort Hawkins.

South further indicates that if the interpretation of four acres is adhered to, the north wall of the fort would have extended north over the crest of the hill two hundred feet past Woolfolk Street. Defensively, this would have been unwise. Also an area of only 20 feet would have been utilized as a storage shed, soldiers' quarters, etc., in the center of a wall 430 feet in length. This would have caused the fort to be considerably out of proportion in relation to the existing interior structures, and would not conform to the specifications of other forts that used such interior structures as part of the palisade wall. Another important factor that should be considered is that a musket would be far more efficient at a range of 240 feet than at 430 feet (South MSa).

Thus additional archeological excavation was required to, hopefully,

answer the questions raised by the 1936 excavations and to clearly delineate the outlines of the fort.

ARCHEOLOGY OF FORT HAWKINS - 1971

The present archeological investigation was conducted using methods similar to those used by Willey in 1936 and referred to as slot trenching. By use of this method, instead of completely exposing an area, in this case a palisade ditch, slots are excavated at right angles to the presumed location of the palisade wall (Figure 8). This method does not require that an entire structure be excavated, as the palisade ditch is located in a series of archeological units, and the wall may be conjectured to exist in the area not excavated between the units. This, of course, does not usually allow for finding evidence of gates, and other possible existing features in the wall, unless accidentally excavated. Therefore, parallel slots sometimes must be connected by excavating a trench along the conjectured area of the palisade ditch between the slot trenches, thereby exposing features that would not otherwise be located.

The initial excavations were begun along the areas north and west of the reconstructed southeast blockhouse since these were the locations where Willey had found evidence of the palisade ditch and posts.

The East Palisade

Along the east side of the fortified area, posts and a palisade ditch eight-tenths of a foot wide, were detected at a depth of one foot from the surface in initial excavation Units 2 and 3 located 44 feet and 66 feet, respectively, from the north side of the reconstructed blockhouse. In Unit 7, 94 feet from the blockhouse, a four foot gap was encountered in the

palisade ditch. When this measurement is compared to Willey's map (Figure 9), this gap lies at approximately the same place where Willey dug a trench in 1936. Aside from the gap, no other evidence of disturbance was able to be detected. Willey's map indicates a measurement from the south wall of the trench to be 91 feet from the blockhouse in contrast to the present distance of 94 feet. When comparisons are made between the 1936 and the 1971 measurements a consistent discrepancy of three to four feet is seen on Willey's map. This may be due to misinterpretation of the measurements. Also some measurements do not correspond within the text of Willey's report and the map.

Beyond the 1936 slot trench, at a distance of 109 feet (105 feet - 1936) from the blockhouse, the palisade ditch stopped. It was at this same place that Willey (1936 MS) described a ten foot gap which he interpreted as being a gate. This section is located in Units 7 and 17. Figures 11 and 12 show the palisade ditch and posts located in Unit 17. This was one of the areas along the palisade ditch where it was possible to see where the posts had been set abutting the west (right) wall of the ditch. The ditch is one and one-tenths feet wide; the posts were eight-tenths of a foot wide with the exterior fill comprising three-tenths of a foot.

A backhoe was used to dig Unit 17A to reveal the portion of the palisade ditch north of the ten foot gap. In this unit the ditch was again encountered and extended 17 feet north before ending. Due to lack of time, detailed excavations only revealed the north and south ends of the 17 foot section. Midway between the palisade ditch, two uprooted bricks were uncovered by the backhoe immediately west of the ditch.

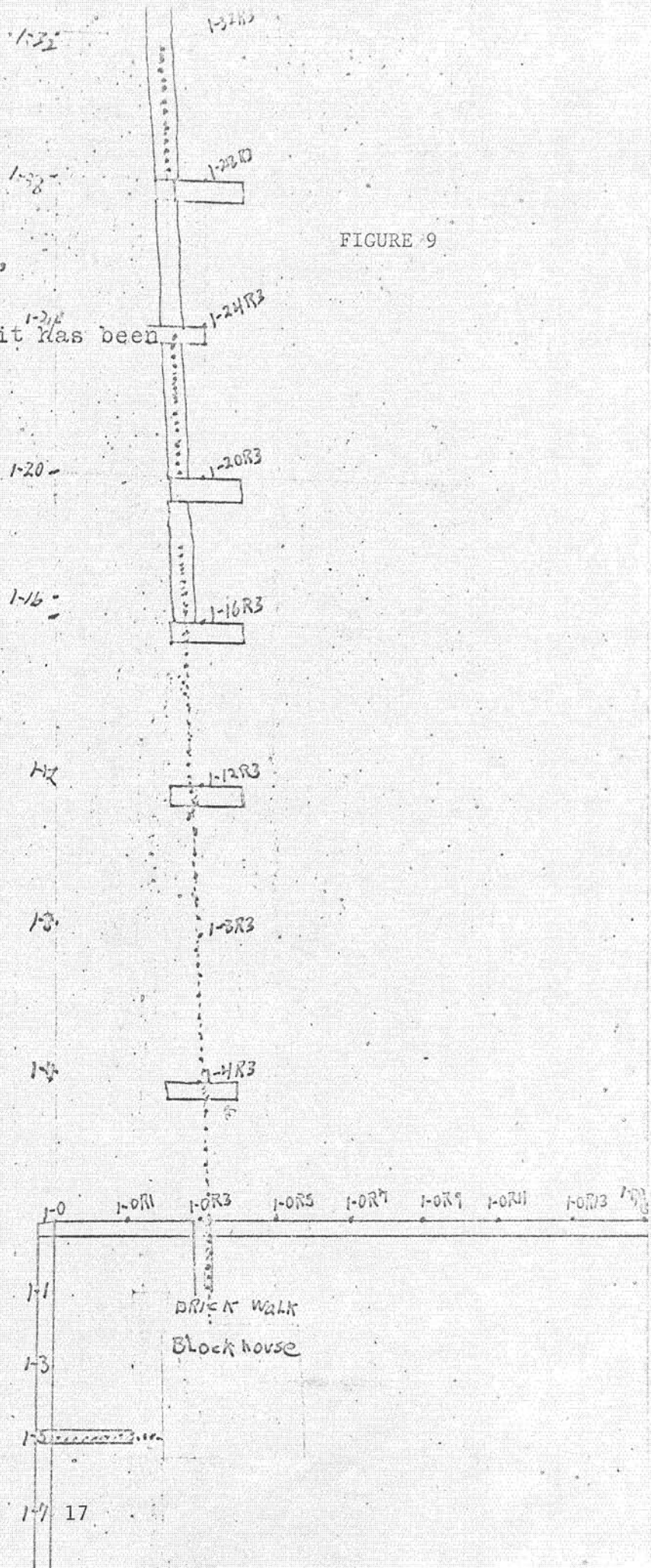
North of the 17 foot palisade ditch section another break in the ditch

are due our gratitude for taking the steps they did, for if they had not, the site of Fort Hawkins may well have been totally lost to urban Macon. For a city to have lost the memory of its nucleus in such a manner would be as unfortunate as if the Creeks had forgotten that the spirit of their nation lay in the mounds of Ocmulgee. Fort Hawkins could become a shrine for Macon as refreshing and productive of reflection as that monument to the Indian at Ocmulgee. We hope that Macon will not fail to take advantage of the opportunity that offers itself at this time, for to delay another decade will likely spell the end of Fort Hawkins, and only a faded memory will remain.

Upon this line of direction cuts were made across road gap, 100' north of offset 36. The stockade was not picked up here; although it is possible it has been destroyed as from 28 to 36.

FIGURE 9

Ft. Hawkins Excavations
 at close of 9/22/36
 BY Gordon Willey
 (East Stockade)



Scale 20' to an inch

- Stockade Posts
- - - SUPPOSED LINE OF STOCKADE
- CUTS
- ENGINEERING LINES

FIGURE 10

FT. HAWKINS EXCAVATIONS
at close of 9/22/36
St. Gordon Willet



20'

(South Stockade)

..... Stockade
- - - - - supposed line of Stockade
— Engineering Lines
— Cut

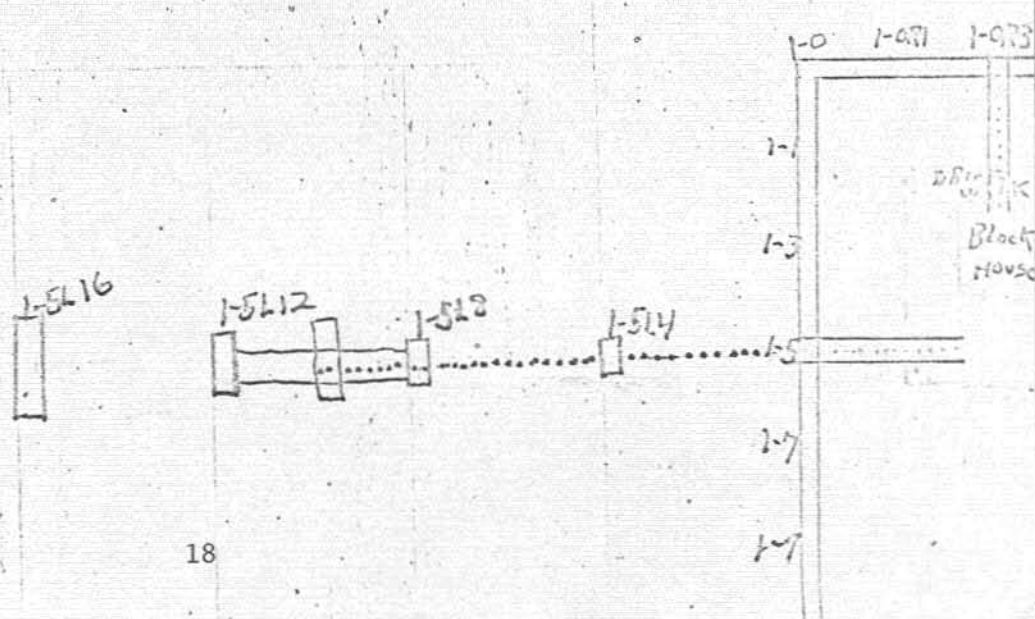




FIGURE 11

Palisade posts in Unit 17 looking north.



FIGURE 12

Palisade ditch visible in Unit 17 after drying. View to the south.

was encountered extending a distance of 22 feet, where once more the palisade ditch was located. Two bricks were found oriented in a north-south direction west of the ditch. The palisade ditch was only visible for a short distance since it was not found in Unit 11. Since Willey's map (Figure 9) indicates that the ditch was located farther north, the fact that it was not located in the present excavation may be due to its destruction in 1936. There was no visible stratigraphic sequence in this area; the soil beneath the top humus layer resembling subsoil.

Units 23 and 24 were excavated parallel to the palisade ditch, Unit 23, to determine if the ditch had turned west since it was not found at the furthest point north near the retaining wall. Unit 24 was excavated parallel to Unit 17 in an effort to locate evidence of interior structures. No evidence of a palisade ditch nor posts was found in this unit.

Along the east side, the palisade ditch was located near the surface and supports Willey's observations that the palisade tended to rise as it progressed northward (MS).

There were few artifacts found along this side. The ceramics found correspond to the types described for Units 6 (Feature 8) and 13B along the south palisade.

The South Palisade

Along the south palisade side, Unit 4, located near the chain link enclosure of the reconstructed blockhouse, revealed the palisade ditch and the remains of a post at a depth of 2.06 feet from the surface. The post impressions were clear in the ditch, including the mold of a round post considerably larger than the ditch (Figure 13). The ditch was seven-tenths of a foot in width. Within this unit, extraneous postmolds occurred north



FIGURE 13

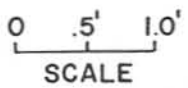
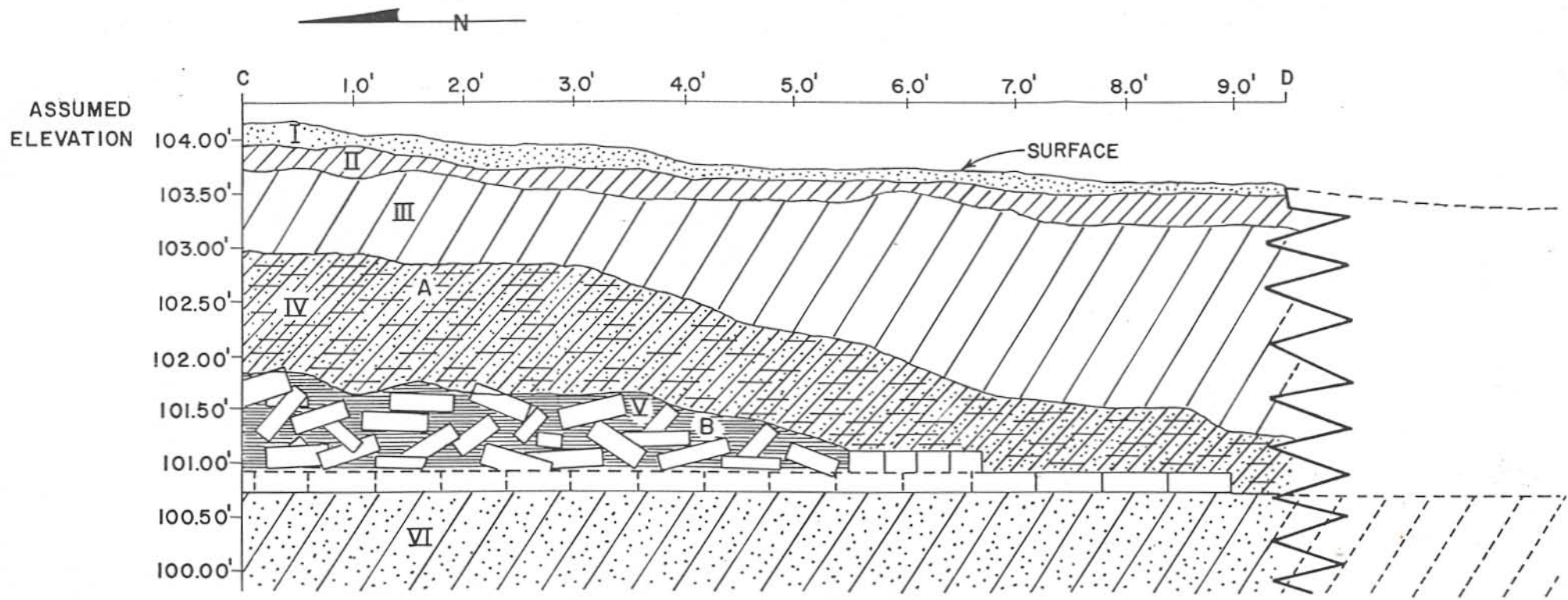
Palisade ditch and postmold in Unit 4.

of the ditch (interior portion of stockade). The postmolds located in this unit tended to be very soft and after a rainstorm, some collapsed.

In Unit 6, excavated a distance of 57 feet from the west wall of the blockhouse, a brick floor and foundation (Feature 8) were found at a depth of one and one-tenths feet below the surface protruding from the north and west walls of the unit (Figure 16). The bricks were not mortared and appeared to be bonded with clay. The bricks comprising this floor were set with the lengths oriented in a north-south direction. At the north half of the east edge of this fragment of the floor, the foundation two layers high, was located. The basic style of construction appears to be English bond. This style consists of the use of a row of headers, alternating with two or more rows of stretchers, and was a bond used in the nineteenth century (South, personal communication).

A number of artifacts were recovered in the vicinity of the brick floor and wall consisting mainly of ceramics. Ceramics when found in such a context, and as in Unit 13B, can serve as an aid in determining the date of an architectural feature. These ceramics, mainly English, comprise types which have a general time span from ca. 1780 to ca. 1835 (South, personal communication). The types of ceramic sherds found in Unit 6 (Feature 8) consist basically of types referred to as creamware and pearlware (Figure 17).

Creamware is a ceramic type that was produced by Josiah Wedgwood ca. 1759 and underwent varying evolutionary stages until its extinction in the early 1800's (Noel Hume 1970:126). The style of creamware found in the context of Feature 8 was probably produced after ca. 1785 based on its lighter coloration. A rim sherd can be dated prior to 1783 when only plain rims were produced and which are found in late eighteenth and early nineteenth



FORT HAWKINS

(9BI21)

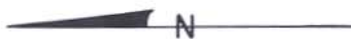
SOIL PROFILE

EAST FACE-TRENCH I3 (A & B)

- | | |
|--------------------------------|---------------------------------------|
| I TOPSOIL (LIGHT BROWN) | IV DISTURBED CLAY FILL (ORANGE BROWN) |
| II HUMUS (GRAYISH BROWN) | V BRICK LAYER & RUBBLE (RED) |
| III CLAY FILL (REDDISH ORANGE) | VI SUBSOIL (RED) |

.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0 10.5 11.0 11.5

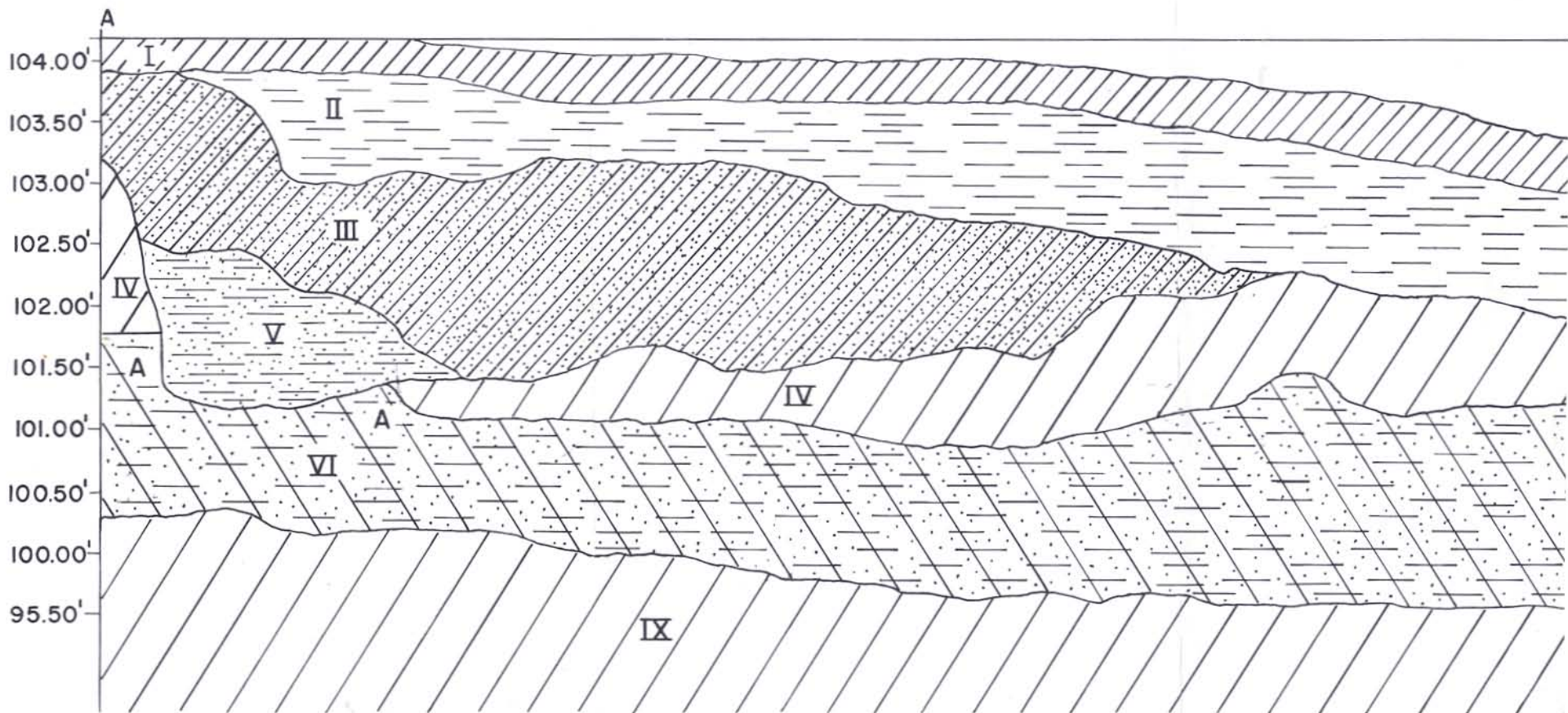
1 FOOT



FORT

PROFILE OF U

ASSUMED
ELEVATION



- I HUMUS (GRAYISH BROWN)
- II REDDISH BROWN CLAY FILL
- III LIGHT BROWN CLAY FILL
- IV REDDISH CLAY FILL
- V YELLOW ORANGE CLAY FILL

- VI REDDISH ORANGE DISTURBED CLAY ZONE
- VII LIGHT YELLOW CLAY FILL (POST MOLD)
- VIII LIGHT ORANGE CLAY FILL (PALISADE DITCH)
- IX SUBSOIL (REDDISH CLAY)

FIGI

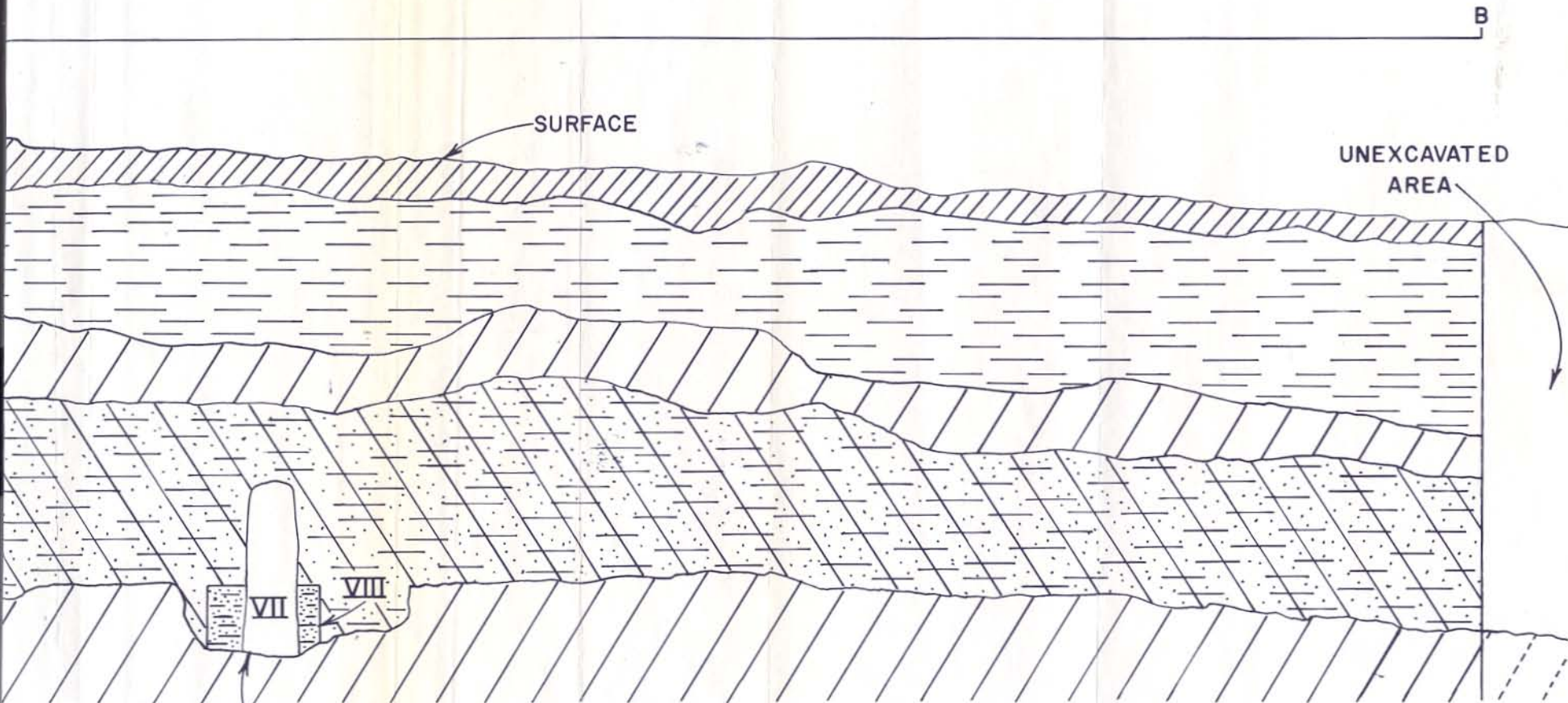
12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0 20.5 21.0 21.5 22.0 22.5 23.0 23.5 24.0

HAWKINS

9BI21)

UNIT 14 (A) - EAST FACE

B



14 (B) - PALISADE DITCH
& POST MOLD IN WALL PROFILE

FIGURE 15



FIGURE 16

Brick floor and foundation in Unit 6 (Feature 8).

FIGURE 17

CERAMICS FROM UNIT 6 (Feature 8) AND UNIT 13B.

- Unit 6
- a. Blue transfer printed pearlware ca.1787-1820.
 - b. Green edged pearlware ca.1785-1795.
 - c. Plain edged creamware ca.1790-1800.
- Unit 13B
- d. Blue transfer printed pearlware ca.1787-1820.
 - e. Blue painted pearlware ca.1779-1810.
 - f. Blue edged pearlware ca.1785-1795.
 - g. Mocha Ware ca.1795-1850.
 - h. Polychrome hand painted pearlware ca.1815-1835.
 - i. Blue willow "transfer printed" pearlware ca.1792-1820's.
 - j. Blue underglaze pearlware ca.1815-1835.
 - k. Parian Ware ca.1840+
 - l. Green edged pearlware ca.1785-1795.

century contexts (Noel Hume 1970:126).

The majority of the ceramics constitute a type which is classified as pearlware. This type was also made by Josiah Wedgwood about 1779 and lasted through ca. 1820. Some forms continued to be made until ca. 1835. Pearlware can be recognized by a bluish coloring appearing in foot-ring crevices and around handles (Noel Hume 1970:128-29).

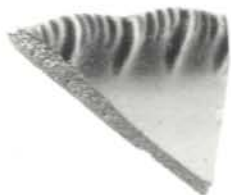
Evidence of later disturbance in Unit 6 is indicated by a modern .22 calibre short cartridge which was found south of, and below, the brick floor. According to Willey's map (Figure 10), a trench was excavated in this location in 1936 which may help explain the cartridge case. As was the case along the east palisade, evidence of a recent disturbance was not detected.

In Unit 13, located 105 feet from the blockhouse, another brick floor (Feature 13B) was located at a depth of 2.80 feet from the surface (Figures 14 and 18). It was evidence that this feature was not directly associated with Feature 8 (Unit 6), located 48 feet to the east, since Unit 9 had been excavated between Unit 6 and 13 and no features were found. This floor was made up of a double layer of bricks laid in no apparent pattern. The bottom section was intact except for the south edge, but most of the upper portion had been disturbed, and some bricks removed. A considerable number of artifacts, consisting mainly of ceramics, were recovered from the top of the brick rubble and floor.

As with Unit 6 (Feature 8) the ceramic types comprise a time span from ca. 1779 to ca. 1835. The most abundant type is pearlware. The pearlware and other ceramic types found in Unit 13B represent a time span between ca. 1779 through ca. 1820. These dates compliment other data in associating this brick floor with the period of 1806-1821 (Figure 17).



a



b



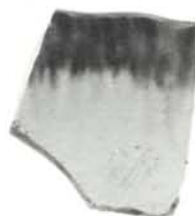
c



d



e



f



g



h



i



j



k



l

FIGURE 17

One ceramic type recovered from this level is known as Parian ware. It is a porcelain which was not glazed when fired, or perhaps given a slight "smear" glaze which gave it the dull appearance of polished marble. It was originally produced for making figurines in the early 1840's (Ramsay 1961:81). Since this ceramic type constitutes a later date than the above, possibilities exist for later intrusion.

Within Unit 13, as with Unit 6, the palisade ditch was not found. The palisade trench was found in Unit 14 adjacent to Unit 13 at a depth of 3.5 feet below the surface (Figure 15). As illustrated in Figure 15, considerable filling has occurred in this area.

The palisade ditch was again located along the south side of the area in Unit 25 at a depth of 4.50 feet below the surface. This unit was excavated with a backhoe and considerable amounts of charcoal were found in the ditch, suggesting that the posts had been burned. Unit 25 revealed that the palisade ditch ended at this location suggesting a gap for a gate or some other feature, conceivably a structure somewhat suggestive of another blockhouse (Figure 19).

Two other trenches were excavated west of Unit 25, one with the backhoe, but no trace of a ditch was revealed.

Machinery was used the last three days to accomplish the goals set out for the project. A backhoe was used since considerable time had been expended along the south side due to the depth of the palisade ditch. It was necessary to try and follow the south palisade wall toward the west until it turned north or otherwise ended before work could commence along the west side.

The West Palisade

Excavations proceeded along the hedge parallel to Fort Hill Street. As seen in Figure 1 most of the units along the west palisade side were excavated by use of the backhoe.

The initial excavation, Unit 27, revealed a large, charred postmold at 1.0 feet below the surface. Protruding from it toward the south and northwest, was a feature resembling a narrow palisade ditch. Further trenching north of this unit did not produce any further feature evidence, except in Unit 29 which revealed a postmold in the south profile.

As excavations proceeded toward the north, south of the school sidewalk, Unit 31 at 1.0 feet below the surface revealed considerable amounts of brick and pieces of partially rotted wood. Plaster fragments were recovered from this unit with a whitewash finish indicating that the walls in this structure had been plastered and whitewashed. The feature encompassed the entire length of the trench.

North of the school sidewalk, Unit 32 was excavated beginning near the west hedge and continuing east with the soil profile consisting of subsoil beneath the topsoil and humus horizon. Approximately 30 feet from the schoolhouse, a large, heavily burned, round postmold was found at 1.4 feet from the surface.

From this location, units were excavated north and south with some units producing evidence of a palisade ditch. Sections of a palisade ditch were found in Units 32, 34, 34A, and 37.

Along this side the ditch was not as well defined as along the south and east sides, with no evidence of posts occurring within the ditch. All occurrences of the palisade ditch were at a depth of 1.0 feet or less with

the exception of Unit 37 where the ditch was found at a depth of 4.0 feet from the surface. At this depth it was not well defined, and the stratigraphy indicated considerable disturbance above. The palisade ditch seemed to occur sporadically along the west side. Its nearness to the surface may be the reason for it not occurring in all the units.

In Units 22 and 40 a ditch was located which was slightly wider than the palisade ditch in the other units. Also it appeared to be slightly offset to the west of the palisade ditch. This may represent the east wall of an exterior structure. This same ditch was found in Unit 42, a vertical cut in the bank south of Woolfolk Street. The soil profile revealed that the ditch extended in the direction of the street. The ditch was situated 1.40 feet from the surface and was 1.40 feet in height.

The artifacts recovered from the units along the west side constitute mainly ceramics such as were recovered along the south and east sides, including window and bottle glass fragments, iron nails, and bone. Since this area was excavated with a backhoe, no specific proveniences can be given the artifacts recovered except to assign them to their primary units.

INTERPRETATION OF ARCHEOLOGICAL DATA

The main result of the 1971 archeological investigation is that the east-west dimensions of Fort Hawkins are now known. It will no longer be necessary for persons involved in historical research to interpret the size of the structure merely by ambiguous data. It has been definitely ascertained that the size of Fort Hawkins is 290 feet from the east wall to the west wall. However, the question still remains as to whether the fort was actually square in plan or not. This information was impossible to retrieve since the northern wall of the palisade had been destroyed. Due to this it

is impossible to present the complete plan incorporating the actual dimensions of Fort Hawkins.

Destruction of archeological sites occurs constantly whether accidentally, maliciously or as a result of the normal progress of civilization. Therefore, it becomes necessary to derive as much information as possible from archeological investigations. This knowledge, together with historical documentation, can sometimes lead to a solution to a problem which might otherwise remain unsolved.

Through the combined use of archeology and historic documents it was possible, in this instance, to clearly identify some major dimensions of Fort Hawkins and, by inference, conjecture the other dimensions. We therefore have, with some assurance, the complete plan of the fort.

The distance between the east and west wall is 290 feet (Figure 1). The distance between the north wall of the southeast blockhouse and the center of the 22 foot gap is 148 feet. This figure when doubled results in a conjectured dimension of 296 feet for the east palisade. The fact that the assumed north-south dimension coincides closely with that of the known east-west dimension is evidence that the 22 foot gap represents one of the areas mentioned in the historic account:

There were four long houses, one in the centre of each stockade to the width of each house, about twenty feet (Butler 1879:60).

The west palisade was extended a distance of 296 feet north to correspond with the assumed length of the east palisade. The conjectured north wall was extended from the northeast corner west for 290 feet. The northwest corner was thus formed by the intersection of the west wall, and the conjectured north wall. A line was then extended diagonally in alignment with the northwest and southeast corners of the southeast blockhouse

toward the conjectured northwest fort corner. This line intersected the presumed northwest corner. A conjecture of the northwest blockhouse was possible by projecting equal measurements obtained from the center of the southeast blockhouse.

The data presented in the above discussion provides us with substantial evidence indicating that Fort Hawkins did comprise a square configuration.

Plans similar to that of Fort Hawkins were used in the construction of both military and civilian forts of the period and extending into later times. Some examples are Fort Okanogan, built in 1811, by the Pacific Fur Company in the state of Washington, utilizing a square palisade wall with two blockhouses at opposite corners (Grabert 1968); Fort Spokane, built in 1812, also operated by the Pacific Fur Company, using a similar plan (Combes 1964); and Fort William, predecessor to Fort Laramie in Wyoming, built in 1834 and constructed on a similar plan as the above forts (Heib 1954).

Information is scarce regarding military forts constructed approximately the same time as Fort Hawkins for the southeastern part of the United States.

An excavation is in progress at Fort Mitchell, Russell County, Alabama. Fort Mitchell was a military post contemporary with Fort Hawkins. Once this project is completed, it may be possible to determine its size and relationship to Fort Hawkins.

The East Palisade

Aside from the 22 foot gap along the east side, the ten foot gap is another feature which must be interpreted. Willey (1936 MS) concluded that the gap was a gate. The sketch drawn by E. D. Irvine (Figure 2) indicates a gate along a palisade to the right of a blockhouse. It cannot be ascertained which blockhouse is represented in the sketch, but if one can assume

that it is the southeast blockhouse, then a gate in this area would explain the gap along the east palisade. A further assumption can be made that even if this is not the southeast blockhouse represented in the sketch, a gate would have existed along two, and possibly all four palisade walls of the fort.

The palisade ditch was evident along the east side for a distance of 150 feet from the southeast blockhouse. Remains of posts are still in evidence, although not complete. The posts, and postmolds were square, lending support to the historic account which states that:

The stockade was built of posts of hewn timber fourteen feet long and fourteen inches thick (Butler 1879:60).

Although the posts were square, they were not fourteen inches thick. Measurements taken of the posts indicate that they varied between six and eight-tenths of a foot in width in most cases. Willey (1936 MS) states that the posts were eight inches wide. Figure 12 shows the palisade ditch and post outline observed in Unit 17. The ditch is 1.1 feet wide with posts encompassing an area of eight tenths feet and the remainder taken up by fill. The posts abutted against the west side of the ditch and the ditch was filled along the exterior side.

Samples of wood comprising the palisade were not taken. Willey (1936 MS) states that the wood used was pine. It seems reasonable that a coniferous species would have been used in making wooden posts 18 feet in length.

The palisade tends to angle slightly toward a westerly direction as can be seen in Figure 1. The south and west walls angle in comparable directions giving the fort a slight parallelogram shape. Willey (1936 MS) indicates that the east wall angled west at a rate of 23 inches (approx. 1.9 feet) every 40 feet.

The bricks found along the palisade ditch may comprise portions of structures which were destroyed. The palisade ditch along this side is a foot or less in depth. The 1936 excavation showed that posts and the palisade ditch along this side were located close to the surface, and seemed to rise as the ditch progressed northward.

The South Palisade

The 1936 excavation did not extend west very far from the blockhouse along this side, however, Willey (1936 MS) states that he found posts and a palisade ditch at two and one half feet (2.5 feet) below the surface. The present excavation revealed the palisade ditch in three units, 4, 14, and 25. In Unit 4 the ditch was located below two feet of fill, in Unit 14 over three and a half feet, and in Unit 25 the ditch was below four feet of fill.

During the 1936 excavation a brick foundation was found which Willey attributed to the post-Civil War period, based on the fact that brick was present. The brick structural remains found in the present excavations are presumed to be the same as, or related to, the structure found by Willey. Evidence gathered during the present excavation by elevation comparisons and ceramic analysis found in the context of the brick floor in Unit 13B, and Unit 6 (Feature 8) indicates that these structures were associated with the fort during its period of occupation by the military, and afterward. The structures may represent a kitchen or a mess area. No evidence of the palisade ditch was found in Units 6 and 13 presumably because the palisade walls were incorporated into the stockade. The southern edges of the foundation of both Feature 8 and 13B were not intact. Willey's map (Figure 10) shows that posts were located 57 to 67 feet from the blockhouse. This area



FIGURE 18

Brick floor in Unit 13B.



encompasses the location where the present Unit 6 was excavated. This may explain the disturbed brick floor and also the cartridge case.

The palisade ditch found in Unit 25 corresponds closely in elevation to the ones obtained in the preceding units. The ditch ends abruptly which suggests that a structure may have been associated with the wall at this location. The wall did not turn north to form a corner, and is approximately 15 feet east of where the southwest corner was conjectured to be located. A gate would not seem feasible situated so near to a corner, therefore, a structure such as a blockhouse may be conjectured for this corner until an accurate assessment can be made.

The West Palisade

The excavations along the west side of the palisade were mainly constructed with the use of a backhoe. Results of these excavations indicate that considerable disturbance has occurred in this area. The palisade ditch was located near the surface. In only one unit, 37, was the ditch found to be about four feet from the surface, and at this depth it was not easily recognizable.

In all of the locations where the ditch was found along this side, considerable burning had occurred.

The rubble-fill in Unit 31 located 70 feet west of the palisade ditch possibly represents a structure which was located outside the confines of the stockade. This was not an uncommon practice.

The wide ditch located near the north portion of the schoolyard, extending northward into Woolfolk Street, can be interpreted as a possible builders' trench dug after the fort ceased to function as a military complex. This interpretation is based on the nearness of the structural remains to the

west palisade. A structure located so close to the wall would have made musket or rifle fire ineffective for defending the west wall from the northwest blockhouse.

As has been stressed throughout the context of this report, the answers to the above questions raised by the limited exploratory archeology will only be determined by further archeology.

COMPARISONS BETWEEN THE EAST, SOUTH, AND WEST PALISADES

The ditch, comprising the east and west palisade remains, occurred near the surface, while the south palisade ditch was found beneath two and a half and four feet of fill (Figures 14 and 15). The reason for this is that disturbance, grading or otherwise, has occurred over the past 35 years, and earlier, in the schoolyard which is probably the reason that no evidence of the ditch was found near the north retaining wall. Also, along the west palisade side, considerable disturbance has occurred which may explain why the palisade ditch was not consistently located. The fill removed from the east and west palisade areas has been used to fill the area along the location of the south palisade.

Present elevations taken from the top of the palisade ditch along the east and south sides reveal that the south palisade was three feet lower. It is possible that in historic times the south palisade was lower than the east palisade due to differences in the topography. Defensively, this would not have caused any great concern since there are no topographic features near the south section of the hill upon which the fort was situated which are at a higher elevation.

The feature found along the west palisade side in Unit 31 comprising brick rubble and rotten wood may represent a structure associated with the

fort during 1806-1821. If this structure was present during the period of military occupation, it would tend to verify Irvine's sketch (Figure 2) which depicts a high three-story structure in the background. Furthermore, this would then also identify the blockhouse in the left forefront as the southeast blockhouse, and the gate would represent the ten foot gap located along the east palisade ditch.

ARTIFACT DISCUSSION

The artifacts recovered during the course of the excavation consisted mainly of ceramic fragments, although quantities of glass, both bottle and window were found, as well as iron nails and bone (Figure 20).

Of the above, ceramic sherds probably represent the most important items in helping to date an archeological site. Ceramics, as everything else, undergo typological and stylistic changes through time, brought about by social preferences, conditions, etc. Dating may be accomplished by utilizing historical records which may indicate that a certain potter or factory in England produced a certain type and style of pottery at a particular period of time. The above factors can be combined to arrive at dates which can be very close to the actual dates for the beginning and abandoning of a site. This can be extremely useful when dates are not known for a specific archeological site.

The dates for the military occupation of Fort Hawkins are documented as 1806-1821. Information is scarce relating to the post-1821 occupation, although historical accounts (Butler 1879:77-78) indicate that it was occupied and from this settlement the city of Macon was founded.

The ceramic dates for Fort Hawkins based on sherds found in controlled archeological contexts range between ca. 1779-ca. 1835 (Noel Hume 1970:126-32; and South, personal communication). The ceramic time span overlaps the

FIGURE 20

ARTIFACTS FROM GENERAL EXCAVATION

- a. Blue on white transfer printed earthenware ca.1820+
- b. White earthenware ca.1820+
- c. White ironstone ca.1813+
- d. Bottleneck ca.1800+.
- e. Wrought iron spike
- f. Horseshoe fragment
- g. Bottleneck with spout
- h. Porcelain doll
- i. Clay marble
- j. .65 musket ball

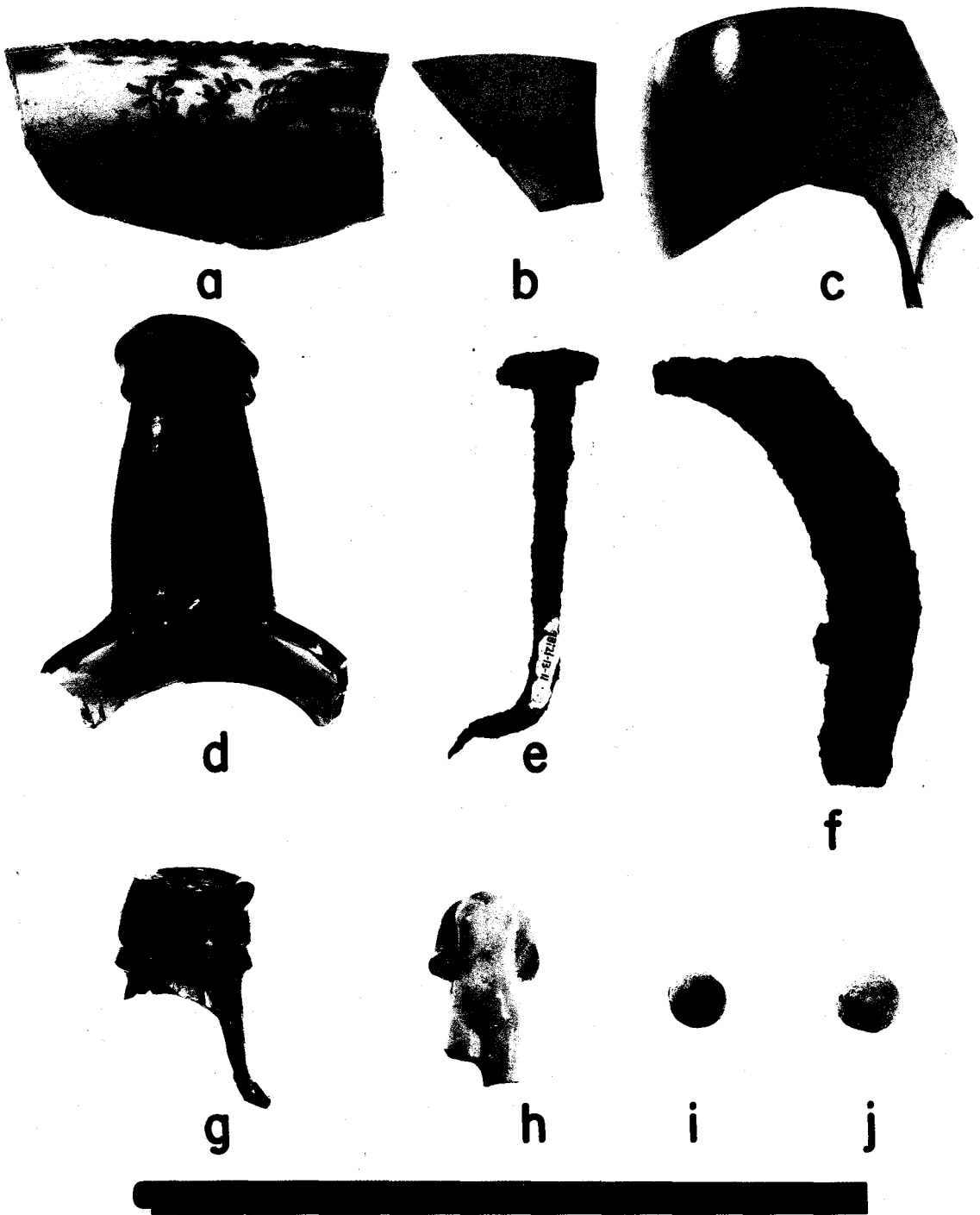


FIGURE 20

military occupation by several years in either direction, but certain factors must be considered. The date ca. 1779 represents the date when a specialized type or style of ceramic was initially manufactured, but may have an ending date of ca. 1810 which would correspond with the military occupation of Fort Hawkins. All of the ceramic types found at Fort Hawkins and taken from known associated architectural features, regardless of their initial manufacturing date, fall within the 1806 through 1821 range.

A ceramic analysis was conducted on ceramic types found in a context certain to be associated with Fort Hawkins during 1806-1821, using a method developed by Stanley South, Archeologist, Institute of Archeology and Anthropology, University of South Carolina (South MSb). The ceramics were typed, based on specific established criteria, and dated accordingly. Quantities were derived for each specific sherd type and a mean date was ascertained based on beginning and ending manufacture dates. With the use of mathematical calculations a mean date of 1808.12 was derived. This date may seem somewhat early, since theoretically the mean date should fall around 1815, however, South (1971 MSb) has indicated a plus or minus factor of three years for the dates derived using his formula. Thus a date of 1808.12 plus three years is quite close to the known historical median date for the site. If a major excavation is executed, a larger sample of ceramics will be derived which could possibly exact a median date closer to 1815. One important aspect which must not be overlooked, however, is that the mean date 1808.13 \pm three years was derived solely on dating the ceramic content and does fall within the 1806-1821 range.

The above discussion is just one example of the technical skills which are being developed by archeologists in the field of historical archeology

to serve as tools in a continuing effort to derive as much information as possible from the past by utilizing archeological material to its fullest extent.

SUMMARY

The exploratory archeological investigations conducted by use of slot trenching, located the length of the south wall and demonstrated it to be 290 feet in length. Portions of the palisade ditch were revealed by slots along the east and west walls. The east palisade was found to be 148 feet from the north wall of the southeast blockhouse to a presumed mid-point and was conjectured to extend to a length of 296 feet. The west palisade was conjectured to be a length of 296 feet based on the information derived from the east palisade. The north wall is clearly shown to be in Woolfolk Street but may be assumed to be as long as the south wall or 290 feet.

The above dimensions (Figure 1) clearly outline the fort, suggest blockhouse locations and indicate locations of other structures. The area which the fort encompasses is not 14 acres, or even four acres but appears instead to be approximately one and one-half acres.

RECOMMENDATIONS

Although the dimensions of the area encompassed by Fort Hawkins are now known, the research should not stop there. There are still several questions which must be answered. The purpose which this project has accomplished, has acted as a springboard from which further plans can now be formulated which will serve toward the final development of the site. If the final product is a reconstructed fort, then it can be said that this final product was a result of the use made of the tools of history and

archeology which helped bring to life an architectural complex capable of rivaling the original structure in its accuracy and splendor.

For the final product to be as architecturally correct as the original fort, further archeological research will have to be conducted to answer questions which were not answered in the limited two-week operation. Furthermore, additional questions were brought into the open as a result of the excavation. Such questions as:

- (1) What is the exact relationship of the brick floors along the south palisade to the fort?
- (2) What relationship does the exterior structure located on the west side share with the fort proper?
- (3) What are the dimensions of the interior structures?
- (4) Why does the palisade ditch along the east side disappear as it approaches the north retaining wall?
- (5) Was there a blockhouse located at the southwest corner?

The above are only a few of the important questions which should definitely be answered before further plans are formulated which can be used to properly interpret and develop the site. The information retrieved from a major archeological investigation would be of major importance since it would be the only source available, acting in place of the original plan, from which an historic architect could undertake to draw plans showing proper location of the palisade ditch and interior buildings, necessary for a proper interpretation.

Of course, there are many forms which historic site development can take, the most popular being Disneyland type tourist traps which are designed primarily to attract tourists and which possess little or no concern for historical accuracy and authenticity. There comes a truthful and difficult moment in the process of decision making when individuals are called upon to bring

forth their true belief in the heritage of the past, or whether this belief is allowed to be shunned in favor of profits in the future!

Why not make use of historical archeology to fulfill the means which it is meant to accomplish; that being the responsibility, together with history, of interpreting the heritage which has been handed down and which plays an important role in determining the future (South 1971:103-112).

Therefore, it is strongly urged that considerations be given for future archeological research which will enable Fort Hawkins to become a shrine of Macon, capable of reflecting the heritage of its people as it properly should, and not serve merely as a structure erected to act solely as another means of adding to the sources of city revenues, thus allowing an important aspect of the heritage upon whose foundations this country was built to be desecrated.

EXPLANATION OF PROPOSED ARCHEOLOGICAL BUDGET

The following proposed budget is based on a project allowing for three months of actual field work and nine months involved in cataloging, researching, and writing the final report.

The cost of the excavation could be reduced somewhat if the city of Macon and the Bibb County Commission were able to furnish heavy equipment and supplies as was done with the present excavation.

PROPOSED BUDGET FOR MAJOR ARCHEOLOGICAL INVESTIGATIONS
OF FORT HAWKINS

1. Salary, Archeologist, 52 weeks @ \$175.00 per week	\$9,100.00
2. Per diem, food and lodging, 90 days @ \$15.00 per day	1,260.00
3. Salary, Assistant Archeologist, 12 weeks @ \$125.00 per week	1,500.00
4. Per diem, food and lodging, 90 days @ \$15.00 per day	1,260.00
5. Labor, ten men for 12 weeks @ \$2.00 per hour average	9,600.00
6. Lab Assistants, two men for 40 weeks (half-time) @ \$1.75 per hour	2,800.00
7. Supplies, photographic, mapping and drafting, and miscellaneous for field	1,000.00
8. Vehicle operating costs for 12 weeks	300.00
9. Heavy equipment for stripping, minor excavation, and backfilling, 12 days @ \$100.00 per day	1,200.00
10. Report preparation, typing, Xeroxing, darkroom work, etc.	500.00
11. Contingencies or unforeseen emergency costs	400.00
TOTAL	<u>\$31,720.00</u>

LIST OF EQUIPMENT

1. Vehicle, station wagon, carryall, or pickup
2. Surveying transit and tripod
3. Stadia rod
4. Steel tapes, 100 foot (2)
5. Camera, 4 x 5 Graphic or equivalent (for B & W film)
6. Camera, 35 mm., Cannon or equivalent (for color film)
7. Shovels, L.H.R.P. (12)
8. Shovels, straight edge (12)
9. Trowels, small, masons (12)
10. Wheelbarrows, large, rubber tire (5)
11. Heavy equipment for minor excavation, stripping, and backfilling

BIBLIOGRAPHY

- Bryan, Benjamin L.
 MS Fort Hawkins -- Its History and Partial Reconstruction. On file at the Southeast Archeological Research Center, Macon, 1939.
- Butler, John C.
 1879 Historical Record of Macon and Central Georgia. Middle Georgia Historical Society, Inc., Macon, 1969.
- Combes, John D.
 1964 Excavations at Spokane House - Fort Spokane Historic Site 1962-1963. Washington State University, Pullman.
- Dollar, Clyde D.
 MS The First Fort Smith Report. On file at the Southeast Archeological Research Center, Macon, 1966.
- Grabert, G. F.
 1968 The Astor Fort Okanogan, A Final Report on Salvage Archaeology in the Wells Reservoir - Part II. University of Washington, Seattle.
- Hieb, David L.
 1954 Fort Laramie. National Park Service Historical Handbook Series No. 20, Washington.
- Noel Hume, Ivor
 1970 A Guide to Artifacts of Colonial America. Alfred A. Knopf, New York.
- Ramsey, L. L. G.
 1961 Antique English Pottery, Porcelain and Glass. E. P. Dutton and Company, Inc., New York.
- South, Stanley
 1971 The Log Cabin Syndrome. In: The Conference on Historic Site Archaeology Papers, Volume 5, Part 1, Columbia.
- MSa An Examination of the Site of Fort Hawkins in Macon, Bibb County, Georgia, with an Evaluation of the Potential for Historical Archeology, with a View Toward Historic Site Development. On file at the Institute of Archeology and Anthropology, University of South Carolina, Columbia, 1970.
- MSb Evolution and Horizon as Revealed in Ceramic Analysis in Historical Archeology. On file at the Institute of Archeology and Anthropology, University of South Carolina, Columbia, 1971.
- Willey, Gordon R.
 MS Report on Fort Hawkins Excavations. On file at the Southeast Archeological Research Center, Macon, 1936.