Ronald B. Clary
General Manager
New Nuclear Deployment

SCE&G®
A SCANA COMPANY

May 18, 2009
NND-09-0136

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

ATTN: Document Control Desk

Subject: V. C. Summer Nuclear Station Units 2 and 3
Docket Numbers 52-027 and 52-028
Combined License Application – Environmental Report Audit
Information Needs: CR-5 and CR-9

Reference:
1. Letter from S.A. Byrne to Document Control Desk, Submittal of a Combined License Application for V. C. Summer Nuclear Station Units 2 and 3, dated March 27, 2008.
2. Letter from Ronald B. Clary to Document Control Desk, Submittal of Revision 1 to Part 3 (Environmental Report) of the Combined License Application for the V. C. Summer Nuclear Station Units 2 and 3, dated February 13, 2009.

By letter dated March 27, 2008, South Carolina Electric & Gas Company (SCE&G) submitted a combined license application (COLA) for two Westinghouse AP1000 units, designated V.C. Summer Nuclear Station (VCSNS) Units 2 and 3, to be located at the existing VCSNS site in Fairfield County, South Carolina. Subsequently the Environmental Report (ER), Part 3 of the application, was revised and submitted to the NRC (reference 2).

During the week of March 9, 2009, the NRC conducted an Environmental Audit to gather information to assist in the review of the ER. The purpose of this letter is to submit a portion of the ER Information Needs identified by the NRC as CR-5 and CR-9. CR-5 and CR-9 provide site archaeological reports and related ER references requested by NRC reviewers.

The enclosed response lists the specific documents provided and whether their disclosure status is Public or Confidential based on their sensitive nature (i.e. where disclosure may risk harm to a historic resource as described in The National Historic Preservation Act, Section 304 (16 USC 470w-3(a)). Accordingly, SCE&G requests that those documents identified as Confidential be withheld from public disclosure in accordance with 10 CFR 2.390. Because the enclosed response is being submitted under penalty of perjury, SCE&G also

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NRO

requests a waiver in accordance with 10 CFR 2.390(b)(1)(ii) of the requirement for a separate affidavit to accompany the request for withholding.

Please address any questions to Mr. Alfred M. Paglia, Manager, Nuclear Licensing, New Nuclear Deployment, P. O. Box 88, Jenkinsville, S.C. 29065; by telephone at 803-345-4191; or by email at apaglia@scana.com.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 18th day of May 2009

Ronald B. Clary
General Manager
New Nuclear Deployment

ARR/RBC/ar

Enclosures

c (with Enclosures):
Patricia Vokoun
Carl Berkowitz
FileNet

c (without Enclosures):
Luis A. Reyes
Chandu Patel
Jennifer Davis
John Zeiler
Stephen A. Byrne
Ronald B. Clary
Bill McCall
Kenneth J. Browne
Randolph R. Mahan
Kathryn M. Sutton
Rich Louie
April Rice
John J. DeBlasio

VCSNS UNITS 2 and 3

Response to NRC Information Needs Item

Information Item Number: CR-5/CR-9 **Revision:** 0

Statement of the Information Item:

Information Item CR-5/CR-9:

CR-5: Provide references for the descriptions of cultural resources located within the project area (#104, 106, 52, 53, 54, 55, and 135).

Provide references for the descriptions of cultural resources located within the project area (Martin, Nichols 2002, McCutchen James, NSA 2006a, 2006b, 2007a, 2007b, 2008). NSA are the five archaeology reports. Will get the 4. The 2008 report will come later when it is finalized with SHPO. Need Revels 2002 and 2003, Santee Cooper 2008, SCE&G 2008, Teague 1979, Trinkley 1994, Webb 2006) [authors & dates added by SME to avoid confusion between Rev 0, Rev 1].

CR-9: Provide an expert to explain the methodology, results of the cultural resources surveys conducted, recommendations of determination of eligibilities, and status of official NRHP evaluations for the cultural resources studies conducted for the COLA (and SHPO input on these).

SCE&G Follow Up Action:

CR-5: Provide clean, color hard copies of requested archaeological reports (list provided at left). Phase 2 archaeological report will be forwarded after Chuck Cantley (SC SHPO) concurs.

CR-9: Provide remaining SHPO correspondence and Phase 2 Report. Provide any correspondence regarding 2008 addendum.

Response: The requested reports and correspondence are provided in the enclosures. Certain documents (i.e. the current site archaeological studies) were considered confidential by the NRC and SHPO reviewers due to their sensitive nature. Sensitive documents have been stamped on the cover page only as specified by NRC staff. A list of documents identified as Public or Confidential status and the ER Revision 1 reference number is provided below.

Martin, Nichols 2002 (ER R1 ref. 40) - Public

McCutchen James (ER R1 ref. 42) - Public

NSA 2006a, 2006b (ER R1 ref. 52, 53) - Confidential

NSA 2007a (ER R1 ref. 54) – Confidential

NSA 2007b (ER R1 ref. 55) – Confidential

NSA 2008 (ER R1 ref. 56) – Confidential

Response to NRC Information Needs Item

Revels 2002 and 2003 (ER R1 ref. 58, 59) - Public

Santee Cooper 2008 – Not Provided – Transmission Studies previously submitted to NRC on September 4, 2008, NND-08-0026

SCE&G 2008 – Not Provided – Transmission Studies previously submitted to NRC on September 4, 2008, NND-08-0026

Teague 1979 (ER R1 ref. 107) - Public

Trinkley 1994 (ER R1 ref. 109) - Public

Webb 2006 (ER R1 ref. 138) - Confidential

Correspondence from SCE&G/Contractors to SHPO (all Public) dated 4/9/07, 12/18/08, 7/9/07, and 3/17/09.

Correspondence from SHPO to SCE&G/Contractors (all Public) dated 8/16/06, 9/14/06, 4/27/07, 8/16/07, 1/28/09, and 4/17/09.

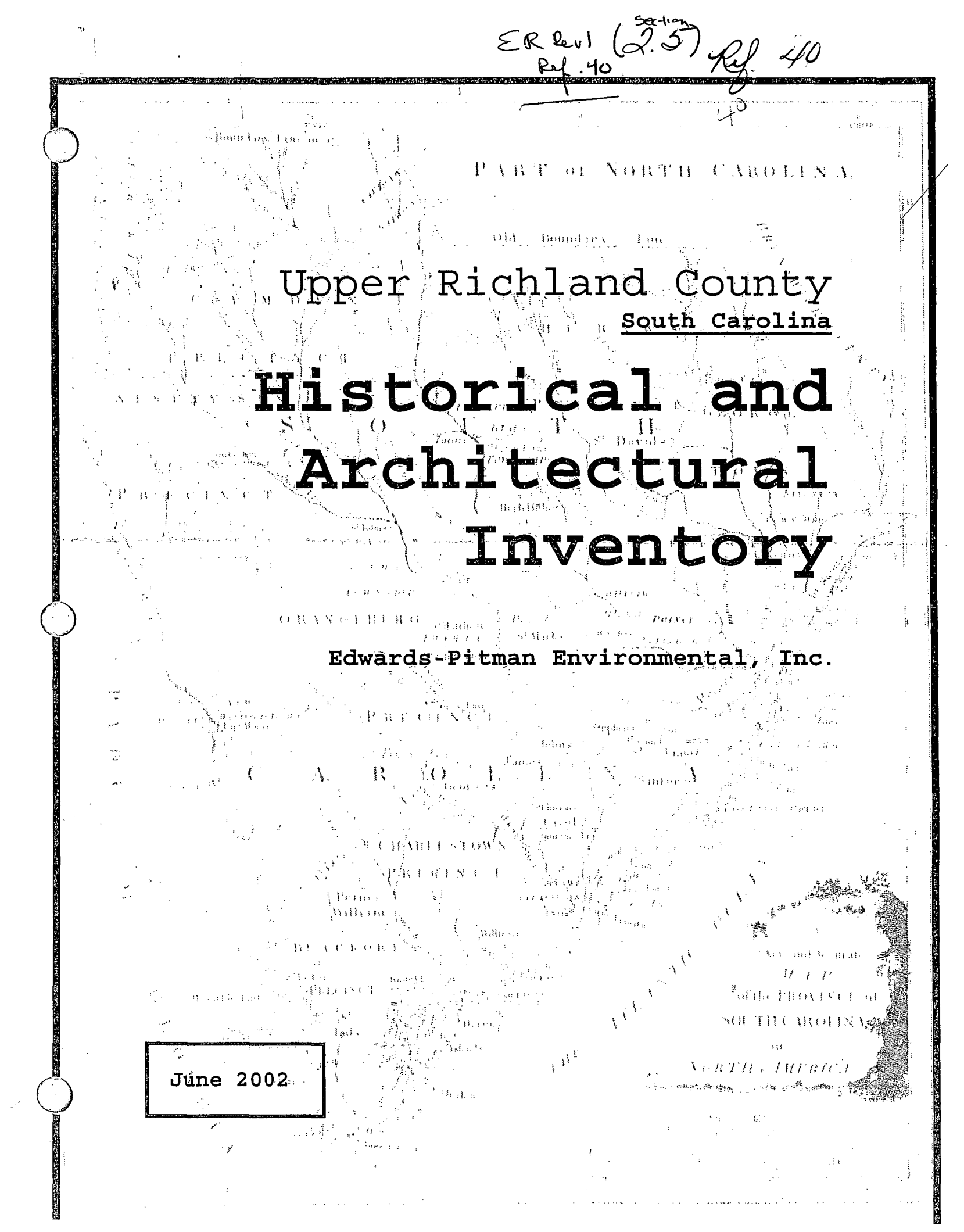
COLA Revisions:

No COLA revision is required as a result of the response to this Information Needs item.

Public

Documents

ER Rev1 (2.5) Ref. 40
Section
Ref. 40



Upper Richland County
South Carolina

Historical and Architectural Inventory

Edwards-Pitman Environmental, Inc.

June 2002

Potentially Eligible Resources: Pre-1800 and Pre-Civil War

Name and Site Number	Location	Comments
Pet Sites House (4979.00)	1311 Pet Sites Road	
Abney House (4856.00)	1428 Blythewood Rd.	later additions to house
DuBard House (4893.00)	2101 Cedar Creek Rd.	good complex
James Sands House (4794)	244 Ida Lane	
Stephen Smith, Jr. House (4896)	Cedar Creek	

III. Architecture from the Civil War to the end of the Nineteenth Century

With the prosperity and growth the railroad brought to some parts of upper Richland County after the Civil War, architecture became more influenced by national trends. Queen Anne-style influences were evident in millwork on dwellings and the irregular massing of houses built after the war. More vernacular expressions endured for dwellings located away from the rail corridors. Simple frame houses with little decor remained ubiquitous on small farms and homesteads spread across the northern part of the county.

Potentially Eligible Resources: From the Civil War to 1900

Name and Site Number	Location	Comments
Ballentine House (4879.00)	2713 Wildflower Rd.	

IV. Twentieth Century Architecture

Houses built in the first half of the twentieth century took on many expressions. Bungalows were a popular style, with the more elaborate examples occurring closer to towns. In rural areas, the influence of the bungalow style appeared in the design of porches and in the presence of decorative knee braces along roof eaves. Institutional buildings were overwhelmingly simple—churches and schools were built with a front-gable orientation and generally lacked much ornament. The saddle-notched log house which proved popular throughout the southeast in the 1920s and 1930s was rarely built in the upper part of the county.

Ref. 2.5 42

ER Rev 1 Ref 42

History of Company 441

S. C. P-66

PARR, SOUTH CAROLINA

By James McCutchen.

THE men who made up this company came from a large group of men which arrived in Spartanburg very early on the morning of May 20, 1933, and came from all parts of South Carolina. These men stood their first physical examination in Spartanburg and after staying there all day the train was boarded and headed for Fort Moultrie. We got into Fort Moultrie about 6:00 a. m. on the morning of the 21st, and was it a hot day! Here we stood the final examination to see if we would be able to take what was coming.

The men who made up the company came mostly from the counties of Spartanburg, Anderson, Cherokee, Union, Pickens and Oconee.

It was here that the meaning of the term "policing up" was learned. Most of the work done here was in the nature of cleaning and beautifying the post to the great delight of the regulars on the post. It was here also that the men learned the rudiments of the art of drilling. The rest of the time was spent on the beach and in learning all about that thing called "gold bricking" (you know, working yourself to death trying to get out of work).

After a couple of weeks there were rumors to the effect that we were to move in a very short time. To listen to the various tales one would think that there was a very good chance of our moving anywhere between the Rio Grande and the Gulf of Mexico on the South to Canada on the North.

And so we moved to Parr, S. C., getting here about 4:00 a. m. on the morning of June 13. We were then under the able command of Capt. W. L. Blanton who had under him 2nd Lt. T. B. Spratt, 1st Lt. J. E. McManaway. Under the direction of Mr. J. T. McAlister, superintendent of the forestry work, we began on the work projects before the camp had been completely built. During the ensuing months there was a marked improvement both in the quality and quantity of work done by the men. This was due partly to the addition of more and better tools and trucks. But it was also due to the fact that the group of men who came to Parr became more and more an organized group of men whose name began with efficiency and ended with "We can take it."

Capt. Blanton left to engage in R. O. T. C. work at P. C. College. He was relieved by J. E. McManaway, 1st Lt. Inf.-Res. The work of beautifying the camp site now began in earnest. Long hours of overtime work, work that was done after the required eight hours had been accomplished, was a daily occurrence. This overtime work consisted mostly of hauling crushed rock over a distance of eighteen miles. This rock was used to spread over the camp area and the road to the camp. If it had not been for this rock the whole company would have had to live in red sticky mud and clay during the past winter. Had it not been for all this work it would have been impossible for a motor propelled vehicle of any kind to go to and from camp.

There were a number of changes in the officers connected with this company: Lt. D. H. Armstrong was with the company for a short time. He was in turn relieved by Lt. W. N. Henderson who was in turn relieved by Lt. J. T. Ellis. Lt. Spratt was relieved after being with the company for about two months. The company is now commanded by Lt. L. E. Marshall, who relieved Lt. McManaway on May 5th.

This camp is primarily a soil erosion camp, but it has, like the majority of camps, had the problem of building fire lanes, truck trails and fighting forest fires. This company has existed now over a year and the majority of boys still consist of the original company that left Fort Moultrie.

We may not be the best camp but just stating facts and not boasting, let all the CCC companies line up and parade by and we will bow to none.

And in ending it would be appropriate to say even as Paul did in his Epistle to the Romans: "We have run a good race: We have finished our course."

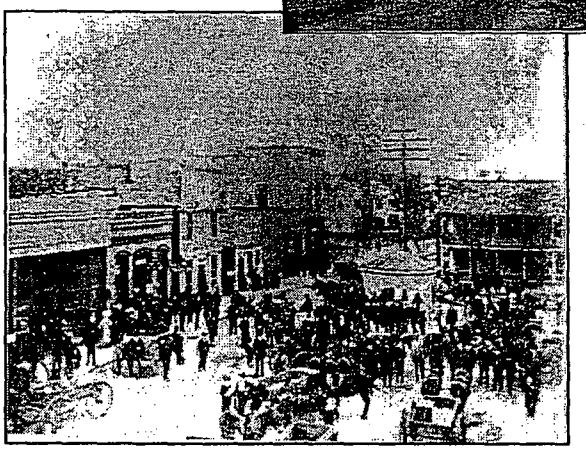
It is up to the new men in this camp and all the other camps in the U. S. to carry on.

V2.5-19

2.5-57

ER 81 Ref Ref 58

HISTORICAL AND ARCHITECTURAL SURVEY OF THE TOWNS OF LITTLE MOUNTAIN, POMARIA, AND PROSPERITY, NEWBERRY COUNTY, SOUTH CAROLINA



TRC GARROW ASSOCIATES, INC.
COLUMBIA, SOUTH CAROLINA

VIII. COMPILED PROPERTY INVENTORY

LITTLE MOUNTAIN

Site Number	Address	Historic Name	Historic Use	Date	National Register Eligibility
304-0075	532 Pomaria St.	Counts House	single dwelling	1930 c.	Not Eligible
304-0076	428 Pomaria St.	Kempston House	single dwelling	1900 c.	Not Eligible
304-0077	435 Pomaria St.		single dwelling	1915 c.	Not Eligible
304-0078	380 Pomaria St.		single dwelling	1939 c.	Not Eligible
304-0079	308 Pomaria St.	Counts-Feagle House	single dwelling	1907	Contributes to Eligible District
304-0080	317 Pomaria St.	W.B. Shealy House	single dwelling	1905 c.	Contributes to Eligible District
304-0081	274 Pomaria St.	Col. E.J. Locke House	single dwelling	1949	Contributes to Eligible District
304-0082	263 Pomaria St.	J.M. Sease, MD House	single dwelling	1890 c.	Contributes to Eligible District
304-0083	229 Pomaria St.	J.B. Lathan House	single dwelling	1905 c.	Contributes to Eligible District
304-0084	175 Pomaria St.	Preacher Wessinger House	single dwelling	1890 c.	Contributes to Eligible District
304-0085	116 Pomaria St.	G.R. Shealy House	single dwelling	1940 c.	Contributes to Eligible District
304-0086	89 Pomaria St.	G.M. Shealy House	single dwelling	1914 c.	Contributes to Eligible District
304-0087	69 Pomaria St.	Frick House	single dwelling	1915 c.	Contributes to Eligible District
304-0088	NW corner at int. of Church and Pomaria Sts.	CN&L Railroad Section Master's House	single dwelling	1890	Individually Eligible/Contributes to Eligible District

304-0089	585 Church St.	Brady House	single dwelling	1890 c.	Contributes to Eligible District
304-0090	810 Main St.	James H. Wise Store	commercial	1900 c.	Contributes to Eligible District
304-0091	Main St.	Farmers & Merchants Bank	commercial	1910	Not Eligible
304-0092	824 Main St.	J.M. and J.C. Sease, MD	commercial	1917 c.	Contributes to Eligible District
304-0093	834 Main St.	Post Office	commercial	1960	Not Eligible
304-0094	Main St.	Counts & Shealy General Merchandise	commercial	1910 c.	Contributes to Eligible District
304-0095	Main St.	Drug Store	commercial	1920 c.	Not Eligible
304-0096	S of Main St. in alley behind Masonic Hall	Andrew Miller's Store	commercial	1900 c.	Contributes to Eligible District
304-0097	218 Depot St.	Derrick Lumber Yard	commercial	1915 c.	Contributes to Eligible District
304-0098	97 W. Church St.	Wise House	commercial	1890 c.	Contributes to Eligible District
304-0099	199 W. Church St.	Little Mtn. Oil Mill	industrial	1904	Contributes to Eligible District
304-0100	1437 Longtrail Pl.		single dwelling	1925 c.	Not Eligible
304-0101	26 Dogwood Rd.		single dwelling	1925 c.	Not Eligible
304-0102	1586 Main St.	J. Effice Metts House	single dwelling	1949 c.	Not Eligible
304-0103	1228 Main St.	Ed Locke House	single dwelling	1960 c.	Not Eligible
304-0104	1172 Main St.	David Farr House	single dwelling	1927 c.	Contributes to Eligible District
304-0105	1098 Main St.	Dominick-Boland House	single dwelling	1860	Individually Eligible/Contributes to Eligible District
304-0106	1036 Main St.		single dwelling	1890 c.	Contributes to Eligible District

304-0107	1010 Main St.		single dwelling	1925 c.	Contributes to Eligible District
304-0108	984 Main St.	Matthews House	single dwelling	1910 c.	Contributes to Eligible District
304-0109	692 Mill St.	Little Mountain School	education	1909 c.	Individually Eligible
304-0110	127 Mill St.		single dwelling	1925 c.	Not Eligible
304-0111	858 Mountain St.	Manse	single dwelling	1895 c.	Not Eligible
304-0112	832 Mountain St.	Miller House	single dwelling	1910 c.	Contributes to Eligible District
304-0113	Mountain St.	Bennett Miller House	single dwelling	1910 c.	Contributes to Eligible District
304-0114	724 Mountain St.	Malcom Sloan House	single dwelling	1910 c.	Contributes to Eligible District
304-0115	Mountain St.	Ernest Boland House	single dwelling	1905 c.	Not Eligible
304-0116	Mt. Zion Cir.	Mt. Zion AME School	education	1915 c.	Individually Eligible
304-0117	357 Church St.	Olie Stoudemire House	single dwelling	1915 c.	Contributes to Eligible District
304-0118	329 Church St.		single dwelling	1900 c.	Contributes to Eligible District
304-0119	289 Church St.		single dwelling	1925 c.	Contributes to Eligible District
304-0120	177 Church St.		single dwelling	1925 c.	Not Eligible
304-0121	314 Main St.	Stoudemire House	single dwelling	1926	Not Eligible
304-0122	Church St.	David Shealy House	single dwelling	1810	Not Eligible
304-0123	508 Mountain St.		single dwelling	1940	Not Eligible
304-0124	549 Mountain Ave.		single dwelling	1950 c.	Not Eligible
304-0125	Main St.	G. Russell Shealy Service Station	commercial	1935	Not Eligible

304-0126	531 Church St.	Holy Trinity Lutheran Church	religious	1891 c.	Contributes to Eligible District

POMARIA

Site Number	Address	Historic Name	Historic Use	Date	National Register Eligibility
407-0127	Hwy 176		single dwelling	1900 c.	Not Eligible
407-0128	110 Angella St.		commercial	1920 c.	Not Eligible
407-0129	120 Angella St.		commercial	1920 c.	Contributes to Eligible District
407-0130	N corner of int. Main, Holloway & Angella Sts.		commercial	1900 c.	Contributes to Eligible District
407-0131	N side of Angella St. approx. 120 ft. E of int. w/ Holloway St.	Pomaria Post Office	commercial	1949 c.	Contributes to Eligible District
407-0132	152 Main St.		commercial	1900 c.	Contributes to Eligible District
407-0133	162 Main St.	Kinard Bros. General Store	commercial	1900 c.	Contributes to Eligible District
407-0134	172 Main St.		commercial	1900 c.	Contributes to Eligible District
407-0135	Main St.		commercial	1900 c.	Contributes to Eligible District
407-0136	Main St.	Pinner's Pharmacy	commercial	1900 c.	Contributes to Eligible District
407-0137	Main St.	Bank of Pomaria	commercial	1900 c.	Contributes to Eligible District
407-0138	109 Rest St.		single dwelling	1890 c.	Not Eligible
407-0139	140 Victoria St.	Girl Scout Hut	commercial	1925 c.	Contributes to Eligible District
407-0140	Victoria St.	Wilson's Laundrymat	commercial	1920 c.	Contributes to Eligible District

407-0141	120 Victoria St.		single dwelling	1900 c.	Not Eligible
407-0142	108 Rest St.	Pomaria Cotton Gin and Oil Mill	single dwelling	1890 c.	Contributes to Eligible District
407-0143	241 Rest St.	L.H. Boland House	single dwelling	1925 c.	Not Eligible
407-0144	261 Rest St.	Hentz House	single dwelling	1890 c.	Not Eligible
407-0145	246 Rest St.		single dwelling	1920 c.	Not Eligible
407-0146	274 Rest St.		single dwelling	1880 c.	Not Eligible
407-0147	Rest St.		single dwelling	1914 c.	Not Eligible
407-0148	Rest St.		single dwelling	1900 c.	Not Eligible
407-0149	332 Rest St.	Counts House	single dwelling	1890 c.	Not Eligible
407-0150	Hentz St., S side, approx. 100 yds. E of int. w/ Holloway St.	Old Methodist Church	religious	1890 c.	Individually Eligible
407-0151	431 Rest St.	Old Methodist Parsonage	single dwelling	1915 c.	Not Eligible
407-0152	450 Rest St.		single dwelling	1910 c.	Not Eligible
407-0153	221 Folk St.		single dwelling	1930 c.	Not Eligible
407-0154	211 Folk St.		single dwelling	1920 c.	Not Eligible
407-0155	165 Folk St.		single dwelling	1945 c.	Not Eligible
407-0156	138 Folk St.	Pomaria Elementary School	education	1913	Not Eligible
407-0157	115 Folk St.		single dwelling	1945 c.	Not Eligible
407-0158	578 Holloway St.		single dwelling	1920 c.	Not Eligible

407-0159	602 Holloway St.		single dwelling	1945 c.	Not Eligible
407-0160	662 Holloway St.	1892 House	single dwelling	1892	Listed
407-0161	155 Kinard St.	Tenant house	single dwelling	1930 c.	Not Eligible
407-0162	162 Kinard St.	Tenant house	single dwelling	1930 c.	Not Eligible
407-0163	159 Kinard St.	Tenant house	single dwelling	1930 c.	Not Eligible
407-0164	6864 Hwy. 176	Tenant house	single dwelling	1930 c.	Not Eligible
407-0165	112 St. Paul Rd.		single dwelling	1925 c.	Not Eligible
407-0166	111 St. Paul Rd.	William Hatton House	single dwelling	1890 c.	Not Eligible
407-0167	Hwy 176, E side, approx. 100 ft. S of int. w/ St. Paul Rd.	Hatton's Store	commercial	1945 c.	Not Eligible
407-0168	6686 Hwy 176	J.C. Aull House	single dwelling	1850 c.	Not Eligible
407-0169	671 Holloway St.		single dwelling	1915 c.	Individually Eligible
407-0170	661 Holloway St.		single dwelling	1920 c.	Not Eligible
407-0171	561 Holloway St.	Holloway House	single dwelling	1835 c.	Listed
407-0172	411 Holloway St.	Oakland House	single dwelling	1821	Not Eligible
407-0173	352 Holloway St.	Old Setzler Hotel	commercial/single dwelling	1900 c.	Not Eligible
407-0174	Holloway St.	John Hentz House	single dwelling	1902	Not Eligible
407-0175	242 Holloway St.	H.W. Hipp House	single dwelling	1900 c.	Not Eligible
407-0176	N side of int. of Hwy 176 & Holloway St.		single dwelling	1930 c.	Contributes to Eligible District

HISTORICAL AND ARCHITECTURAL SURVEY OF NEWBERRY COUNTY

NATIONAL REGISTER EVALUATIONS

The following determinations are based on evaluations of the Newberry County Survey by the State Historic Preservation Office (SHPO) of the S.C. Department of Archives and History. It is the opinion of the SHPO that the properties meet the eligibility criteria for inclusion in the National Register of Historic Places. These determinations are based on the present architectural integrity and available historical information for the properties included in the survey area. Properties may be removed from or added to this list if changes are made that affect a property's physical integrity. Historical information that is brought to the attention of the National Register Coordinator/Architectural Historian confirming or denying a property's historic significance may also affect a property's eligibility status. The process of identifying and evaluating historic properties is never complete; therefore, the SHPO encourages readers of this report to alert the National Register Coordinator to properties that may have been overlooked during this evaluation.

National Register determinations of eligibility were made during and following a site visit to Newberry County on November 13, 2003, by SHPO staff Andrew W. Chandler and Bradley S. Sauls, and in consultation with Jennifer Revels of Palmetto Conservation Foundation.

INDIVIDIUAL PROPERTIES DETERMINED ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES

Site No.	Property Name or Address	National Register Criteria
Blair Quad		
1314	Hardy Plantation (Ballylee)	C: Architecture
1431	Suber-Dickert House (10488 Broad River Road, Glymphville vicinity)	C: Architecture

Little Mountain Quad

1112	Fike-Sease-Fulmer House (2601 Wheeland Rd., Little Mountain vicinity)	C: Architecture
1139	St. Paul's Lutheran Church (Pomaria vicinity)	C: Architecture

Newberry East Quad

1546	Gist House (337 Rutherford Rd.)	C: Architecture
1548	Thomas Wilson Caldwell House (15968 US Hwy 176)	C: Architecture

Pomaria Quad

1293	7443 Broad River Rd.	C: Architecture

Prosperity Quad

1326	1339 Clara Brown Rd. (Prosperity vicinity)	C: Architecture
1328	Serendipity (Schumpert House 600 Schumpert Mill Rd., Prosperity vicinity)	C: Architecture
1389	Bedenbaugh House (214 Ira Kinard Rd., Prosperity vicinity)	C: Architecture

Whitmire Quad

1566	Jasper Hall (125 Colonial Drive, Whitmire vicinity)	C: Architecture

HISTORIC DISTRICTS DETERMINED ELIGIBLE FOR THE NATIONAL REGISTER OF HISTORIC PLACES

West Boundary Street Historic District, Boundary Increase (City of Newberry)

National Register Criterion C: Architecture

Site No.	Address
0933	713 Boundary St.
0934	709 Boundary St.
0935	708 Boundary St.
0936	706 Boundary St.
0937	603 Boundary St.
0938	540 Boundary St.
0939	533 Boundary St.
0940	532 Boundary St.

Main Street-Harper Street Historic District, Boundary Increase (City of Newberry)

National Register Criterion C: Architecture

Site No.	Address
0353	1511 Main St.
0354	1507 Main St.
0355	1505 Main St.
0356	1501 Main St.
0357	1413 Main St.
0358	1411 Main St.
0359	1409 Main Center
0360	1407 Main St.
0361	1405 Main St.
0362	1403 Main St.
0363	1401 Main St.
0399	1312 Main St.
0400	1310 Main St.
0402	1304 Main St.
0404	1400 Main St.
0405	1402 Main Street
0406	1406-1410 Main St.
0408	1412 Main St.
0409	1414 Main St.
0410	1418 Main St.
0411	1109 Wilson St.
0412	1500 Main St.
0413	1504 Main St.
0414	1506 Main St.
0415	1512 Main St.
0416	1530 Main St.
0645	1809 Harper St.
0646	1807 Harper St.
0647	1803 Harper St.
0648	1801 Harper St
0649	1725 Harper St.
0650	1721 Harper St.
0651	1715-1717 Harper St.
0652	1711 Harper St. (1300 Calhoun St.)
0663	1315 Glenn St.
0664	1307 Glenn St.
0665	1921 Harper St.

Main Street-Harper Street Boundary Increase (continued)

Site No.	Address
0666	1917 Harper St.
0667	1915 Harper St.
0668	1911 Harper St.
0669	1907 Harper St.
0670	1901 Harper St.
0673	1311 Glenn St.
0674	2003 Harper St.
0675	1312 Glenn St.
0676	1314 Glenn St.
0677	1322 Glenn St.
0678	1324 Glenn St.
0679	1328 Glenn St.
0684	2017 Harper St.
0685	2015 Harper St.
0686	2009 Harper St.
0687	2101 Harper St.
0688	2107 Harper St.
0689	2121 Harper St.
0690	2123 Harper St.
0691	2125 Harper St.
0692	2201-2203 Harper St.
0693	2221 Harper St.
0702	1310 Summer St.
0703	2006 Harper St.
0704	2010 Harper St.
0705	2012 Harper St.
0706	2014 Harper St.
0713	1218 Glenn St.
0714	1221 Glenn St.
0715	1222 Glenn St.
0716	1224 Glenn St.
0717	1226 Glenn St.
0718	2122 Harper St.
0719	2126 Harper St.
0720	2128 Harper St.
0721	1229 Jones St.
0722	1225 Jones St.
0723	1223 Jones St.
0724	2115 Main St
0725	2107 Main St.
0726	2103 Main St.

Main Street-Harper Street Boundary Increase (continued)

Site No.	Address
0727	1218 Summer St.
0728	1220 Summer St.
0729	1226 Summer St.
0730	1228 Summer St.
0731	1230 Summer St.
0732	1236 Summer St.
0733	1253 Hunt St.
0734	2218 Harper St.
0735	2212 Harper St.
0736	1250 Jones St.
0737	1224 Jones St.
0738	1222 Jones St.
0739	1218 Jones St.
0743	1247 Hunt St.
0755	1248 Hunt St.
0756	1254 Hunt St.
0762	1241 Crenshaw St.
0763	1236 Crenshaw St.
0764	1230 Crenshaw St.
0765	1227 Crenshaw St.
0766	1228 Crenshaw St.
0768	1219 Crenshaw St.
0770	1806 Harper St.
0771	1808 Harper St.
0772	1810 Harper St.
0780	1934 Harper St.
0781	1922 Harper St.
0782	1906 Harper St.
0783	1912 Harper St.
0784	1920 Harper St.
0795	1720 Harper St.
0796	1724 Harper St.
0797	1231 Walnut St.
0799	1214 Walnut St.
0800	1218 Walnut St.
0801	1224 Walnut St.
0802	1228 Walnut St.
0803	1234 Walnut St.
0828	2200 Main St.
0829	2206 Main St.
0830	2214 Main St.

Main Street-Harper Street Boundary Increase (continued)

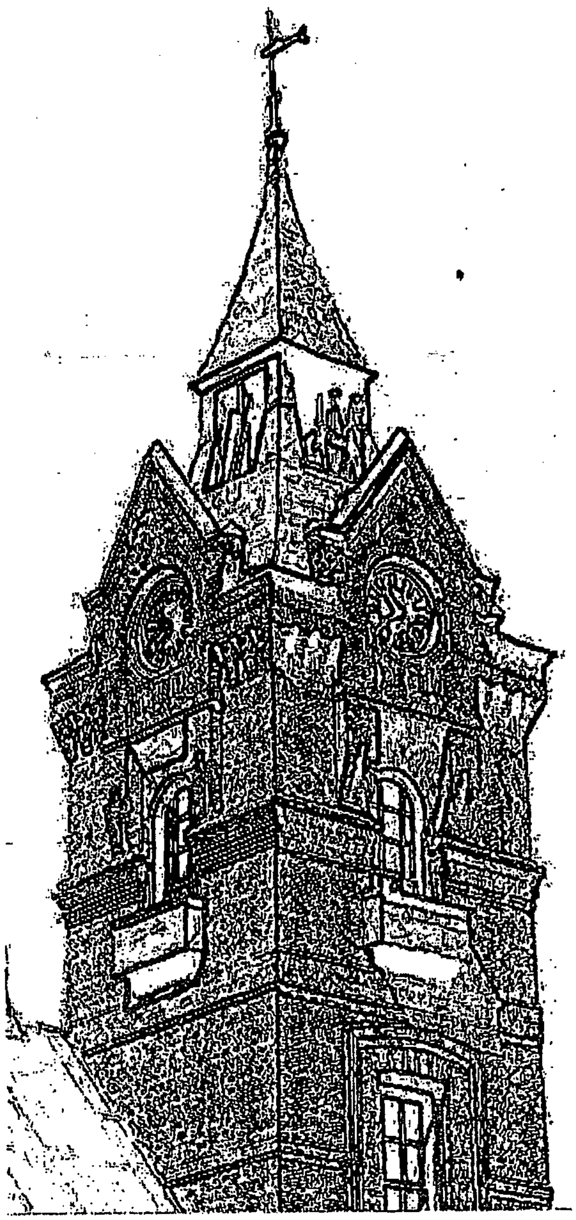
Site No.	Address
0831	2230 Main St.
0832	2305 Main St.
0834	2307 Main St.
0835	2308 Main St.
0836	2309 Main St.
0837	2319 Main St.
0838	2400 Main St.
0839	2401 Main St.
0840	2404 Main St.
0841	2405 Main St
0842	2417 Main St.
0843	2430 Main St.
0888	1217 Glenn St.
0889	1227 Glenn St.
0890	1231 Glenn St.
1069	1223 Summer Street

2.5

ER Rev Ref 59

Jennifer Revels
2003

HISTORICAL AND ARCHITECTURAL SURVEY OF NEWBERRY COUNTY, SOUTH CAROLINA



Newberry Opera House

I. PROJECT SUMMARY

Palmetto Conservation Foundation conducted this historic resources survey of Newberry County, South Carolina. The work was undertaken on behalf of Newberry County and the City of Newberry and was funded by both the City and County administrators. The survey was conducted for the purpose of identifying properties and districts that should be considered for possible local designation and/or NRHP designation within the county. The survey will be utilized for the creation and promotion of economic incentives for rehabilitation, education, and heritage tourism, and the information will aid local governments in future planning activities and cultural tourism development.

The boundaries for the survey were the Newberry County lines on the north, east, south and west. There were 1537 properties surveyed within a total area of approximately 631square miles. The results of the architectural survey indicate that there are potential historic districts within the town of Newberry. In addition, there were 650 properties surveyed in the rural areas of the county. Of these identified properties, 11 are considered individually eligible for listing in the NRHP.

There were 581 residential, 122 commercial, 7 religious, 3 educational and two industrial properties identified within the municipal limits of the city of Newberry. One residential expansion district within the Newberry city limits was identified as being eligible for listing in the NRHP.

There were 54 residential and 37 commercial properties identified within the municipal limits of the town of Whitmire. Of these identified properties, none are considered to be individually eligible for listing in the NRHP.

There were 13 residential structures, one commercial building, one school, one entertainment venue, and one church identified within the municipal limits of the town of Silverstreet. Of these identified properties, none are considered to be individually eligible for listing in the NRHP.

There were 12 residential structures, one commercial building, and one school identified within the municipal limits of the town of Chappells. Of these identified properties, none are considered to be individually eligible for listing in the NRHP.

There were 17 residential structures, one commercial building, one church, one school, and two unidentified structures recorded within the municipal limits of the town of Peak. Of these identified properties, none are considered to be individually eligible for listing in the NRHP.

There were five residential structures, two commercial buildings, and one church complex identified within the municipal limits of the town of Kinards. Of these identified properties, none are considered to be individually eligible for listing in the NRHP.

Fieldwork for the project was conducted from May through October 2003. Ken Driggers, Director of Palmetto Conservation Foundation, supervised the survey, and Preservation Planner Jennifer Revels and contractor Ernest Shealy conducted the architectural survey and historical research.

1317	Quarter Rd., N side, approx. 1/2 mi. W of int. w/ Mt. Pleasant Rd.		Residential/Domestic	ca. 1910	Not Eligible
1318	Mt. Pleasant Rd., S side, approx. 3/4 mi. W of int. w/ Ringer Rd.	Reece Mercantile Company	Commercial	ca. 1920	Not Eligible
1431	10488 Bush River Rd.	Hardy-Suber House	Residential/Domestic	ca. 1840	Eligible

Bush River

Site No	Address/Location	Historic Name	Historic Use	Date	Eligibility
1622	28169 Hwy 76		Residential/Domestic	ca. 1900	Not Eligible
1623	28365 Hwy 76	Oakdale	Residential/Domestic	ca. 1855	Not Eligible
1624	Hwy 76, N side, approx. 1 mi. E of int. w/ SC 560		Residential/Domestic	ca. 1930	Not Eligible
1625	Hwy 76, N side, approx. 3/4 mi. E of int. w/ SC 560		Residential/Domestic	ca. 1915	Not Eligible
1626	8936 Bush River Rd.	Bush River Baptist Church	Religious	ca. 1880	Not Eligible
1627	8574 Bush River Rd.		Residential/Domestic	ca. 1860	Not Eligible
1628	9071 Bush River Rd.		Residential/Domestic	ca. 1925	Not Eligible

1132	2009 Holy Trinity Church Rd.		Residential/Domestic	ca. 1915	Not Eligible
1133	1703 Holy Trinity Church Rd.		Residential/Domestic	ca. 1915	Not Eligible
1134	263 Harris Rd.		Residential/Domestic	ca. 1920	Not Eligible
1135	55 Sam's Circle		Residential/Domestic	ca. 1880	Not Eligible
1136	Central School Rd., W side, approx. 100 yds. S of int. w/ Koon's Trestle Rd.		Residential/Domestic	ca. 1915	Not Eligible
1137	347 Central School Rd.		Residential/Domestic	ca. 1925	Not Eligible
1138	917 Koon's Trestle Rd.		Residential/Domestic	ca. 1910	Not Eligible
1139	2491 SC 773	St. Paul's Lutheran Church	Religious	1936	Eligible
1140	2745 SC 773		Residential/Domestic	ca. 1915	Not Eligible
1141	3064 SC 773		Residential/Domestic	ca. 1915	Not Eligible
1142	Wicker Rd., S side, approx. 1/8 mi. W of int. w/ SC 773		Residential/Domestic	ca. 1925	Not Eligible

	8708 Broad River Rd.		Residential/Domestic	ca. 1900	Not Eligible
	Broad River Rd., W side, just south of int. w/ New Hope Rd.		Commercial	ca. 1920	Not Eligible
	Broad River Rd., E side, across from int. w/ New Hope Rd.		Residential/Domestic	ca. 1900	Not Eligible
	7443 Broad River Rd.		Residential/Domestic	ca. 1880	Eligible
	Broad River Rd., W side, approx. 1/2 mi. S of int. w/ New Hope Rd.		Residential/Domestic	ca. 1925	Not Eligible
	8269 Broad River Rd.		Residential/Domestic	ca. 1930	Not Eligible
	8157 Broad River Rd.		Residential/Domestic	ca. 1920	Not Eligible

Prosperity

File No	Address/Location	Historic Name	Historic Use	Date	Eligibility
1819	Candy Kitchen Rd., W side, approx. 1 1/2 mi. N of int. w/ Hwy 76		Residential/Domestic	ca. 1890	Not Eligible
1820	Bachman Chapel Rd., W side, approx. 3/4 mi. E of int. w/ Hwy 76		Residential/Domestic	ca. 1925-30	Not Eligible
1821	Bachman Chapel Rd., W side, approx. 3/4 mi. E of int. w/ Hwy 76		Residential/Domestic	ca. 1920	Not Eligible

38 FA 29-30, 33, 37-53
38 NE 6-16

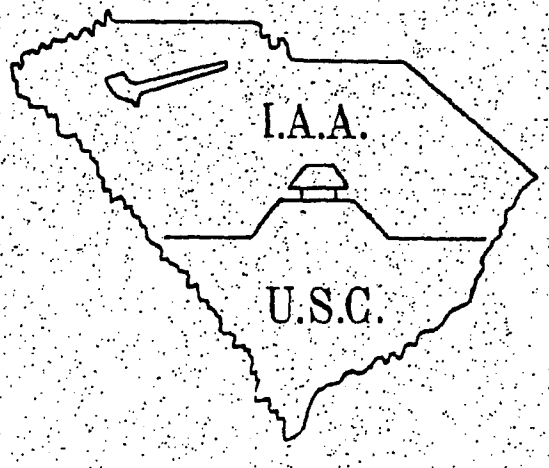
2.5 Ref 107 ERRI

AN ASSESSMENT
OF ARCHEOLOGICAL RESOURCES
IN THE PARR PROJECT AREA,
SOUTH CAROLINA

by

George A. Teague
Research Manuscript Series No.

RESEARCH MANUSCRIPT SERIES



INSTITUTE OF ARCHEOLOGY AND ANTHROPOLOGY
UNIVERSITY OF SOUTH CAROLINA
COLUMBIA, SOUTH CAROLINA
29208

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ACKNOWLEDGEMENTS

Thanks are extended to the South Carolina Electric & Gas Company for providing, through funding, this opportunity to add to the knowledge of the prehistory of South Carolina. The survey and excavations were made much more pleasant through the many courtesies extended by Mr. E. H. Crews, Mr. W. E. Moore, and Mr. E. L. Presley, all of the South Carolina Electric & Gas Company.

Special thanks are due Mr. R. M. Blair, of Blair, South Carolina, and Mrs. Josie McMeekin, of Monticello, South Carolina, for permitting excavation on their properties. In addition, many local residents were kind enough to share their knowledge of the area with us, in particular Mr. B. B. Martin and Mr. R. A. Westbrook, both of Monticello, South Carolina.

Over 20 members of the Archeological Society of South Carolina contributed two or more weekends of their time in supervised excavation at Blair Mound, enabling the sampling area to be greatly expanded. I thank them.

Appreciation is due many people at the Institute of Archeology and Anthropology for contributing their skills and knowledge to this project. Jim Frierson, Darby Erd drafted the maps and line-drawings; Gordon Brown is responsible for the photographs; and John Combes, Leland Ferguson, and Stanley South all contributed through lively discussion to the planning and execution of this project.

Lynn S. Teague is gratefully acknowledged for having read and offered useful comments on earlier drafts of this report. Also, special thanks are extended to Robert L. Stephenson, who served as project director and administrator.

INTRODUCTION

The Parr Hydroelectric Project will affect the Frees Creek drainage and a section of the Broad River in Fairfield and Newberry Counties, South Carolina. This area, 25 air miles northwest of Columbia, South Carolina, is the Piedmont Physiographic Province, about 20 miles northwest of the Fall Line (Fig. 1). Funding for a program of archeological survey and excavation within the area to be affected by the Parr Project was provided by the South Carolina Electric & Gas Company.

The study area consists of those areas that will be inundated or disturbed by construction of the Parr Hydroelectric Project, and hence will be inaccessible for future archeological research. Specifically, these areas are as follows:

Parr Reservoir Area

Elevating the existing Parr Dam will result in an addition of approximately 2,500 acres to the Parr Reservoir on the Broad River. The initial construction of Parr Dam in 1914 inundated the original floodplain and most of the first terrace of the Broad River within the Parr Reservoir. Thus, the topographic zones most affected will be the remnants of the first and second terraces of the Broad River for a distance of about 12 miles upstream from Parr Dam, as well as the mouths of Cannons, Frees, Hellers, and Terrible Creeks.

Monticello Reservoir Area

Construction of a dam on Frees Creek will impound water from Frees Creek and its associated small tributaries to an elevation of 425 feet above mean sea level, thus forming Monticello Reservoir. This Reservoir will cover an area of about 6,800 acres.

Nuclear Site Areas

There will be two nuclear sites, one on the south boundary and another on the west boundary of Monticello Reservoir. Exclusion areas surrounding these sites will render more than 2,500 acres inaccessible.

In total, about 12,000 acres will be inaccessible for archeological research upon completion of the Parr Hydroelectric Project (South Carolina Electric and Gas 1971).

Knowledge of the past is an important national resource. This has been recognized through enactment of the Environmental Protection Act of 1969 and subsequent legislation providing for the protection of resources that can contribute to an understanding of prehistory and history. In keeping with this legislation, the Parr archeological study was conducted in order to determine the nature and distribution of archeological sites in the project area and to assess the probable effects of the project on these resources. Work was conducted in several phases.

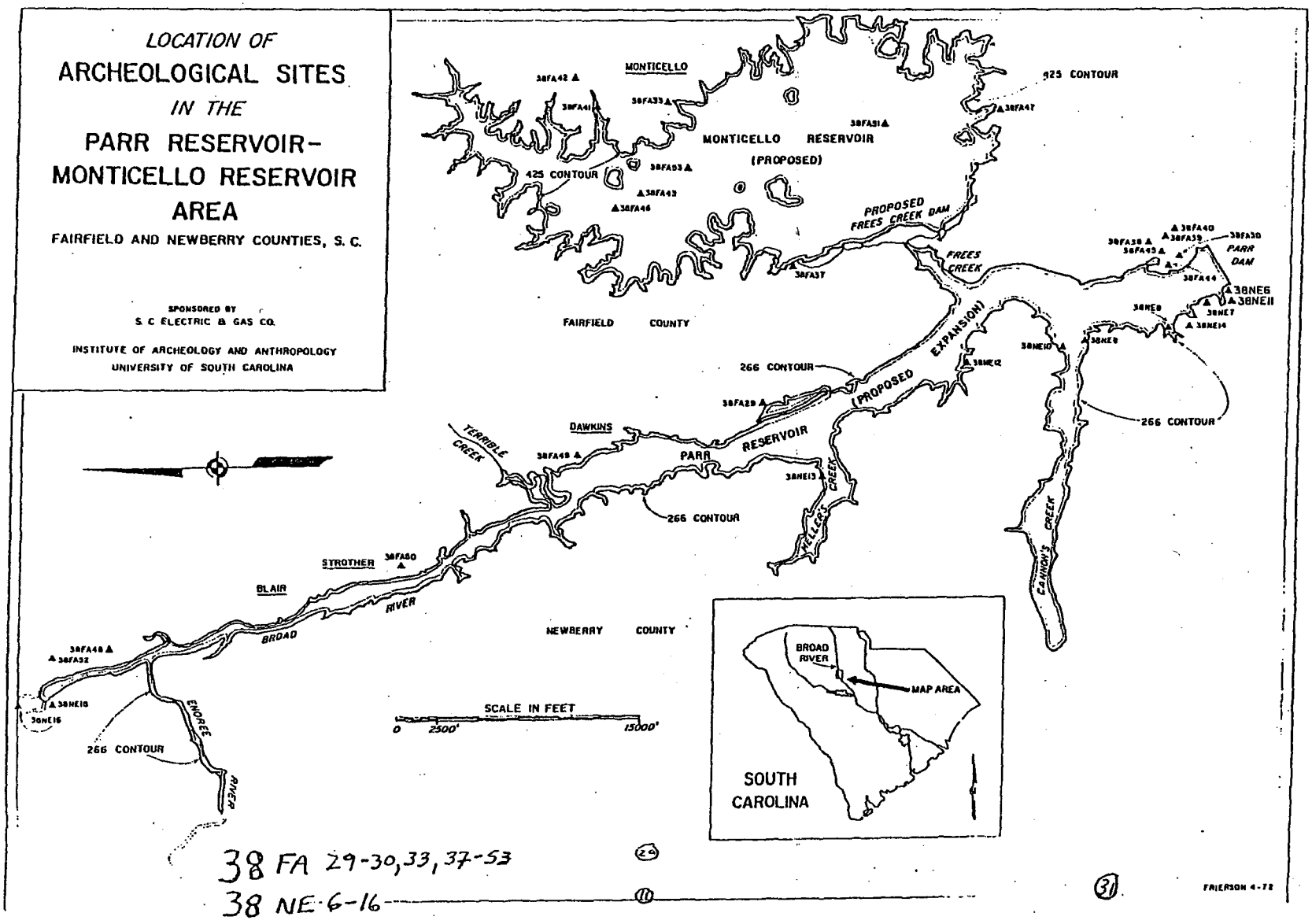


FIGURE 1: Map of the study area showing location of archeological sites.

During February, and part of March, 1972, John Jameson and I conducted a reconnaissance of the study area and found and recorded 27 archeological sites. In addition, four sites were already known to be in this area. Thirty person-days were expended in the survey.

After analysis of survey data, conducted during April, 1972, two sites, McMeekin Shelter (38FA41) and Blair Mound (38FA48), were selected for extensive test excavation. Excavation began on May 15, 1972 and ended on June 30, 1972. The excavation crew consisted of George Teague (Supervisor), Carol Weed (Site Assistant), Travis Bianchi, Richard Edwards, Holly Hook, Susan Jackson, Page Luttrell, David Miller, and David Mullis.

Data gathered during the field season were analyzed and collated at the Institute of Archeology and Anthropology during July and part of August, 1972.

This report serves as a record of fieldwork, and provides a base of data for an archeologically poorly understood area.

BACKGROUND TO THE SURVEY

Research Strategy

"Before the archaeologist launches into a presentation of his methodology and data, he should present, to some degree at least, the theoretical assumptions upon which the study was undertaken and interpreted (South 1959: 5)." In this chapter, an attempt will be made to explicate the theoretical assumptions under which the Parr survey was conducted.

Anyone collecting data operates under some form of theoretical model, whether explicit or implicit. Accordingly, this model is carried forward through research strategies. It is convenient to classify these strategies in terms of goal orientation. Some goals common to archeologists have been listed by Binford (1968). They are as follows:

1. The collection of data which will in the future "fill in the gaps in the puzzle."

2. The reconstruction of culture history --that is, the ordering of particular events in time and space.

3. The reconstruction of past lifeways through interpretation of activity sets in their spatial context.

The major, and often stated, goal of much recent archeology is:

4. The explanation of culture process through the formation and testing of formal hypotheses.

All of these goals have been pursued in past contract archeology projects. Consider the orientations of several major projects done in the Southeastern United States, for example. Salvage archeology done in the Norris and Wheeler Basins of Tennessee (Webb 1938, 1939), apparently had as a goal little more than the non-selective accumulation of data. Certain monumental surveys conducted in the Lower Mississippi Valley and in the Yazoo Basin operated with very little explicit theory (Phillips, et al. 1951: 39-40; Phillips 1970: 3-4), but it may be inferred that these surveys were primarily concerned with typology and space-time distributions, that is, with the reconstruction of culture history.

Lifeways reconstruction has been strangely neglected in American archeology in general and in contract archeology in particular. If the delineation of patterns of settlement and subsistence is to be included under the rubric of lifeways reconstruction, then in the Southeastern United States, we may look to Hemmings' (1970) study of the Trotter's Shoals area of South Carolina, among others.

Instances of the explicitly explanation-oriented approach are rare in contract archeology. An early example of the use of this strategy can be found in Skinner's (1971) work in Texas where salvage data were

used to produce testable hypotheses concerning group size fluctuations and maintenance cycles. In addition, an interesting set of hypotheses concerning culture change was proposed and tested through material culture trait frequencies by Wauchope (1966). However, a general interest in social patterning has been common for some time (see Johnson 1942).

In summary, archeological surveys have traditionally served several functions, the most basic among them being the determination of the past occupations of an area by man. They have provided at least a relative estimate of site densities within an area and, of course, have provided an approximation of unexcavated material remains (Zubrow 1971: 127). In addition, the chronological ordering of human occupations in an area, the patterns of settlement and subsistence which obtained in that area at various times, and the lifeway structures which enabled man to maintain himself may be reconstructed from survey derived data. Further, the relationship of man with his environment may be perceived in a systemic context, allowing questions concerning culture process to be more effectively formulated and addressed.

Strategy devised for the Parr Hydroelectric Project Survey was based on the position that goals outlined above are in fact complementary and reciprocal, rather than mutually exclusive. Hence, goals of this survey were as follows:

1. To outline the space and time distributions of prehistoric and early historic occupation within the study area.

2. To delineate the relationship between man and environment in the study area and to determine the ways in which prehistoric man maintained himself.

3. To propose, for future testing, hypotheses regarding processes of culture change, especially those involving settlement and subsistence, which occurred in the study area.

In addition to this theoretically oriented strategy, it is incumbent upon the archeologist involved in a management-oriented study to suggest ways in which archeological resources and the information which they represent may be preserved.

Research Methodology and Technique

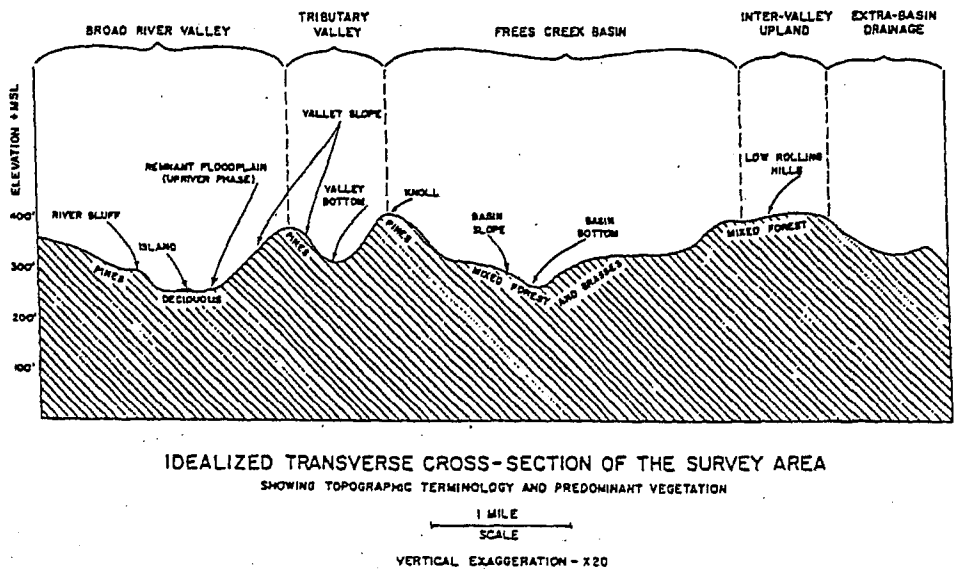
Survey of the Parr Project Area did not involve complete coverage of the proposed impact areas. However, generalizations about a population may be made on the basis of a sample of that population. The percentage of the whole needed for generalizations in any given case depends upon the characteristics of the population being sampled (most importantly size and distribution), the questions being asked, and the precision with which the characteristics of the population must be determined in order to satisfactorily resolve these questions.

For the purposes of this study, a relatively small sampling fraction was employed. About 5% of the area was covered. It is believed, however, that this has been adequate to determine the outlines of settlement distributions in the study area and to provide information for the assessment of potential project impacts on the resources.

The research objectives defined earlier may be approached on many levels. In this case, very broad questions have been asked and very generalized answers provided. This is consistent with the management objectives of the study.

The areal survey of a reservoir area presents peculiar problems. While there are physiographically integral units such as river bottoms, bluffs, etc., it must be kept in mind that these units likely formed only a portion of the total region of importance to the prehistoric inhabitants. Nonetheless, significant information may be extracted through recognition of the patterning of occupation within environmental zones.

As a preliminary phase of sampling strategy selection, environmental zones within the survey area, were determined (Fig. 2). Next, a portion of the survey area that included all environmental zones was selected for initial survey. A grid with 1000 foot intervals was imposed upon a map of this portion of the study area, and the locations of the 300 grid intersection points were plotted. Thirty of these points were selected by a non-stratified statistically random technique, and were ground-checked for the presence of archeological sites. Six sites-- 38NE8, 38NE9, 38NE10, 38NE11, 38FA44, and 38FA45--were located at grid intersection points. Equally important was the subjective determination of where sites were likely not to be found due to physiographic considerations: for example, on steep slopes of the Broad River and in the alluvium of tributary drainages.



IDEALIZED TRANSVERSE CROSS-SECTION OF THE SURVEY AREA
SHOWING TOPOGRAPHIC TERMINOLOGY AND PREDOMINANT VEGETATION

1 MILE
SCALE

VERTICAL EXAGGERATION - X20

FIGURE 2: Physiographic cross-section of the study area.

On the basis of this preliminary evaluation, transects were selected for physical on-the-ground traverse. The remnants of river bottomlands and terraces, as well as overlooking knolls along the Broad River, were surveyed in their entirety, as were a number of arbitrary transects across the proposed Monticello Reservoir.

Due to the great amount of ground cover, site identification along the survey transects was usually limited to areas that had been exposed by erosion or man-made disturbances such as road building, right-of-way clearance, or cultivation. In addition, locations which seemed subjectively likely to have been occupied prehistorically were tested for stratigraphy and content through excavation of small test pits, usually 1 m^2.

The traverses were conducted by four-wheel-drive truck, by foot and by small boat. Two people walked along the transect plots, remaining in visual contact, while maximizing lateral observation of the terrain. When sites or cleared areas were found, survey expanded to encompass an area approximately 100 m in diameter, with the site or cleared area serving as a focal point.

Sites so located were photographed and recorded on standardized forms, and were mapped when site complexity dictated. Diagnostic artifacts were collected non-systematically for later identification. Primary records, photographs, and collections are maintained at the Institute of Archeology and Anthropology.

THE SURVEY AREA: PHYSICAL AND CULTURAL ENVIRONMENT

The Environmental Setting

Introduction

The environment within the study area has a variety of implications for prehistoric and historic cultural development. Subsurface geology of the area is of interest principally as it relates to economically useful stone available to the prehistoric population for tool manufacture. The occurrence of caves and rock shelters, valuable archeologically because of their long-term attraction as a focus of human occupation, is also of interest. Likewise soil and water resources are significant as indicators of agricultural potential, and to plants and animals support. Plants and animals are, of course, significant as sources of food and other commodities related to the general subsistence pattern.

The following description of the environment is of necessity based almost entirely upon current conditions and those of the recent past. It would be unwarranted to assume that resource types and availabilty have remained stable since the prehistoric occupation of the area. It could be expected that the rates of change vary for the various resources. The most dramatic changes have doubtlessly occurred in the plant and animal populations of the area, while geologic conditions are probably little changed.

One particular problem in interpreting the environment is that the original Broad River Valley bottom is not available for study. A dam was built at Parr Shoals in the early years of this century and the floodplain was inundated. The valley bottom referred to in this report is the current floodplain, formed of terraces and remnant original floodplain.

Subsurface Geology

The geology of the study area is relatively well known (Kesler 1936; McCauley 1961; Overstreet and Bell 1965; Secor and Wagener 1968). A complex system of metamorphosed sedimentary rocks is covered by soils resulting primarily from chemical weathering of the underlying parent rock. Five principal rock units--Charlotte belt gneiss, Carolina slate belt rocks, mignate, granadiorite, and granofels--have been defined for the area.

The first two of these units contain materials useful in tool manufacture such as quartz, quartzite, rhyolite, andesite, gneiss, and siliceous slate. Economically useful stone is found in abundance on deflated surfaces along bluffs and on knoll tops in the study area (Fig. 3).

FIGURE 3: Site 38FA49--Stone quarry debris exposed on deflated surface (View to North).

FIGURE 4: Site 38FA41 during excavation (View to Northwest).

Structurally, rock outcrops are sparse and faulting is infrequent, although a well developed joint system is present. Consequently, rock shelters and caves are rare. Only one small rock shelter was found during the survey (Fig. 4).

Land Forms and Soils

The study area is characterized by rolling hills and mature stream valleys with superimposed deep erosional gullies, which are probably very recent in origin. Elevation ranges from about 250 feet to about 500 feet above sea level.

Areal drainage is commonly of the dendritic pattern, with occasional trellis forms occurring. All water in Frees Creek is obtained from rainfall runoff and drains ultimately, as do other systems in the area, into the Broad River. The area may be described as both well watered and well drained.

Upland soil genesis is from chemical weathering, and soil accumulations are fairly deep, both on the uplands and in the valleys. Soils are redeposited colluvially on slopes and alluvially in valley bottoms. Aeolian deposition is minor. Dominant soils are of the Cecil, Enon, Wilkes, Catula, and Lloyd Series. These soils, as they occur in the study area, can be characterized as acid and sloping, with low fertility (Camp, et al 1960). Soils of the Congaree Series are found along the Broad River. These soils are better for general farming, but a high flood danger exists.

Although extensively farmed in the past, the study area is at present not well suited for agriculture because of erosion and poor soil. An examination of aerial photos reveals a remarkably small amount of cleared acreage.

Plants and Animals

The plant and animal resources of the study area proper are virtually unknown. Monitoring was begun by South Carolina Electric and Gas in 1971 (South Carolina Electric and Gas n.d.), and collections were made of various aquatic species. Sixteen species of fish were reported, including bass, sunfish, catfish, and carp.

While surveying for archeological sites, a rich variety of animals were frequently sighted: dove, deer, quail, rabbit, squirrel, turkey and various waterfowl.

The dominant trees in the uplands are pines. However, the regional ecology has doubtlessly changed drastically in the past 200 years. Mills (1826) makes little mention of pines in the Fairfield District, and an early survey of a similar river valley in South Carolina indicates only a small amount of pine within the mixed deciduous forest (Anonymous 1764). According to local tradition, most of the pines were planted in the 1930's. In the valley bottoms, mixed hardwoods predominate: cottonwood, gum, hickory, and oak.

Climate

The climate in the study area is temperate, with occasional dry periods from two to six weeks. Over a 50 year period, temperatures ranged from -2°F. to 108°F. and averaged 63° F. Rainfall over the same period ranged from 30 inches per year to 75 inches per year and averaged 47 inches per year (Camp, et al. 1960).

Summary: The Effective Environment

While information is scarce, a reconstruction of the past environment, as it affected man, can be made. Topographic designations shown in Figure 2 will be useful in this reconstruction.

The Broad River valley bottom was largely inundated by the construction of Parr Dam in 1914; however, remnant floodplains, exposed at low water, exist along the northern reaches of the survey area. The remainder of the valley bottom is composed of geologically recent terraces. Nonetheless, the term "valley bottom" is useful because much the same resources were available along the low terraces as were available on the nearby floodplain. These resources comprised aquatic plants and animals and good farm land. The floodplain and terraces had adequate soils and were replenished and watered by runoff and flooding.

In the uplands, including the bluffs, hills, and the Frees Creek drainage, soils were poorer and erosion more severe. An inordinate amount of labor would have been required to maintain the soil and to divert or conserve water. On the other hand, these areas doubtlessly had an extremely rich population of plants and animals available seasonally for exploitation.

The valley slopes were probably less varied in biotic composition, but as on eroded bluffs and hill tops, large quantities of stone were exposed.

An excellent, and more detailed, reconstruction of cultural environment in another part of the Piedmont can be found in a study by Canouts (1971).

The Cultural Setting

Prehistoric Occupation

The prehistory of the Southeastern United States has been adequately summarized by Griffin (1967) and Willey (1966), among others. A definitive study of early Carolina Piedmont prehistory has been done by Coe (1964). The following is a capsule summary of prehistory in the middle Broad River drainage.

The earliest recognized cultural period is that of the Early Archaic, ranging from 10,000 to 7,000 years ago. Within this period there are three archeological complexes--Hardaway, Palmer, and Kirk. These complexes are recognized primarily by distinctive projectile points. The Early Archaic people are thought to have lived by hunting, fishing and shellfish and plant gathering.

The period following, from about 7,000 to 4,000 years ago, is called the Middle Archaic. This period is characterized by the Stanly, Guilford, Morrow Mountain, and Savannah River Complexes. The subsistence base during this period was essentially the same as the previous one; however, more efficient means of utilizing resources were developed by Middle Archaic peoples (Caldwell 1958).

Following the Middle Archaic, the Late Archaic and Early Woodland lasted until around the time of Christ. Judging from nearby archeological sites (Claflin 1931; Miller 1949), the ways of getting food changed, with a shift to limited horticulture and more intensive shellfish collecting. Pottery was introduced about this time. These revolutionary developments seem to have by-passed the middle Broad River region until later.

After about A.D. 1, there can be found Woodland period sites, characterized by small villages and a variety of stamped and fabric marked pottery.

Around A.D. 1200 the region came under the influence of the South Appalachian Mississippian, a pattern characterized by complicated stamped pottery, mound-ceremonialism, larger villages, and more extensive agriculture (Ferguson 1971). This cultural expression continued, in other regions, until the coming of Europeans.

Early Historic Occupation

A cursory search of the literature (Mills 1826; McMaster 1946) revealed no evidence of historic sites within the study area of the sort that might gain acceptance to the National Register of Historic Places. However, Mills (1826) mentions that the Broad River section of Fairfield District was being settled as early as 1745. By 1819 a number of people had settled near Frees Creek (Thorp 1819). Aboriginal occupation of the area during the Early Historic period, particularly by the Catawba, is possible but has gone unreported except in the most general of terms.

38FA29-30,33
38NE6

(4)

ARCHEOLOGICAL RESOURCES OF THE SURVEY AREA

Introduction

A total of 31 archeological sites have been recorded in the Parr Project Area. The locations of these sites were plotted within the South Carolina State Coordinate System, and results are on file at the Institute of Archeology and Anthropology and at the South Carolina Electric and Gas Company. Site locations in this report are given in terms of topographic situation. The relative position of sites may be seen in Figure 1.

Sites are classified as lithic, multicomponent, non-artifactual, and historic, according to their composition. Lithic sites contain only stone tools or chipping debris. Multicomponent sites have both stone tools and pottery. Non-artifactual sites have man-made features but no portable artifacts. An example of this site class would be a fish trap formed by rock alignments. Historic sites have artifacts of non-aboriginal manufacture. There is a tendency to feel that lithic sites are always earlier than multicomponent sites, but this may not be true. Some sites, such as stone quarries, may have been used throughout the time man occupied the project area.

Sites were assigned to time periods only when diagnostic artifacts were found. Diagnostic artifacts are those which have distinctive forms and which have been dated to some specific time period. Projectile points and pottery are most commonly considered diagnostic.

Previous Survey Results

Previous survey in the study area has been sporadic and informal. Four sites were recorded prior to the present survey. Three of these sites, 38FA29, 38FA30, and 38FA33, were found by Mr. John Kelly during the past 10 years. Another site, 38NE6, was recorded by Mr. Robert Wauchope during the late 1930's.

Only one of these sites, 38FA29, was relocated with any precision during the 1972 survey. The effects of 10 or more of ground cover regrowth can be quite remarkable in disguising sites. These previously recorded sites will be described in the inventory below of known sites in the area.

Inventory of Archeological Resources

Lithic Sites

38FA29. This site is located on a low knoll overlooking the east side of the Broad River. Artifacts are exposed along a dirt road in a stand of pines. The knoll is eroded and the entire exposure is deflated to a pre-Pleistocene red clay surface. No artifacts or deposits are left in place.

Less than a dozen pieces of quartzite chipping debris were exposed. The site was previously collected by Mr. John Kelly who picked up stone cores and one probable Guilford projectile point. The area of occupation is estimated to be 500 square meters. Tentatively, the site is placed in the Middle Archaic period.

38FA30. This site, originally found by Mr. John Kelly, was not relocated. It is shown on our maps as being in the hilly uplands near Parr Dam in the area of the Parr plant facilities. It has likely been destroyed by construction. Kelly reported the occurrence of probable Morrow Mountain and Guilford projectile points, which would place the occupation in the Middle Archaic period.

38FA37. Site 38FA37 is on the west slope of a wide ridge. The ridge forms one side of a stream valley of a tributary to Frees Creek. The ridge is badly eroded to pre-Pleistocene clays, and no intact archeological deposits remain.

About 50 pieces of quartzite chipping debris were dispersed over some 500 square meters. Three flakes and one probable Guilford projectile point midsection were collected. The site is tentatively placed in the Middle Archaic period.

38FA38. Site 38FA38 is on the north slope of a narrow ridgetop in the hilly uplands near Parr Dam. It was found at the base of a transmission tower in the power line right-of-way. The right-of-way has been severely disturbed by heavy equipment, and no intact archeological deposits remain. The area of occupation is unknown because of disturbance, but is estimated to have been less than 100 square meters.

All artifacts seen were collected. These include one Morrow Mountain projectile point, one quartzite biface fragment, and four quartzite flakes. The site dates to the Middle Archaic period.

38FA39. This site is in the valley bottom of a small stream which is a tributary to the Broad River. The site was found along a dirt access road. The roadcut revealed a thin veneer of recently deposited colluvial sand overlying red clay. Artifacts were found on top of the red clay exposure. No intact archeological deposits remain, but about a dozen quartzite flakes were seen. One Morrow Mountain projectile point was also collected.

The extent of occupation is unknown, but was probably less than 100 square meters. The site dates from the Middle Archaic period.

38FA40. Site 38FA40 is located on a low, flat ridge at the base of a transmission tower. The deposits are severely disturbed and the exposure has been graded to a red clay surface.

Extent of occupation is unknown because of disturbance, but artifacts were confined to an area of less than 100 square meters. Less than a dozen quartzite flakes were seen; three were collected. One Savannah River projectile point was collected. The site dates from the Middle Archaic period.

38FA42. This site was found along a roadcut through a plowed field in the flat uplands. The roadcut revealed about 20/cm of tan loamy sand overlying a yellow subsoil. This loamy sand constitutes the plow zone, and artifacts are found within it. No undisturbed archeological deposits remain. The area of occupation in unknown, but artifacts are concentrated within 100 square meters.

About 25 quartzite flakes, one biface fragment, and one Guilford projectile point base, suggesting a Middle Archaic occupation, were exposed. The biface fragment and the projectile point base were collected.

38FA43. This site was found on a west facing basin slope of Frees Creek, about 100 m from the creek itself. The slope has been eroded to subsoil and no intact archeological deposits remain. Artifacts were exposed within an area of about 750 square meters. These artifacts included one Savannah River projectile point base, one biface fragment, and about 25 quartzite flakes. The projectile point base, the biface fragment, and three of the flakes were collected. The site dates from the Middle Archaic period.

38FA44. Site 38FA44 is on a wide knoll near the east bluff of the Broad River. About a dozen quartzite and slate flakes were exposed on the surface, but only nine were collected.

Two stratigraphic test pits, measuring 1 m by .5 m by .5 m deep, were excavated to check surface deposits. Stratigraphy consisted of 15 cm of loamy sand with pebbles overlying red clay. Artifacts came from within the loamy sand, which is an old disturbed plow zone. No undisturbed archeological deposits remain.

The area of occupation is unknown, but artifacts were found within 250 square meters. Cultural affiliation is unknown.

38FA45. This site is on a highly eroded ridge running perpendicular to the Broad River.

Two test pits were excavated into the center of occupation, revealing about 5 cm of disturbed, black humus overlying the red clay subsoil. Artifacts were found both within the humus and on the red clay surface. The origin of the humus is unknown; however it may have been very recently formed. No intact archeological deposits remain.

Over 50 pieces of flaking debris were concentrated within an area 50 m in diameter. Of these artifacts, 21 flakes, eight biface fragments, one Morrow Mountain projectile point, and two Guilford projectile points were collected. The site dates from the Middle Archaic period.

38FA46. Site 38FA46 is on the gently sloping west bank of Frees Creek within the valley bottom.

The occupation area, about 1,000 square meters, is eroded to subsoil. No intact archeological deposits remain.

Artifacts exposed on the surface included about 25 flakes and broken stone tools. Three flakes and two Savannah River projectile points were collected. The site dates from the Middle Archaic period.

38FA47. This site is located in the rolling hills of the uplands above Frees Creek. The site area is fairly flat and is eroded to red clay subsoil. The site has been disturbed by a roadcut and no intact archeological deposits remain.

About a dozen quartzite flakes were seen, of which five were collected.

The area of occupation is unknown, but was probably less than 100 square meters. Cultural affiliation of the site is unknown.

38FA49. Site 38FA49 is on a low bluff that parallels the east bank of the Broad River. The bluff is badly eroded and deflated to a pre-Pleistocene red clay subsoil. Abundant quartzite cobbles and fragments outcrop along the bluff exposures (Fig. 3).

Over 1,000 pieces of quartzite flaking debris were exposed, of which three cores, 26 flakes, and three biface fragments were collected. No diagnostic artifacts were found.

The area of use, or of occupation, is about 25,000 square meters. Cultural affiliation of the site is unknown.

38FA50. This site is on a bluff top overlooking the east bank of the Broad River. The bluff top has been badly eroded and deposits are deflated to a red clay surface. About 20 quartzite flakes were seen on surface exposures; only three were collected.

The area of occupation is unknown, but artifacts were confined to an area of less than 100 square meters. Cultural affiliation of the site is unknown.

38FA51. Site 38FA51 is on an eroded knoll in the rolling hills of the Frees Creek uplands. No intact archeological deposits remain.

Five quartzite flakes were collected. The area of occupation is unknown, but artifacts were concentrated within an area of less than 100 square meters. Cultural affiliation of the site is unknown.

38FA52-53
38NE7-8,6

38FA52. This site is on a high knoll in the uplands east of the Broad River. Deposits are extremely eroded. A thin sand veneer of very recent origin overlies a red clay subsoil.

About a dozen quartzite flakes were exposed, three of which were collected. These artifacts were concentrated in an area of less than 100 square meters. Cultural affiliation of the site is unknown.

38FA53. Site 38FA53 is on a knoll top in the uplands above Frees Creek. The knoll has been graded by machine, and deposits are heavily eroded and disturbed.

About 50 quartzite flakes and two projectile points were seen. The projectile points, one Kirk Serrated and one Guilford, were collected.

The area of occupation is unknown, but artifacts were clustered within an area of about 250 square meters. The site dates from both Early and Middle Archaic periods.

38NE7. This site is on a high bluff overlooking the west bank of the Broad River. The bluff is eroded to red clay subsoil and no intact archeological deposits remain.

About 50 pieces of quartzite and slate flaking debris were exposed, as were one biface fragment and one Morrow Mountain projectile point base. The biface fragment, the projectile point base, and three flakes were collected.

The area of occupation is about 500 square meters. The site dates from the Middle Archaic period.

38NE8. Site 38NE8 is on the north side of a small tributary of the Broad River. The site is located on a flat, recent terrace which, since the raising of the Broad River by impoundment in 1914, serves as floodplain. The site area is cultivated at present.

Two vertical soil exposures along the river edge of the site were faced with a trowel and stratigraphy was recorded. About 25 cm of plow-zone soil overlies a red clay subsoil. Artifacts are found throughout the plow zone. All archeological deposits are deflated and have been mixed and disturbed by plowing.

A large number of artifacts, including several thousand flakes, are exposed on the surface. One scraper, two biface fragments, one Guilford projectile point, and 12 flakes were collected.

The artifact scatter is extensive and total area of occupation is estimated to be about 4,000 square meters.

The site dates from the Middle Archaic and perhaps from the Early Archaic , although no diagnostic artifacts from the earlier period were found. This site may possibly be the site identified by Wauchope as 38NE6.

38NE9. This site is located at the mouth of Cannon's Creek on a low-lying recent terrace. No artifacts were found on the surface, but a 1 m^2 pit excavated to a depth of .3 m revealed the remains of human occupation. Stratigraphy consisted of 20 cm of loamy sand underlain by red clay. Artifacts were found at the contact of the bottom sand unit and the red clay surface. The original deposits seem to have been deflated and artifacts were let down to the pre-Pleistocene clay surface. Following the construction of Parr Dam, flooding during this century deposited the sand and loamy sand units. Apparently no intact archeological deposits remain at this site.

One quartzite core and one Savannah River projectile point were found in the test pit. Both were collected.

The extent of site occupation is unknown. The site dates from the Middle Archaic period.

38NE10. Site 38NE10 is on the north side of Cannon's Creek on a gentle valley slope. About 5 cm of recently disturbed humus overlies, in places, a red clay surface.

Exposed on the surface were about 15 flakes, one quartzite core, and one Guilford projectile point. The projectile point, the core, and two flakes were collected.

Occupation was limited to an area of about 500 square meters. The site dates from the Middle Archaic period.

38NE11. This site is located both on a high bluff of the Broad River and on the contiguous valley slope. About 5 cm of recent colluvium overlies a red clay deposit. No intact archeological deposits remain.

About 100 pieces of quartzite flaking debris were exposed on the surface. Collected artifacts include 13 flakes, four cores, two retouched flakes, four biface fragments, two Morrow Mountain projectile points, one Guilford projectile point, and two Savannah River projectile points.

The area of occupation was about 750 square meters. The site dates from the Middle Archaic period.

38NE12. Site 38NE12 is on a steep slope of the Broad River valley, and is exposed to the east. All that remains geologically is a pre-Pleistocene red clay surface. No intact archeological deposits are present.

About 25 pieces of quartzite and slate chipping debris were on the surface. Eight flakes and two Morrow Mountain projectile points were collected.

The area of occupation was about 750 square meters. The site dates from the Middle Archaic period.

38NE13. This site, which has been damaged by movement of heavy equipment, is on a low lying slope of Heller's Creek. A thin veneer of sand overlies a red clay surface. No archeologically intact deposits remain.

Seven quartzite flakes, two biface fragments, and one Morrow Mountain projectile point were exposed on the surface. All were collected.

The area of occupation is unknown, but was probably less than 250 square meters in extent. The site dates from the Middle Archaic period.

38NE14. Site 38NE14 is on a high knoll in the uplands west of the Broad River. Deposits are disturbed and have been eroded to a red clay surface.

About 50 pieces of chipping debris were exposed. Four of these flakes, two biface fragments, and one Morrow Mountain projectile point were collected.

Extent of occupation is unknown, but was probably confined to an area of about 750 square meters. The site dates from the Middle Archaic period.

38NE15. This site is on a high bluff overlooking shoals on the Broad River near Henderson's Island. Pre-Pleistocene red clay is the dominant exposure, and no intact archeological deposits remain.

About 200 pieces of flaking debris were on the surface. Eight flakes, two cores, one retouched flake, five biface fragments, and one probable Guilford projectile point base were collected.

The occupation extended over about 500 square meters. The site dates from the Middle Archaic period.

Multicomponent Sites

38FA33. This site was found by Mr. John Kelly, and is reported to be in the hilly uplands near Moticello Reservoir. It was not relocated during the present survey.

Stratigraphy is probably disturbed, since the artifacts were found in a road cut. Savannah River and Morrow Mountain projectile points, and a number of pottery sherds were collected by Kelly.

The area of occupation is about 750 square meters. The site was occupied during both Middle Archaic and Woodland times.

38FA41 (McMeekin Shelter). Site 38FA41 is a rock shelter formed by a gneissic outcrop on the south bank of a stream which is a tributary to Frees Creek. No artifacts were exposed, but the likelihood of intact archeological deposits required that the site be test-excavated. Excavation revealed intact deposits of about one meter in depth. The

area of occupation within the shelter proper is about 10 square meters, but for the site as a whole, the area is about 100 square meters.

Over 600 artifacts were collected from the excavation, including pottery sherds, projectile points, and other stone tools. The site contained components of Woodland, Mississippian, and Early Historic occupations. Details of the excavation are reported in a later section of this report.

38FA48 (Blair Mound). This site is located in alluvium of the first terrace of the Broad River, near Beaver Creek. As test excavations showed, archeological deposits are relatively intact and deep, although disturbed by both bulldozer and plow.

During the survey, nine plain and complicated stamped pottery sherds, one small triangular project point, and one Savannah River projectile point were collected. During subsequent excavation, over 6,000 artifacts were collected.

The area of occupation was about 10,000 square meters. The site has components which date from Middle Archaic and Mississippian occupations. Details of the excavation are reported in a later section of this report.

38NE6. Site 38NE6, which was not relocated during the present survey, was recorded originally by Mr. Robert Wauchope during the late 1930's. It was reported to be on the west bank of the Broad River near Parr Dam. This site may be the same as site 38NE8, but until 38NE6 is located accurately, the separate numbers will remain.

Deposits, more than likely lack stratigraphic integrity and significant depth at this site. A great time range, some 10,000 years, is represented by artifacts recovered from the site's surface. Wauchope collected a great many tools including Palmer, Kirk, Morrow Mountain, Guilford, Savannah River, Pee Dee, and Yadkin projectile points. Seventeen pottery sherds were also found.

The area of occupation is unknown, but the site is probably extensive. The site has components which date from Early Archaic, Middle Archaic, and Woodland occupations.

Non-artifactual Sites

38NE16. This site consists of a "V" shaped rock alignment on the shoals of the Broad River near Henderson's Island. The alignment is about 50 meters in maximum dimension and is thought to have been part of a prehistoric fish trap.

High water prevented accurate observations, but from an airplane, the alignment looks like those found elsewhere in South Carolina (see Hemmings 1970). Cultural affiliation is unknown.

38 FA 29-30, 33, 37-43, 45-46, 48, 53
38 NE 6-15

Early Historic Sites

No early historic sites as such were found during the survey. However, two sites produced historic artifacts. A late 18th century gunflint was found in the upper level of site 38FA41 (McMeekin Shelter) during test excavation. A British coin dated 1772 was found in the plow zone at site 38FA48 (Blair Mound).

Summary

Culture History

Although seven sites couldn't be dated properly, the remaining sites allow an occupational sequence to be constructed for the study area.

No pre-Archaic sites were found, but two sites have Early Archaic period components: 38FA53 and 38NE6. Diagnostic artifacts span the entire Early Archaic spectrum from 10,000 to 7,000 years ago.

The Middle Archaic is well represented in the study area, with 23 sites having components from this period. It is useful to subdivide the Middle Archaic into an earlier and a later phase. These phases are represented in similar measure in the study area, with 11 from the earlier phase and 16 from the later.

The earlier phase dates from 7,000 years ago to 5,500 years ago and is characterized by artifacts from the Stanly and Guilford complexes. None of the sites had artifacts from the Stanly complex, which precedes the Guilford stratigraphically in other parts of the Piedmont. This may represent a break in occupation. Sites having components of the Guilford complex are: 38FA29, 38FA30, 38FA37, 38FA42, 38FA45, 38FA53, 38NE6, 38NE8, 38NE10, 38NE11 and 38NE15.

The later phase of the Middle Archaic is characterized by artifacts of the Morrow Mountain and Savannah River complexes. This phase dates from 5,500 to 4,000 years ago. Sites having components of this phase are 38FA30, 38FA33, 38FA38, 38FA39, 38FA40, 38FA43, 38FA45, 38FA46, 38FA48, 38NE6, 38NE7, 38NE9, 38NE11, 38NE12, 38NE13, and 38NE14.

There are no sites that date from the Late Archaic or Early Woodland periods.

Later Woodland period occupations, dating after A.D. 1, are found at sites 38FA33, 38FA41, and 38NE6.

Mississippian components, dating after about A.D. 1200, were found at sites 38FA41 and 38FA48.

Early Historic period artifacts, dating from the late 18th century, were found at sites 38FA41 and 38FA48.

To sum up the culture history of the study area, the first inhabitants probably arrived about 10,000 years ago and occupied the area throughout the Early Archaic period until about 7,000 years ago. There was a break in occupation after the Early Archaic, but occupation resumed within the Middle Archaic period. This occupation lasted until 4,000 years ago. Following the Middle Archaic period, there was another break in occupation that lasted for over a thousand years. The study area was inhabited again during the Woodland period, after about A.D. 1. After A.D. 1200, elements of the South Appalachian Mississippian pattern can be detected. The study area was largely abandoned before the advent of European settlers in the late 18th century.

Settlement and Subsistence

Despite the small sample size, a number of conjectures can be made about how people lived in the past in the project area. Estimates of population would be premature, but the size of occupation areas will reflect something of group size. While there are few physiographic restrictions on how large a camp or village may be, there is a remarkable similarity in site size within the study area. Site size ranges from less than 100 square meters to well over 1,000 square meters, but the average site size varies by only about 100 square meters. Average site size in the Early Archaic period is 625 square meters; in the earlier phase of the Middle Archaic period, 550 square meters; and in the later phase, 675 square meters. During the Ceramic periods the average site size is 650 square meters.

It would be wrong to make too much of this similarity; the evidence is sparse and the time span is long. Two major problems exist. First, sites are commonly deflated and artifacts are mixed, giving a false impression of site extent. Second, not all sites were used as habitation sites. Nonetheless, it is felt that the correspondence in site size will lend some support to the conjecture that group size was relatively small, and relatively stable, at all times.

Caldwell (1958) has proposed that early occupants of the Carolina Piedmont were forest nomads. Drawing from his ideas and from a general analogy of ethnohistoric groups, it is believed that, during the preceramic occupations (before A.D. 1), people in the study area were organized into small bands or microbands. These bands would have split into smaller task-oriented groups for gathering food and raw materials. Following this reasoning, sites may be divided into three classes: base camps, hunting and gathering stations, and limited activity sites. Limited activity sites are those where people left artifacts whether broken, lost, or thrown away, while exploiting some specific resource such as acorns, fish, or stone. Given data on site size, location, and composition, it is possible to interpret site function.

On the basis of evidence found during the survey, it is suggested that both of the Early Archaic sites are base camps. Of the earlier phase Middle Archaic sites, three are base camps, two are hunting and gathering stations, and six are limited activity sites. About the same

ratios are found in the later Middle Archaic sites, although there are more base camps. Six of these later sites are interpreted as base camps, two as hunting and gathering stations, and five as limited activity sites.

During the Ceramic period occupations (after A.D. 1) one of the sites is a hunting and gathering station and two of the others are small agricultural village sites. Site 38FA48 seems to have been used primarily as a ceremonial center during its later occupation.

All environmental zones were used during all time periods, but trends in site placement can be established. During the Preceramic period there was a shift toward occupation of riverine and valley bottom locations. Only two of the earlier Middle Archaic period sites are in riverine association. The other nine are in uplands and on bluffs and valley slopes. During the later phase of the Middle Archaic, on the other hand, half of the sites are in riverine association. This may indicate that there was a growing dependency on fish and shellfish through time.

During the Ceramic period (after A.D. 1) larger sites are associated with arable land in valley bottoms and smaller ones with upland environments.

To summarize, a number of conjectures about settlement and subsistence have been offered hypothetically.

During the past 10,000 years the study area has been occupied sporadically by small groups of people. During the preceramic period these people were organized into small bands which split into work groups to gather food and materials. Base camps were set up, usually in the major valley bottoms, and work parties foraged in all environmental zones, sometimes setting up small work stations in the uplands. Group composition and settlement patterns stayed about the same through time, although there was a shift toward more intensive occupation in the riverine environments later in the occupation. This shift may indicate an increased reliance on fish and shellfish.

After an interval of non-occupation, pottery-using people moved into the study area and lived in small villages in the valley bottoms. Horticulture was important, along with hunting and gathering. Remnants of work stations from this period can be found in the uplands.

More intensive agriculture may have come during the Mississippian period, but there is no direct evidence for this in the study area.

Site Integrity

During the description of sites, the frequent refrain was "no intact archeological deposits remain." The lack of intact deposits is, unfortunately, the usual condition on the Carolina Piedmont.

To understand what is meant by intact deposits, consider first how an archeological site comes to be. Wind, water and gravity deposit silt, sand, and clay, forming a soil. As this soil forms, people are losing,

throwing away, and leaving artifacts. Houses and hearths are built, fall into ruin, and are eventually leveled by time. This combination of soil, artifacts, and features, thick or thin, is an intact archeological deposit.

A number of things can happen to destroy the integrity of deposits. Most common in the study area is the extreme erosion which has often washed away the original soils and features, compacting the artifacts down into earlier soil. Frequently deposits are disturbed by plow or bulldozer. In any case, results are much the same: the relationships of artifacts and features are changed from what they were at first. This changed condition makes reconstruction of the past much more difficult.

Obviously, even the most disturbed site is not a total loss to archeology. From surveying the study area, knowledge of culture history and settlement and subsistence patterns of past inhabitants has been gained. On the other hand, intact sites would allow for much more refined statements about prehistory.

In summary, only seven of the 31 sites in the study area had buried deposits at all, and only two of these were found to contain reasonably intact deposits. Subsurface deposits were monitored for stratigraphic integrity at sites 38FA42, 38FA44, 38FA45, 38NE8, and 38NE9. As was noted in the site inventory, all of these turned out to be shallow, heavily disturbed, and lacking in integrity. Sites 38FA41 (McMeekin Shelter) and 38FA48 (Blair Mound) were found to be promising stratigraphically. Both of these sites were extensively tested, and results are given in following chapters.

EXCAVATIONS AT 38FA41 (MCMEEKIN SHELTER)

Introduction

McMeekin Shelter is formed by a gneissic rock outcrop on the south bank of a small tributary drainage of Frees Creek. The overhanging rock, about one meter above present ground level, shelters an area of about 10 square meters (Fig. 4). The distance form the back wall of the shelter to the lip of the overhang is less than two meters (Fig. 5). In front of the shelter, and against a hill side, is a small cove of flat land measuring about 75 square meters. All other surrounding terrain is steep and rocky. Oak, gum, hickory, and other plants grow thickly in the drainage bottom.

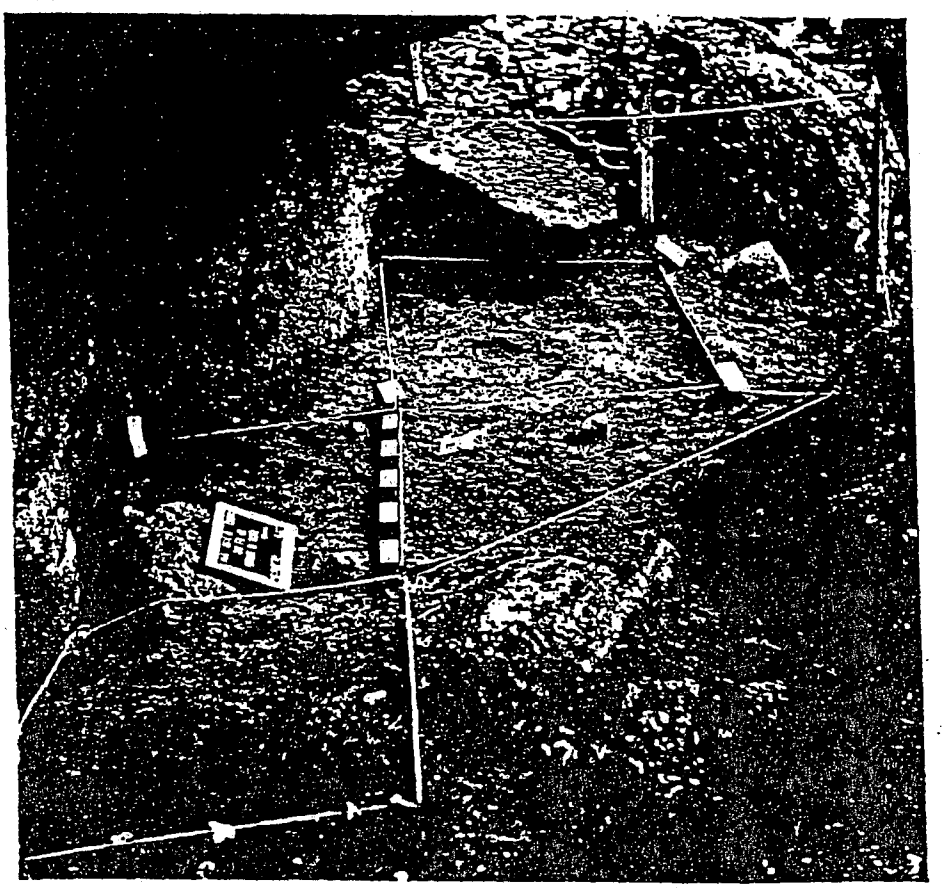


FIGURE 5: Surface of level B after excavation (View to the North). Site 38FA41.

Research Goals

When McMeekin Shelter was found, there were no surface indications of occupation. However, such shelters, rare in the Piedmont, commonly have buried intact archeological deposits. Testing was done to examine the stratigraphy within the shelter itself and in the small area of flat land in front of it.

Strategy involved more than merely checking for buried deposits. Other goals were to define the site boundaries, to reconstruct the occupational sequence, and to interpret the site's function. All of these goals were satisfactorily met.

Test pits in flat land deposits outside the shelter did not produce evidence of occupation and were abandoned. Within the shelter, it became apparent soon that removing all deposits was actually easier than removing only some of them. Thus, what began as a limited test excavation ended as total excavation of the site.

Methodology and Technique

One way to model the formation of shelter deposits is to first assume that there will be horizontal layers of earth with hearths and artifacts on them. The layers, which can be called "living floors," are separated from other living floors by soil which accumulates during periods of non-use.

This notion is far from being without flaw. The temptation is to define a floor at a natural stratigraphic break, and a false impression of unity may be gained. Also, people do not live in the same neat way that this model suggests. Subsequent occupation of the same floor will muddy the picture, as well as intrusions of artifacts, man and rodent, into lower levels. However, this model was believed to be the most elegant available, and was used in directing selection of methods and techniques.

At McMeekin Shelter, deposits were removed by stratigraphic unit to expose old living floors. When deposits were found to be over 10 cm thick, arbitrary vertical units 10 cm in thickness were excavated.

Horizontal control was maintained by imposing an arbitrary metric grid over the site. The largest arbitrary horizontal unit excavated was the square meter. Floors were cleared entirely and artifacts and features were left in place until the floors could be mapped and photographed as a unit.

Fill was removed with trowels and other small tools. All excavated earth was put through 1/4 inch mesh hardware cloth. Artifacts recovered were collected and are stored at the Institute of Archeology and Anthropology. Eighteen person-days were used in excavation and recording.

Stratigraphy

Flat Land

There are about 75 square meters of flat surface immediately in front of the shelter. It would seem likely that this area was occupied at the same time as the shelter, although no evidence of this was found.

Two test pits were put into this area. One was 1m by 3m by 30cm deep. The other was 1m by 2m by 30cm deep. The stratigraphic profiles in each were the same. About 20 cm of recently deposited yellow sand alluvium overlies a pre-Pleistocene red clay soil. No artifacts or features were found.

Apparently, this flat land, which lies just above the stream bottom, has been periodically scoured out by flooding. The same floods apparently deposited sand on the old clay surface. In short, any archeological material which once existed in this area is now gone. The shelter wasn't treated in the same way because of its higher elevation. The shelter floor is about 2m higher than the flat land; thus, the floor was kept out of harm's way in recent years.

Shelter Interior

Six stratigraphic units were recognized within the shelter (Fig. 6). To start from the bottom up, the 60 cm of Unit C strata overlie a gneissic bedrock. The C2 unit is made of chemically decomposed bedrock and coarse yellow-red sand. The higher C1 and C units are, of coarse well sorted, yellow sand. The C1 unit has a particle size somewhat smaller than that of the C unit.

The uppermost Units, B1, B, and A, are all dark, humus-rich, silty sand deposits. They are separated stratigraphically by color and texture differences.

The A unit was subdivided into A1 and A2 subunits on the basis of further texture differences (Fig. 7). The A1 unit is moister and has a higher organic content than the A2 unit. This is probably a difference only in extent of exposure to the elements.

Evidence of human occupation came only from Units A and B and from the upper few centimeters of Unit C.

Soil genesis seems fairly clear cut. Judging from artifact content it is assumed that prior to A.D. 1, an extraordinary flood washed out the shelter and redeposited a quantity of coarse sand. Since that time, several thin layers of soil have formed on top of the sand through colluvial action from the hillside above. Wind-blown sand and decaying plants have also contributed to this process.

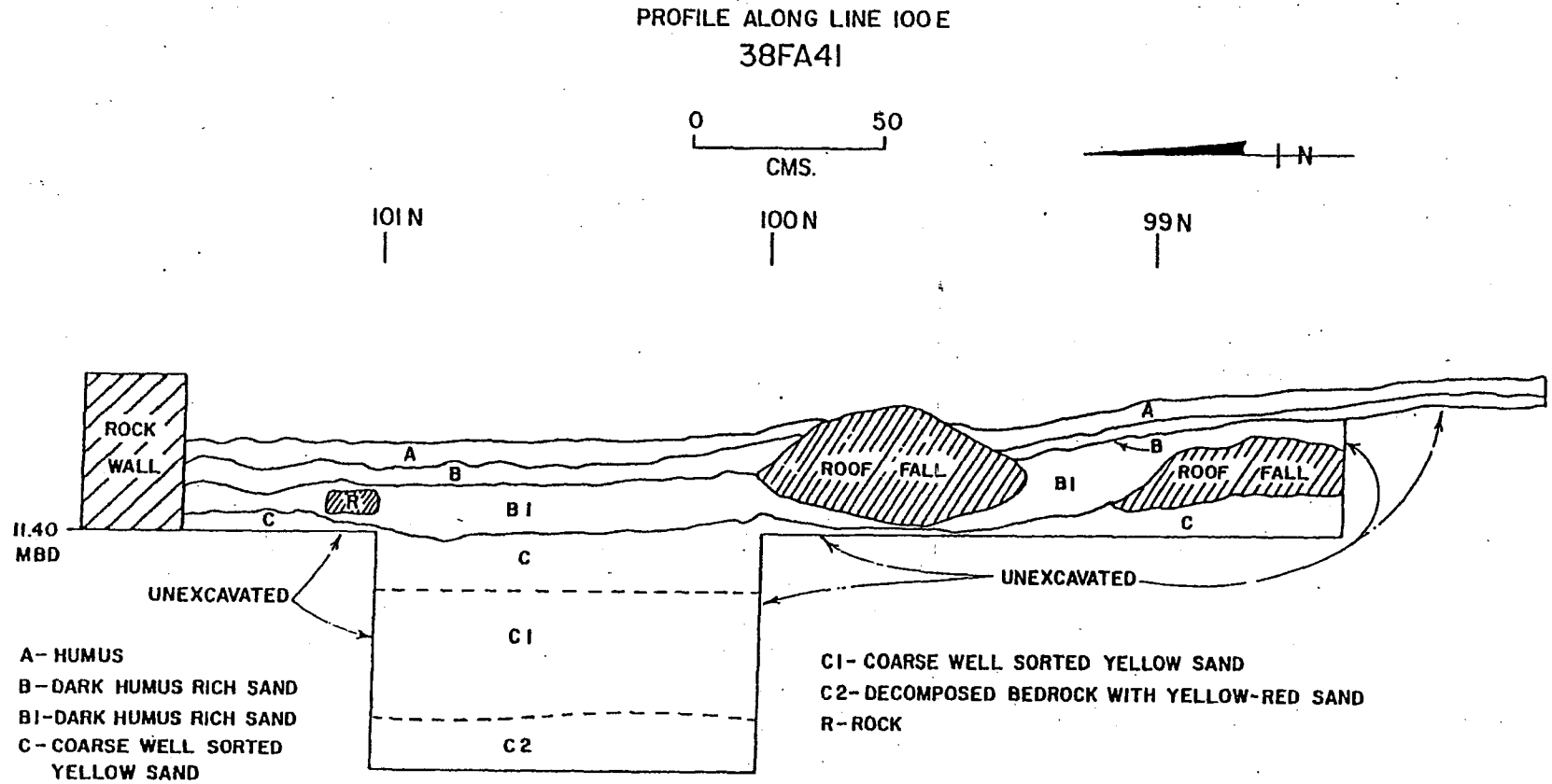


FIGURE 6: Stratigraphic profile at Site 38FA41 (View to the East).

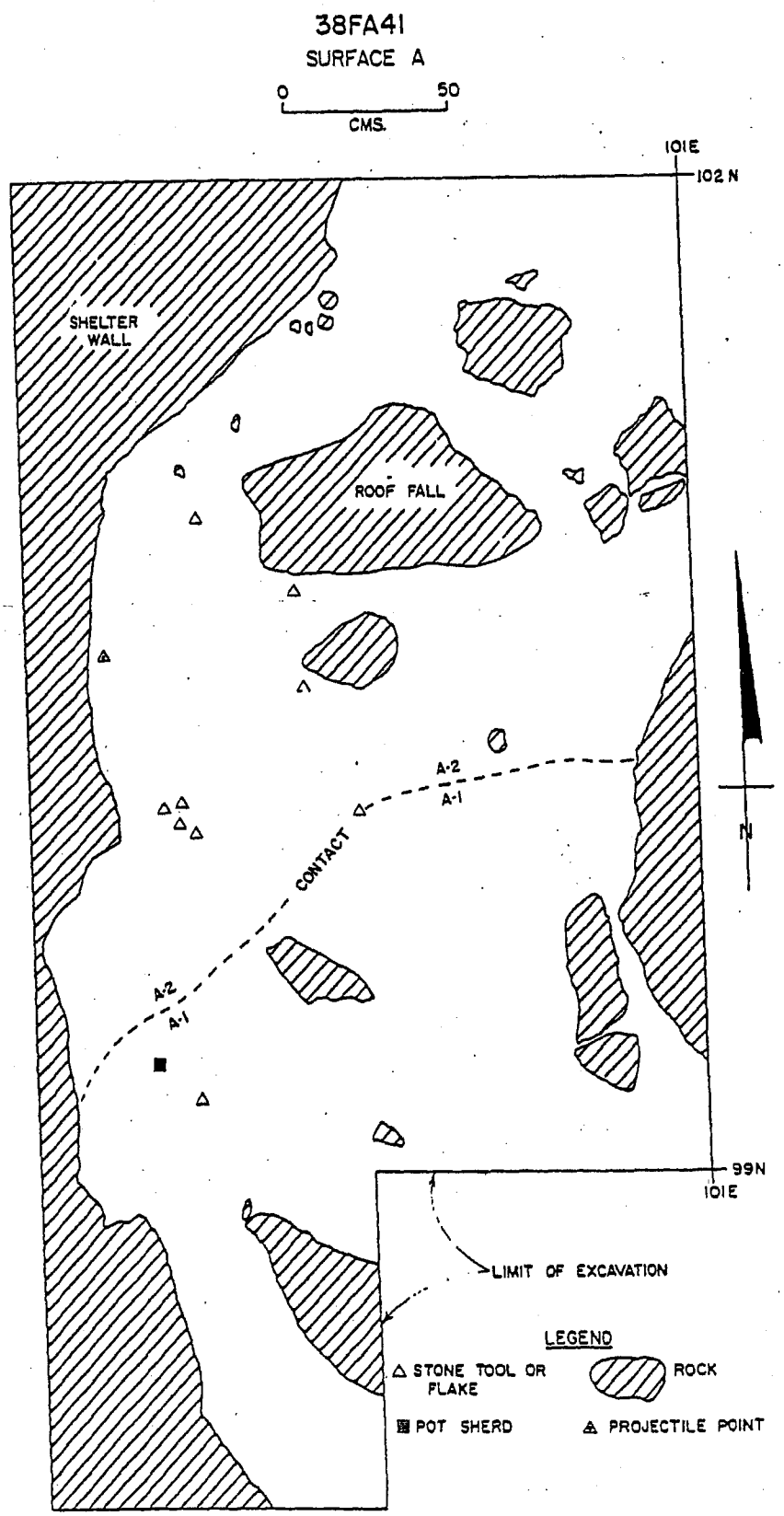


FIGURE 7: Site 38FA41--Surface of Level A (Plan View).

Artifacts

Stone Artifacts

A total of 620 stone artifacts were recovered during excavations at McMeekin Shelter. Among these were flaked stone tools and projectile points, cores and waste flakes, and ground and battered stone implements. Descriptions in this section will follow those of Fitzhugh (1972). Brief definitions of the artifact classes will be given below.

In the flake-tool production process, primary flakes and primary flakes from the exterior or cortical surface, called cortical flakes, are forced from a core, which is a mass of raw material. Most commonly, cores are struck with another rock called a hammerstone in order to produce flakes. This is referred to as hard-hammer percussion. If the primary flakes thus produced are made into tools, secondary flakes are forced from the primary flakes. If the tool is bifacially finished (that is, trimmed on both sides), small flakes with overlapping, wide, shallow scars, called biface thinning flakes, are produced. These distinctions are considered important because they provide the potential for reconstructing tool manufacture sequences.

Distinguishing primary from secondary flakes on a technologically objective basis is difficult, if not impossible. Therefore, the following operational definition is offered. Primary flakes must be of a size consistent with that of finished tools; secondary flakes will be smaller than the flakes used as bases for finished tools.

Primary and secondary flakes may, of course, be used without further modification as they come from the core, in which case they are classified as utilized flakes. A flake exhibiting casual edge resharpening which follows the angle formed at initial detachment is called a retouched flake.

Formal tools, on the other hand, present evidence of regular and extensive retouch which changed the angle of the working edge significantly from that which existed at initial flake detachment. To classify these tools, inferences about form and function are made with reference to ethnographic stone use and to replication studies. Factors thought to be of importance are the form and characteristics of use-edges and the patterns of wear found on tools (e.g., Wilmsen 1970; Gould et al. 1971).

A variety of formal tools was found at McMeekin Shelter. Among these were scrapers, cutting tools, chopping tools, projectile points, and tool blanks. Scrapers are flakes that have been retouched to form an obtuse angle along one or more edges. They are usually retouched unifacially. Cutting tools are similar to scrapers except that acute (sharp) edge angles have been produced. Unifacial knives are cutting tools formed through unifacial retouch; biface knives are produced by bifacial retouch. Projectile points are assumed to have been used to provide sharp ends for arrows or lances. They tend to be symmetrical and to have been ground, thinned, or notched at the base to make hafting easier.

Tool blanks are defined as flakes that have been grossly modified, either bifacially or unifacially, into an uncompleted semblance of one of the formal tool types.

Chopping tools can be of flaked or ground stone and are similar to bifacial knives, but are larger in all dimensions and are crudely worked. Edge-angle values fall mid-way between those for scrapers and knives. Choppers are presumed to have been used for light chopping or heavy cutting.

Ground stone tools are rare in the southeastern United States, with the exception of ground stone axes. Such tools found are usually little more than pieces of coarse stone that show evidence of crushing, grinding, or battering wear. It is hard to infer specific uses for these tools.

Eleven cores were found, with at least two occurring in each stratigraphic level. All were of quartzite. One had been struck along its short axis, producing wide, shallow flake scars. The rest were struck along ridges or at other high-angle points. Flaking was not highly patterned, and it would seem that little attention was given to core preparation. One core from Level B1 had been reused as a chopping tool.

The largest category of stone artifacts was waste flakes. In all, 552 were recovered, with distributions in all levels. Two stone types were present, quartzite and siliceous slate. There is a trend toward increasing popularity in the use of quartzite through time (Table 1).

TABLE 1
(38FA41)

FLAKE MATERIAL TYPE OF LEVEL

	Number of Quartzite Flakes	Number of Slate Flakes
Level A	159 (92%)	14 (8%)
Level B	73 (78%)	93 (17%)
Level B1	171 (77%)	50 (23%)
Level C	39 (60%)	26 (40%)

Flaking procedures seem consistent throughout. About the same ratios of primary to secondary flakes are seen in all levels (Table 2). Hard-hammer percussion techniques are predominant, with no good evidence of soft-hammer (antler or wood baton) use. A number of flakes from Level B1 were driven off by the pressure technique, as evidenced by ground striking platforms and the characteristic thin, lipped form of the flakes.

TABLE 2
(38FA41)

FLAKE TYPE BY LEVEL

	Number of Primary Flakes	Number of Secondary Flakes
Level A	18 (10%)	155 (90%)
Level B	12 (13%)	81 (87%)
Level B1	26 (12%)	195 (88%)
Level C	8 (12%)	57 (88%)

Thirty-six flaked stone tools, exclusive of projectile points, were recovered. All are quartzite, with the exception of one retouched slate flake from the lowest level. A summary of tool types and distributions is given in Table 3. Illustrations of selected tools appear in Figure 8.

TABLE 3
(38FA41)

FLAKED STONE TOOLS BY LEVEL

	LEVEL			
	A	B	B1	C
Biface Knife	3			
Scraper		1		
Tool Blank		3		
Retouched Flake	1			
Cutting Use		3	3	4
Scraping Use		1		1
Biface, Unknown Use		2	11	3

Five cutting tools were trimmed by the pressure technique; the rest were finished by percussion. The largest class of tools comprised bifaces of unknown use. These tools surely represent knives or tool blanks, but quality of the stone is so poor that little more could be determined.

A total of fifteen projectile points were found. All are of quartzite and all were finished by pressure flaking. Classificaiton was based only on form. A summary of point types and their distribution within the site is given in Table 4. Illustrations of selected projectile points are presented in Figure 9. Points are similar in form to a number of types that span the entire Woodland and Mississippian occupation of the Carolina Piedmont (see Coe 1952, 1964).

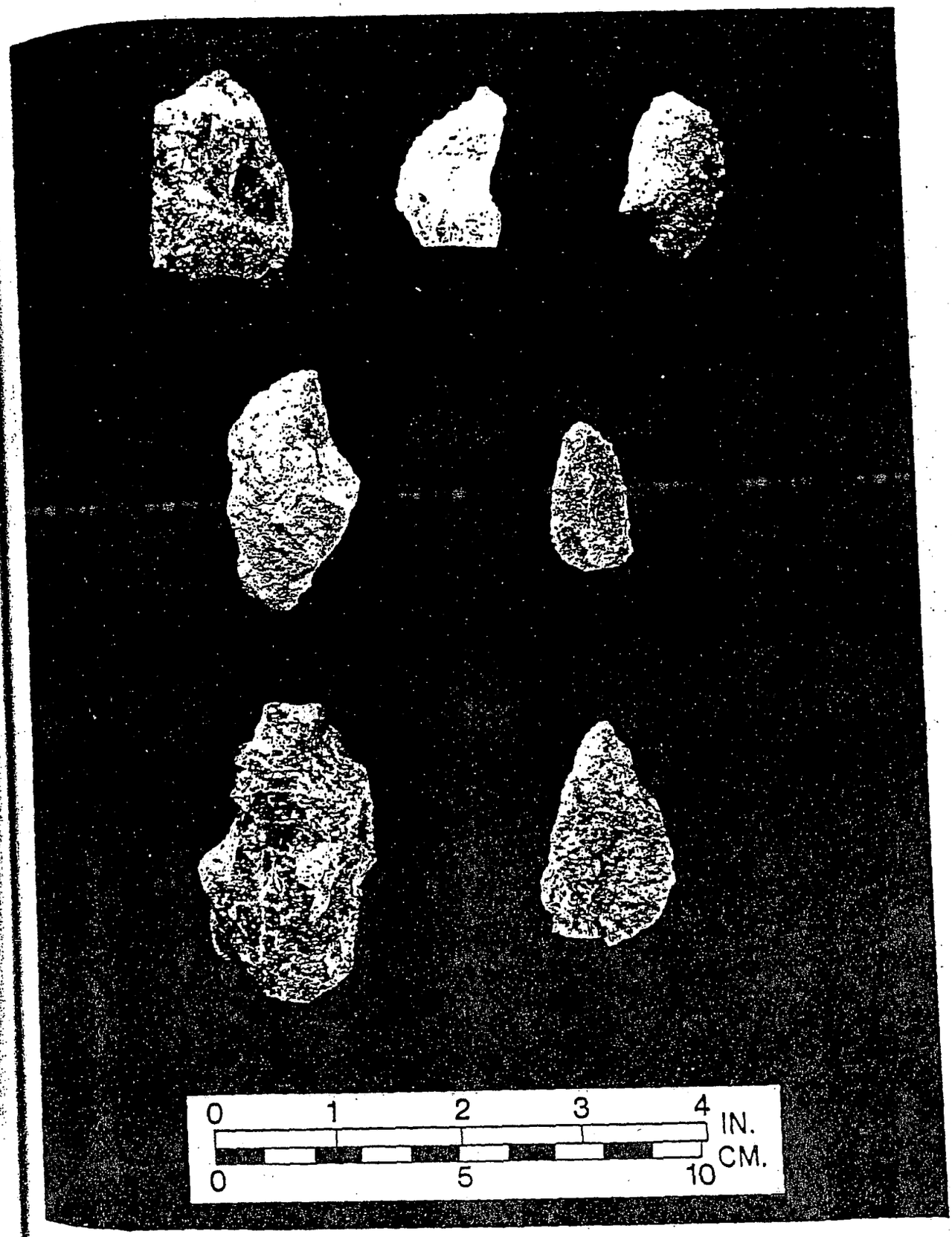


FIGURE 8: Flaked stone tools from 38FA41. (Top Row: Retouched Flakes; Middle Row: Bifacially Flaked Cutting Tools; Bottom Row: Bifacially Flaked Tool Blanks).

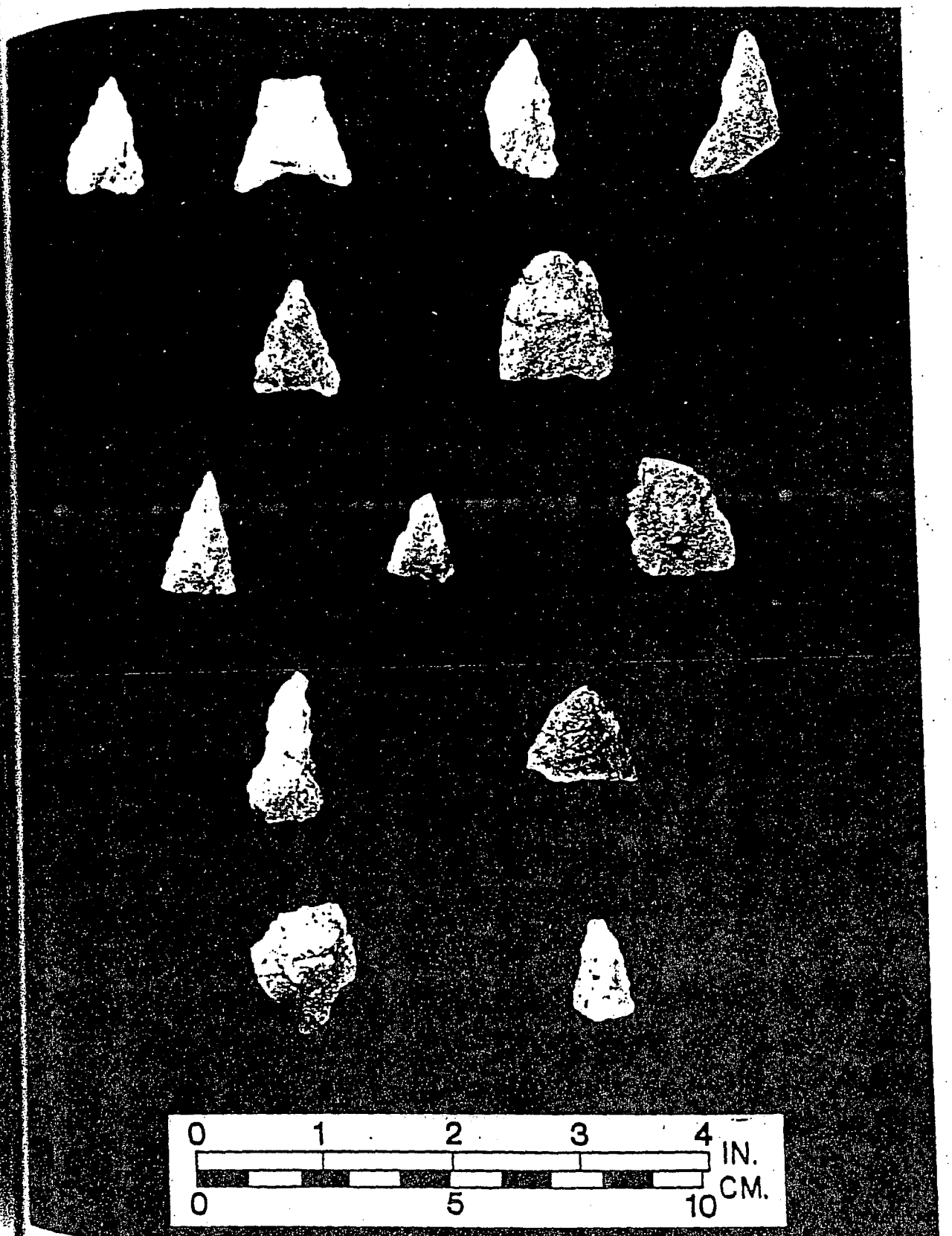


FIGURE 9: Projectile points from 38FA41. (Top Row: Triangular, Concave Base Projectile Points; Second Row: Triangular, Slightly Concave Base Projectile Points; Third Row: Triangular, Straight Base Projectile Points; Fourth and Bottom Rows: Projectile Point Fragments.

TABLE 4
(38FA41)

PROJECTILE POINT DISTRIBUTION

	LEVEL			
	A	B	B1	C
Triangular Points				
Straight Base	1	1	2	1
Concave Base	2		1	1
Convex Base		1		
Serrated			1	
Leaf Shape Points				
Convex Base		1	1	
Fragmentary Points				
Unknown Form				2

One other flaked stone object was found. It is square, percussion trimmed gunflint, found just below the surface of Level A. The flint is a translucent yellow-amber, and is the same in form and material as others described as "French gunflints" (Witthoft 1966: 28-32; Woodward 1960). According to frequency distributions on the Macon Plateau, manufacture and import of these flints centered in the last quarter of the 18th century (Hanson 1970: 55).

Only four ground stone tools made of gneiss were found (Fig. 10). One tabular specimen from Level A had been ground along one edge to produce a chopping or heavy cutting tool. Two grinding tools were analyzed, one from Level B, the other from Level B1. These are both cobbles and appear to have been used as hand-held stones, perhaps for grinding nuts or plants. A battered and end-ground stone came from Level A. Function is undetermined.

Ceramic Artifacts

Eighty-six ceramic vessel sherds constitute the entire ceramic artifact assemblage at McMeekin Shelter. Sherds were classified into three types based on temper, paste, and hardness. Within the types are 10 varieties classed according to vessel surface treatment. Classification methods followed those of McKern (1939) and Shepard (1956). The distribution of sherds by stratigraphic level is shown in Table 5.

First, the ceramic types are not diagnostic for time of vessel manufacture, since all types are found in good number in all levels. There is a tendency, though, for the technologically simpler uniform-paste sherds to occur in lower levels, while heavily tempered ceramics are found more often in upper levels. It is of note also that the only

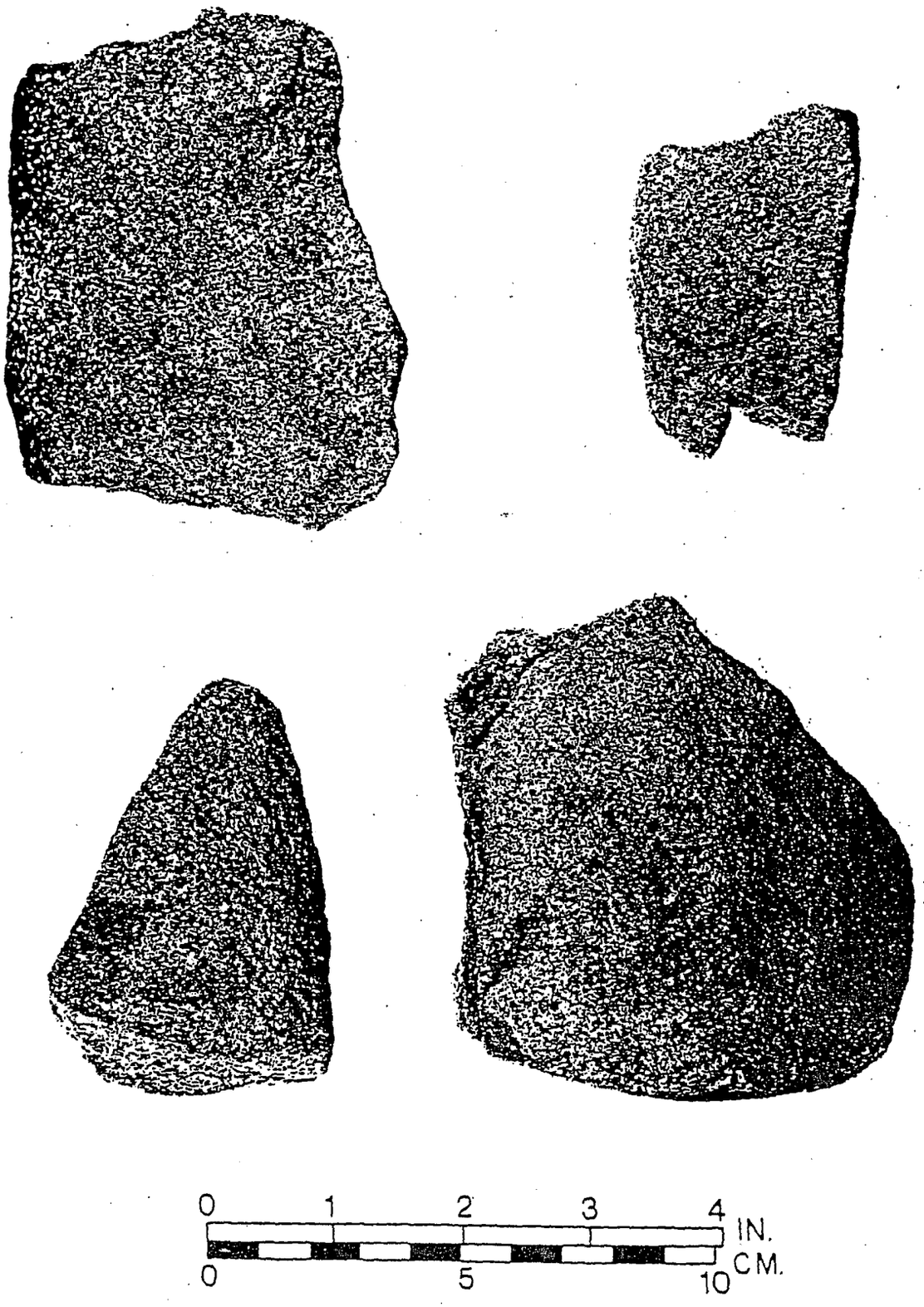


FIGURE 10: Ground stone from 38FA41. Top row left is an edge-ground cutting tool. All others are unshaped pieces of gneiss which show crushing and ground wear.

TABLE 5
(38FA41)

CERAMIC SHERD DISTRIBUTION

	Type	LEVEL A	B	B1	C
I	Sand/Crushed Quartz	9	4	6	5
	Smoothed Interior		4		1
	Smoothed Exterior				1
	Smudged/Burnished Int.			1	
	Burnished Int./Ext.		3		1
	Rim : Bowl			1	
	Base			1	
II	Sand/Occasional Quartz	10	5	11	3
	Smoothed Ext/ Burnished Int.	1			
	Burnished Ext.			1	
III	Sand/Uniform Paste	2	3	4	2
	Smoothed Int./Ext.		2		
	Smooth Int.				1
	Simple Stamp				1
	Check Stamp			1	
	Rim : Bowl			1	
	Rim : Jar			1	

sherds of simple stamped pottery were found in lower levels, while the more carefully treated smudged, burnished, and smooth varieties are found in greater measure in upper levels. These latter varieties resemble those of the Mississippian period found at Blair Mound. The stamped varieties are most like those found in Early and Middle Woodland contexts elsewhere on the Piedmont.

Non-Artifactual Remains

A variety of non-artifactual specimens was collected from McMeekin Shelter, including soil, pollen, charcoal, and bone samples. These samples are stored at the Institute of Archeology and Anthropology, but none have been formally analyzed. Animal bones were few and in very poor condition. On superficial examination there appear to be remains of deer and various rodents present in the collection. Some of the bone was split and burned.

Site Structure

The way artifacts and features are arranged within the site is the "site structure." These arrangements form patterns from which interpretations of site use may be made. In addition to vertical distributions, horizontal relationships must be considered. As discussed earlier in this chapter, it was assumed there would be artifacts and features on buried surfaces, and that examination of these remains would provide insight into human use of McMeekin Shelter. Three such surfaces were found and can be interpreted. It must be kept in mind that faith in these interpretations must be tempered with the realization that neat archeological models of site formation do no always correspond with the actual events that took place in the past.

The first surface to be examined was the uppermost ground level or, to be more exact, the surface under an accumulation of leaves, sticks, and rat droppings. On this surface (Fig. 7) seven pieces of flaked stone, a pot sherd, and a projectile point were found. Just under the surface was a gunflint of Euro-American origin. Observing this surface allows us to understand the very slow rate of natural deposition at the site, as the artifacts might easily span a 500 year period, or even longer. Aboriginal artifacts are the kind that would be expected to occur at a short-term hunting camp.

The surface found at the top of Level B (Fig. 11) was much more complex, and a wide range of activities is represented. That food was cooked and eaten at the site is demonstrated by the presence of two ash and charcoal lenses and by the presence of split and burned bone. Considerable stone tool production is indicated by the profusion of stone cores, primary flakes, and tool blanks. Cutting, scraping, and milling tools are also present and suggest processing of both animal and plant foods. The occurrence of broken projectile points suggests that weapons may have been refitted at the site.

Deposits at the surface of Level B1 differ little from those of upper surfaces (Fig. 12). The same indications of stone working, cooking, and plant and animal collecting are present.

Whether artifacts were deposited at each level during discrete occupations or accrued through a series of short occupations, interpretation remains the same. The Frees Creek drainage was subject to vigorous and frequent hunting and gathering expeditions over a long period.

Another way to get at site function is to utilize the formula for systemic index proposed by Winters (1969: 131-137). The index is obtained by taking the count of fabrication, processing, and domestic implements and dividing the resulting figure by the number of weapons. This was done for the McMeekin collection, after excluding ceramic artifacts, which are not used in this formula. Results are given in Table 6. Despite the small sample size, it is apparent that there is no great disagreement in index values among levels. The index value of 2.0 is in line with Winters' expected value for transient camps. The

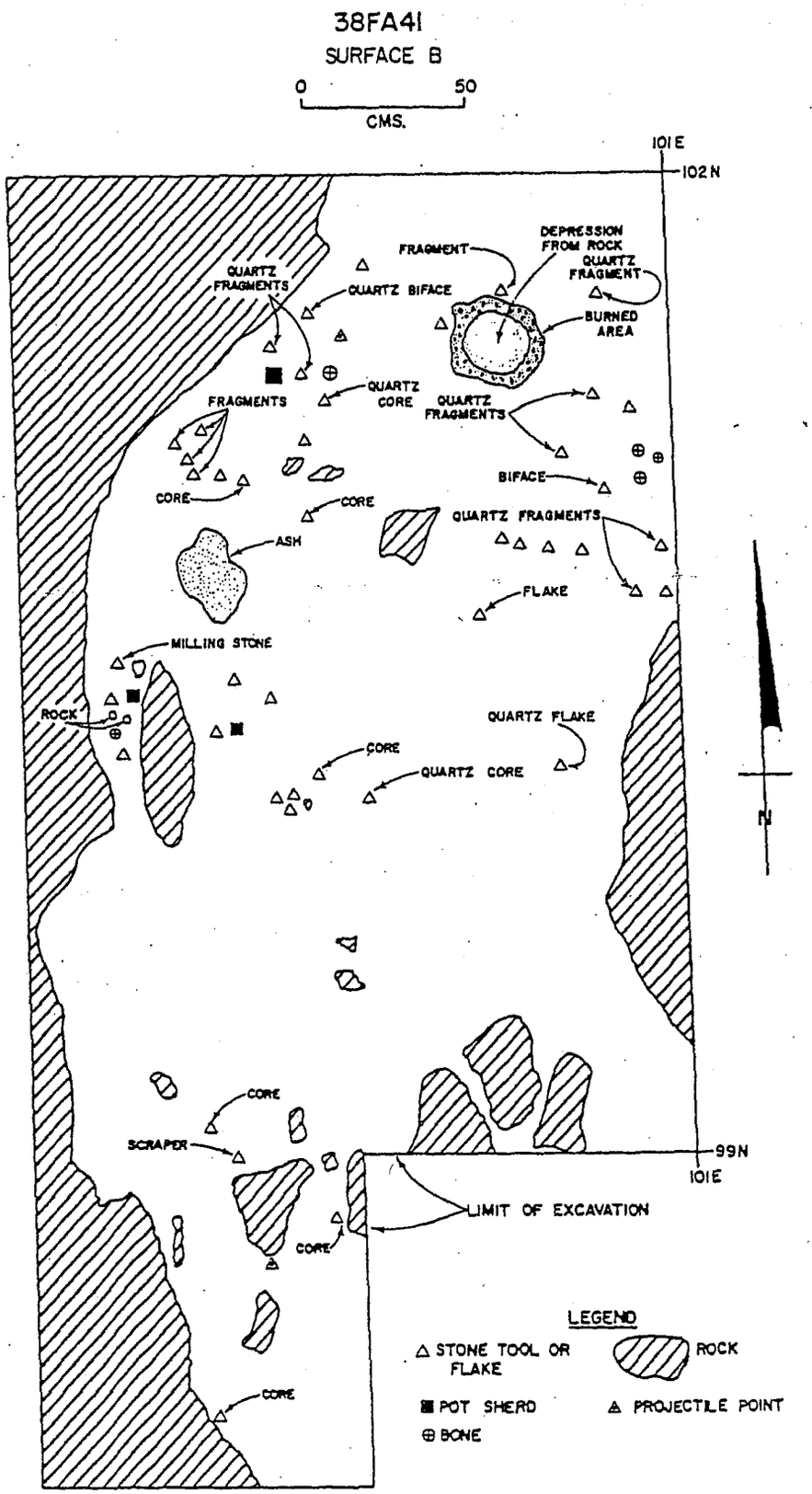


FIGURE 11: Site 38FA41--Surface of Level B (Plan View).

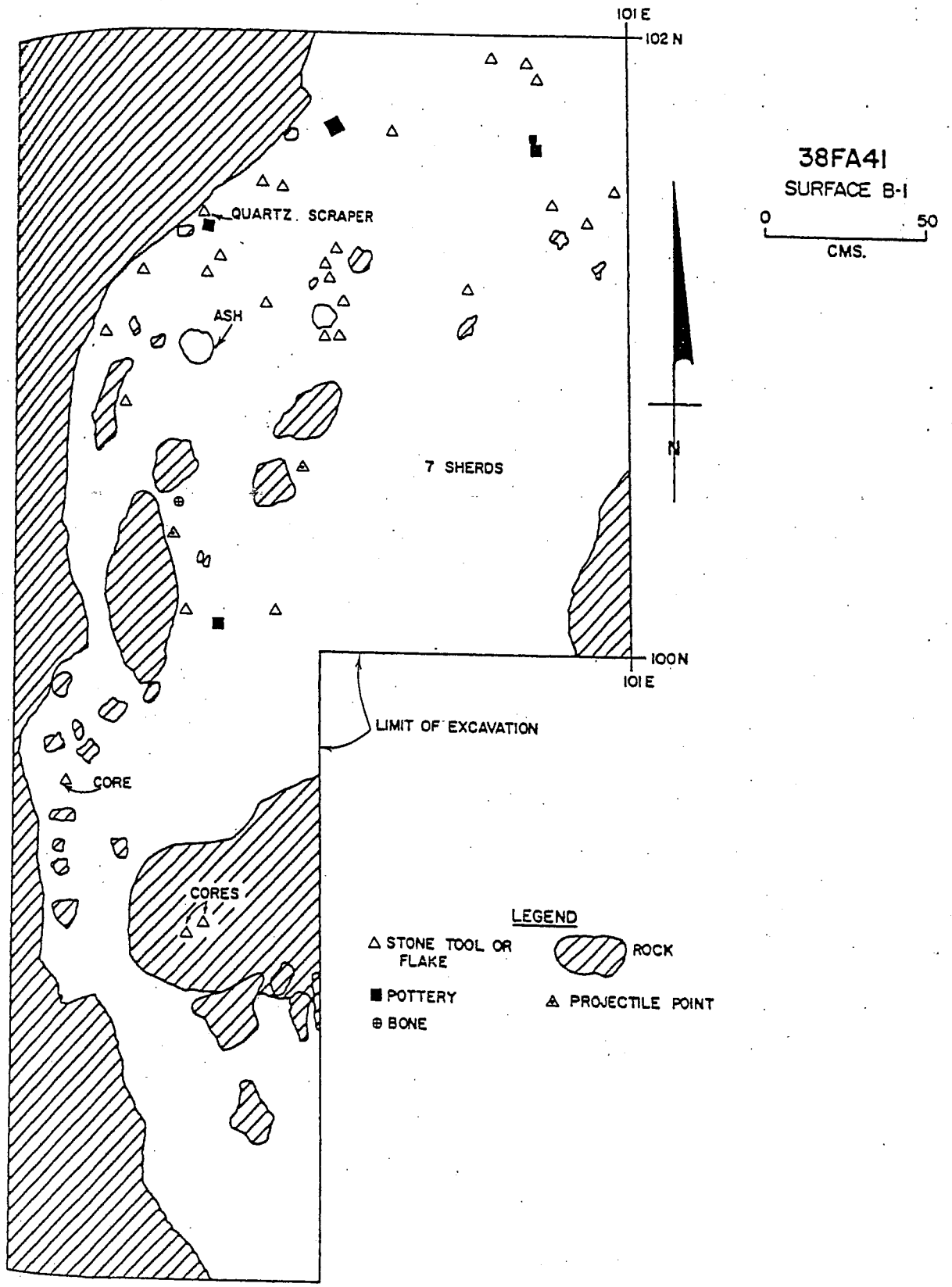


FIGURE 12: Site 38FA41--Surface of Level B1 (Plan View).

higher figures (3.0 and 3.3) are probably produced by the addition of plant processing tools in the McMeekin case, and it is believed also that the 2.0 - 4.0 value range will hold true for other small, generalized hunting and plant gathering stations, should this formula be applied to other sites on the Piedmont.

TABLE 6
(38FA41)

APPLICATION OF WINTERS' SYSTEMIC INDEX

LEVEL	Number of Weapons (Projectile Points)	Number of other Implements	Systemic Index
A	3	6	2.0
B	3	10	3.3
B1	5	15	3.0
C	4	8	2.0

Summary and Conclusions

McMeekin Shelter was doubtlessly only one of a great many small outlying camps and way-stations serving larger prehistoric settlements along the Broad River. The site assumed a large importance archeologically becaused it remained relatively intact. Most similar camps have long since been buried, washed away, or otherwise made unavailable for study.

Excavation of the major portion of the shelter provided good evidence of the important role wild plants and animals played in the subsistence economy of past inhabitants of the Parr region. The shelter was used as a short-term hunting and gathering camp many times over a period which may have begun as early as two thousand years ago and which may have ended as recently as the 19th century.

There are indications of a wide range of activities. Locally available stone was collected and worked to produce stone tools for immediate needs. Tools were sharpened and repaired in the shelter. Processing of plants and animals which occurred at the site might have included skinning and rough-butchering of animals as well as processing of nuts, fruits, and other plants in season.

It is of note that there is little change over time in tool-making techniques or in the tool kits themselves. By extension, one might speculate that there was little change in settlement and subsistence strategies during the time the shelter was occupied. This speculation leads to larger questions.

After A.D. 1200, the Carolina Piedmont fell within the Mississippian sphere of influence, a period of sophisticated religious and political organization. One might ask what changes occur in the economic organization of a society when this sort of culture-contact takes place. It may be that evidence at other sites of elaborate ceremonialism and extensive trade networks is little more than a superficial gloss, obscuring the fact that little fundamental change occurred in the way people went about making their livings. In any case, excavation at McMeekin Shelter has provided a starting point for addressing this and similar questions.

TEST EXCAVATIONS AT 38FA48 (BLAIR MOUND)

Introduction

The Blair Mound site is located on a low-lying terrace of the Broad River near Blair, South Carolina (Fig. 1). It is on a slight natural rise covering about 5 1/2 acres (Figs. 13 and 14). This area has been plowed, as have perhaps another hundred contiguous acres. To the east of the site are wooded hills. Beaver Creek is just to the south.

During survey, a few ceramic sherds were noted on the surface. More intensive collection revealed a sparse surface scatter of artifacts about 2 1/2 acres in extent, with a prehistoric mound at the center of the scatter. The mound once stood to a much greater height, according to local informants, but was reduced to its present elevation by bulldozer about 1960.

During test excavations, 126 square meters were opened and excavated various depths. Over 6,000 artifacts were recovered, 95 percent of which were ceramic sherds and waste flakes from stone chipping. Three hundred person-days were expended in excavation.

Research Goals

The primary reason for excavation at Blair Mound was to test the site for National Register eligibility. Little could be said from examination of the surface about the nature, quality, and extent of deposits, or about the site's research potential. Along with these concerns were questions basic to any archeological excavation: How old is the site? Who lived there? What was the site's function? What kind of changes occurred at the site? Can these changes be explained?

Methodology and Technique

The first step taken was an attempt to define site boundaries and activity areas. A technique used elsewhere with good results has been to collect surface artifacts in a systematic manner and to observe their patterning (Redman and Watson 1970). The assumption implicit in this method is that density of artifacts on the surface reflects density of artifacts below ground, and that analysis of patterns will point to buried features such as houses, refuse pits, and the like.

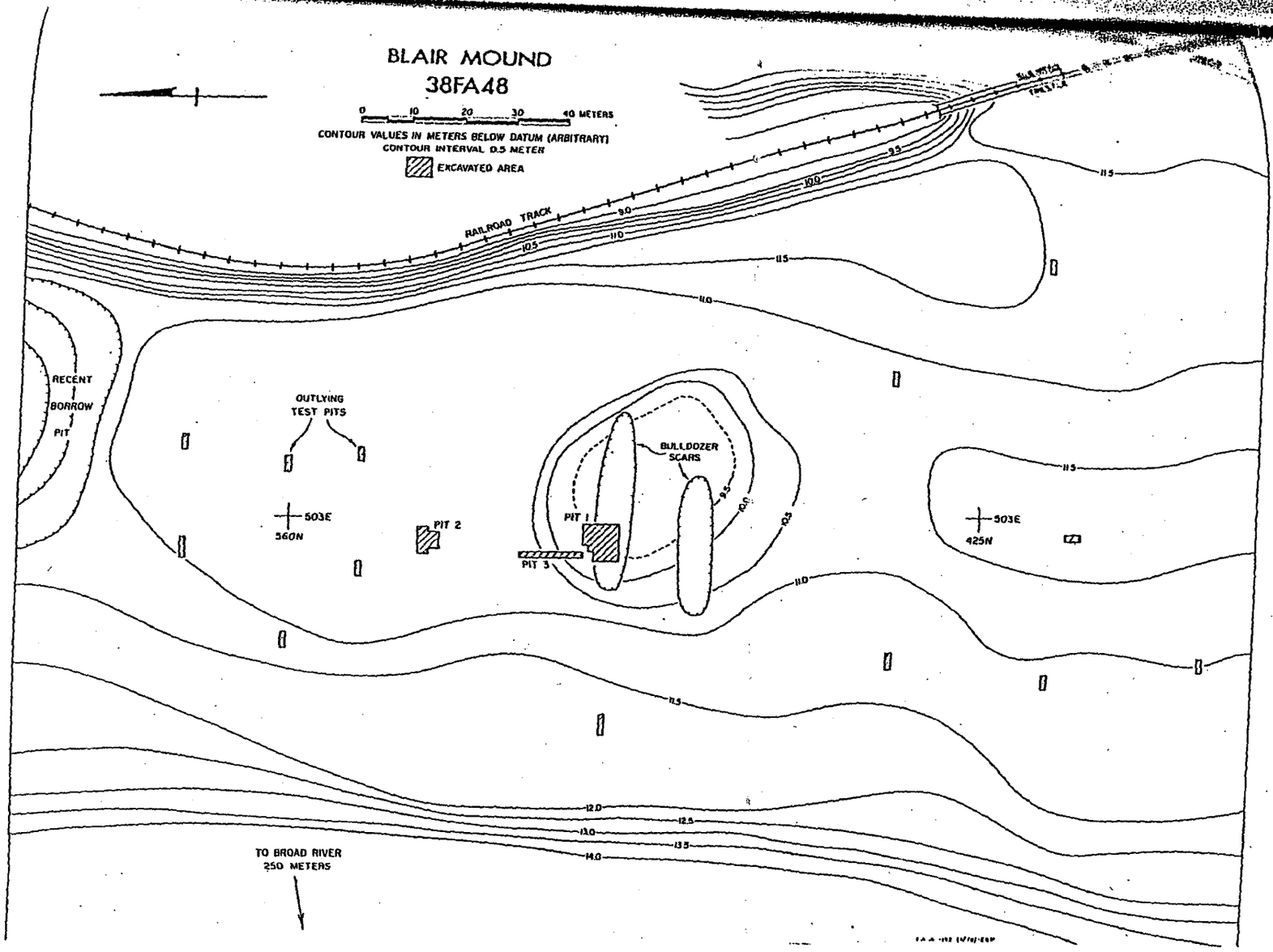


FIGURE 13: Map of 38FA48--Blair Mound (Plan View).

FIGURE 14: Photo of Site 38FA48--Blair Mound (View to East, after flood).

At Blair, 150 surface collection stations were placed systematically at 10 m intervals within the supposed area of the site (Fig. 13). A stake was placed at each station and artifacts were collected within a 2 m radius of each stake.

Only 218 artifacts were collected at the surface collection stations. What was learned could have been predicted by casual observation -- most artifacts on the surface were found close to the mound. No artifact clustering away from the mound was noted, nor could clear site boundaries be drawn; moreover, artifacts were not found on the surface outside the 2 1/2 acres centered on the mound.

In a further effort to determine the subsurface nature of the site, 16 test pits were placed systematically within the site area. Placement was subjective and directed toward assuring wide and equal coverage. Pits were 1 X 3 m or 1 X 4 m horizontally, and were taken to varying depths. Pits I and II were expanded in order to define features revealed within them. Pit III was expanded to provide more information on mound stratigraphy.

Excavation units were placed within an arbitrary grid system for control. A point on the mound was considered to be 500 m north and 500 m east of a hypothetical grid zero point. All measurements were taken by transit and tape from this point. The same 500 N 500 E point was assigned an elevation of 10 m below datum, and the elevation was extended by transit throughout the site.

The largest horizontal excavation unit was the 1 X 4 m test pit or the 2 X 2 m search unit, used in the fill of Pit I. Occupation surfaces and midden were excavated in 1 meter-square units. Units were designated by the intersection value of grid lines at the NE corners of squares.

Plow zone and artificial fill were removed in 20 cm arbitrary vertical levels. All other deposits were excavated as natural stratigraphic levels, or as 10 cm arbitrary levels within natural levels. Features, such as pits or postholes, were excavated as separate units.

Deposits from stratigraphic test pits were not screened, nor were those from plow zone or artificial fill levels. Deposits from midden, features, and occupation levels were put through 1/4 inch mesh hardware cloth.

Plan view and profile drawings were made of excavation units. All artifacts found were collected and stored at the Institute of Archeology and Anthropology.

Stratigraphy

Stratigraphy at the Blair Mound site will be described in detail only for Pits I, II, and III. No features were found in any of the outlying test pits, although artifacts were commonly found in the plow zone and upper 20 cm of undisturbed deposits. For the outlying pits, stratigraphy can be generalized as being similar to that of Pit II (see Fig. 19). Yellow sand alluvium extends to a depth greater than 2 m. Colluvial action on hills to the east, as well as flooding from the Broad River, has produced a complex series of strata. These are formed of thin layers of silt, clay, and decomposed organic matter, interbedded with the sand alluvium. No clear horizon markers were seen to extend throughout the site. It may be, however, that the thin, dark silt layer in Pits II and III (Surface of Level C, Pit II; Level D, Pit III) reflects a single flooding event.

Mound stratigraphy can be seen most clearly in the north wall profile of Pit I (Figs. 15 and 16). The lowest unit, Level D, is yellow sand and is without sign of human occupation. Level C is a dark brown-to-black organic-rich midden deposit, with a high artifact count. Middens are accumulations of refuse, built up from lost and discarded artifacts and from discard of waste food and fiber. Sometimes middens form much like a thick living floor; other times they are formed as refuse dumps. The Level C stratum in Pit I appears to have been formed as a living floor.

Above the midden is a thick artificial fill unit (Level B). It was extremely hard to differentiate sublevels within the level during excavation. The profile reveals, though, that there is a clear stratigraphic break, representing two mound-building phases. The lower was called Mound I; the upper, Mound II. This interpretation was given strength by the presence of burned clay daub at the Mound I-II contact. This indicates the erection and destruction of a wattle and daub structure atop Mound I, then the rebuilding or capping of Mound I with Mound II deposits. There may well have been subsequent rebuilding or elevation of the mound above the Mound II unit as the upper deposits were leveled in the recent past. Lenses within Level B, as indicated by the designations I, II, and IV in Figure 15, are interpreted as individual basket loads of earth, which differ in color and texture from the surrounding matrix.

The uppermost unit, Level A, has been disturbed by plow. While only a few cm thick on the mound, the plow zone extends as deep as 30 cm in other parts of the site.

Stratigraphy in Pit III is somewhat obscure (Fig. 17). The dark, pre-mound midden can be seen on the right of the drawing, overlain by artificial mound-fill deposits. Severe erosion of mound-fill deposits has produced a muddied picture of stratigraphic sequence. No clear demarcations of building stages could be seen. The upper 30 cm contained sparse ceramic sherds and occasional pieces of burned clay daub with stick and reed impressions. At 1.5 m below surface, an Archaic projectile point was found.

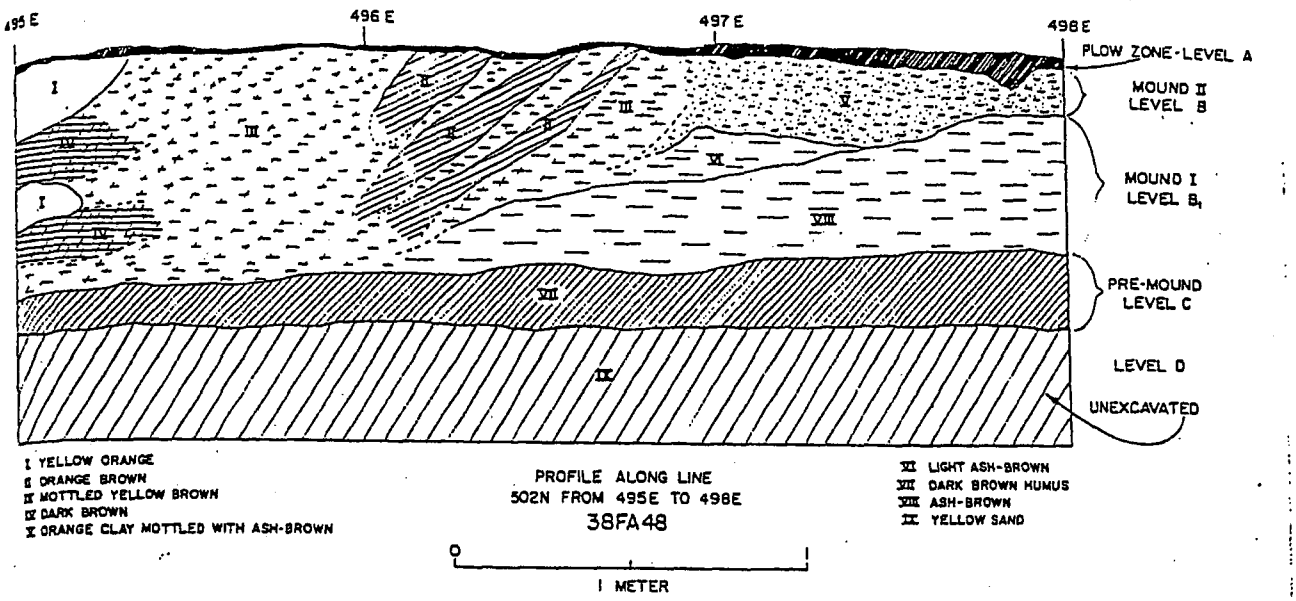


FIGURE 15: Site 38FA48--Drawing of North Wall of Pit I (View to North).

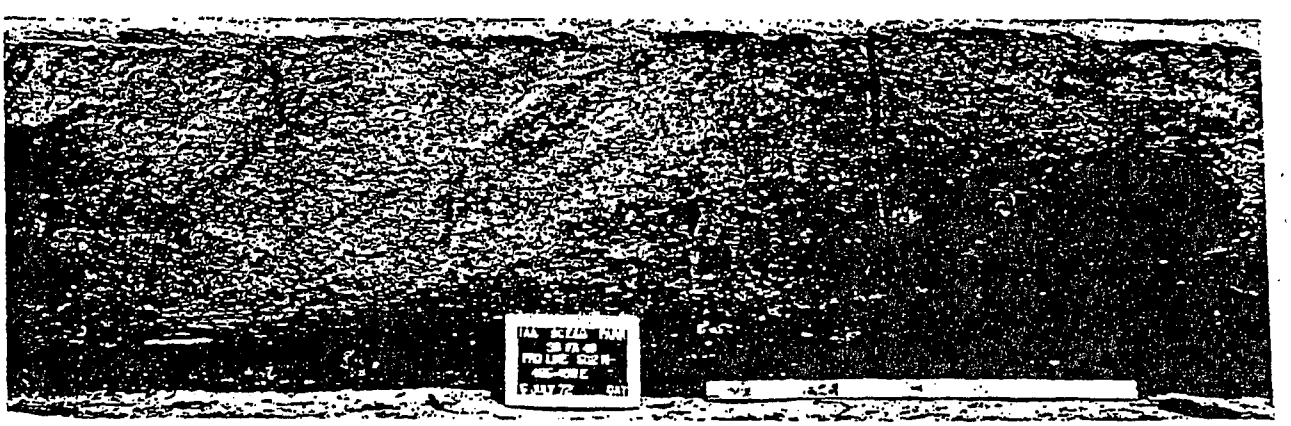


FIGURE 16: Site 38FA48--Photo of North Wall of Pit I (View to North).

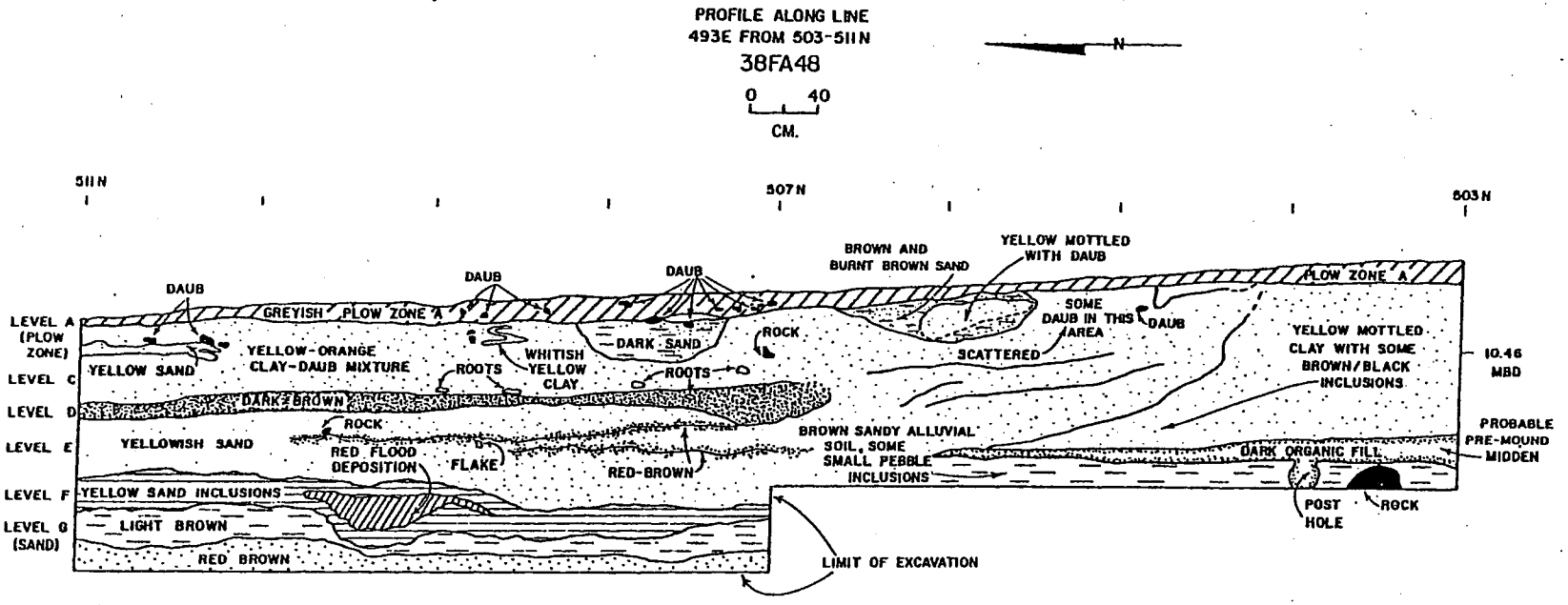


FIGURE 17: Site 38FA48--Drawing of East Wall of Pit III (View to East).

Pit II contained a human burial and other features. The general stratigraphy of the pit was described at the beginning of this section. Features from Ceramic Period occupations were found in Levels B and C.

Site Structure

As discussed, features were found only in Pits I and II, and little can be said about site structure outside these units. At the surface of Level B in Pit II, a tight cluster of 14 cobbles next to a pit which intruded through Levels B and C was found. The cobbles were discolored by fire, and the feature is thought to be a roasting pit. Three pits were found at the surface of Level C, as was a scatter of human bones (Figs. 18 and 19). The pits were without content, except for dark, silty earth fill. Position of long bones suggests a bundle burial. The feature is unusual in that the burial is on top of an old, buried ground surface. This feature is interpreted as representing a burial and subsequent disinterment of the body, by either humans or animals. No grave goods were found, and diagnostic artifacts were lacking. It is felt that the burial and disinterment occurred during, or soon after, the Mound occupation. The bones are in very poor shape, and were not formally analyzed. Bone size and rugosity are consistent with that to be expected in an adult male. Another small pit was found within Level C of Pit I (see Fig. 20). It also was without content.

A photo of Pit I, somewhat the worse for wear after heavy rains and flooding during the field season, is offered as Figure 21. The left half of the pit has been excavated to the surface of Level C; the right half has been taken to the surface of Level D. The small holes are excavated postmolds. During excavation, the surface of Level C was exposed as a unit (Fig. 22). It is clear that a structure was built directly on top of the Level C midden deposits, as attested to by the postmolds which begin at the surface of Level C and intrude through the level into the sterile sand of Level D. Burned clay daub suggests wattle and daub walls applied to large upright posts. Activity areas were not seen as clearly as was hoped. There is an unmistakable cooking hearth formed of a baked clay ring, or basin, in the southwest quadrant. Ash, bone, and shell fragments surround the hearth. There are indications of stone flaking and stone tool discard in the northwest and northeast quadrants. Density scattergrams were plotted for ceramics, bone, and shell, but without revealing any good clustering. Little more can be said about activity areas.

In an attempt to define the structure that once existed at this level Charles Jenks did a computer-aided study in an attempt to define which postmolds were related (Jenks 1972). Diameter, elevation, and location of postmolds which intruded through Level C into Level D were analyzed using Ward's Grouping Program (SPL-2) and Correlation Analysis with Transgeneration (BMD02D). The program established sums, means, cross-product deviations, and standard deviations of all variables. A graphic display was produced by computer, giving a grouping with an error factor of 0.3453. This display has been redrawn to scale as Figure 23.

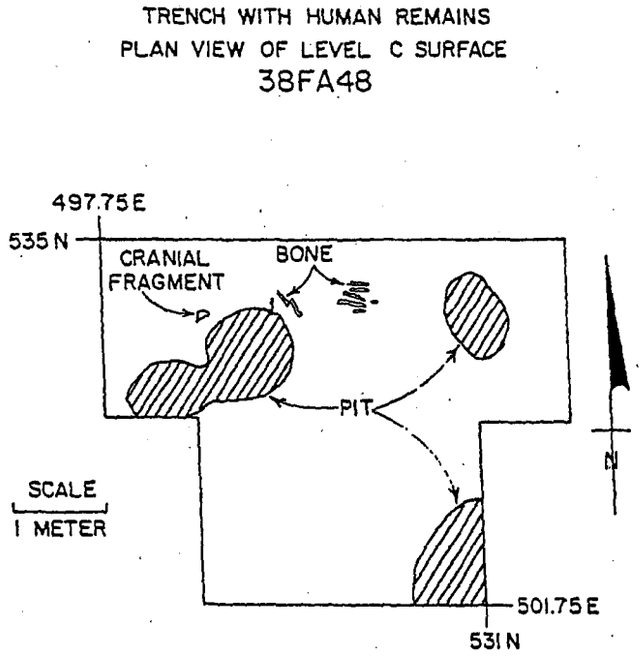


FIGURE 18: Site 38FA48--Map of Level C Surface in Pit II (Plan View).

FIGURE 19: Site 38FA48--Photo of Level C Surface in Pit II, showing burial after excavation (View to East).

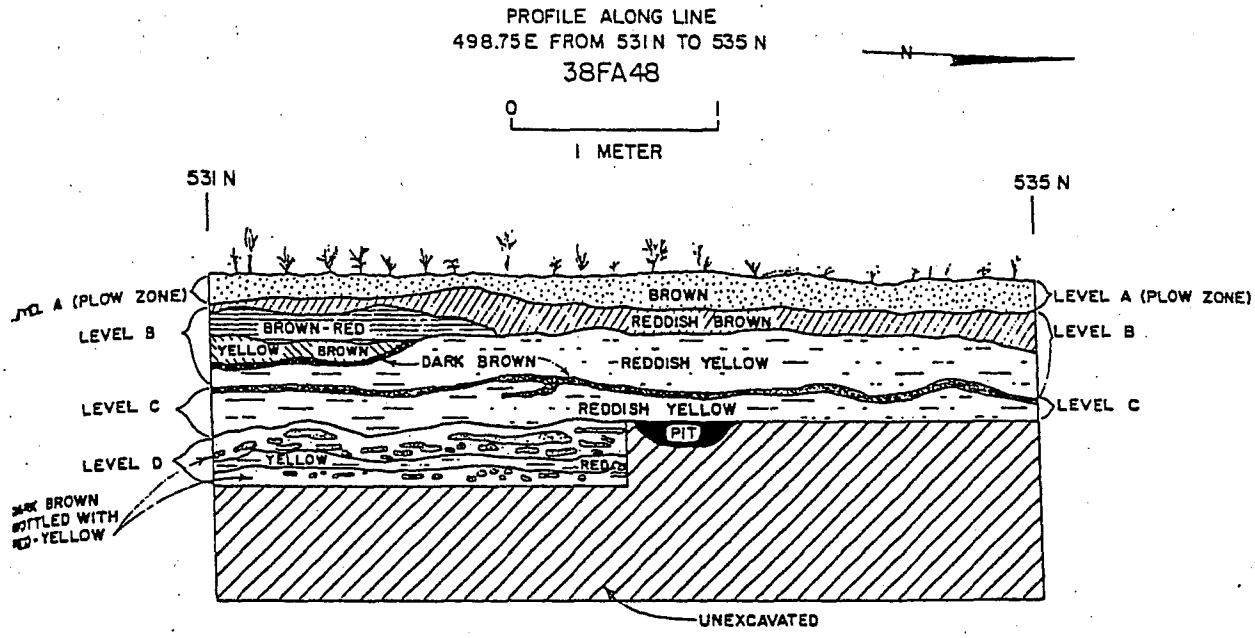


FIGURE 20: Site 38FA48--Drawing of West Wall of Pit II (View to West).

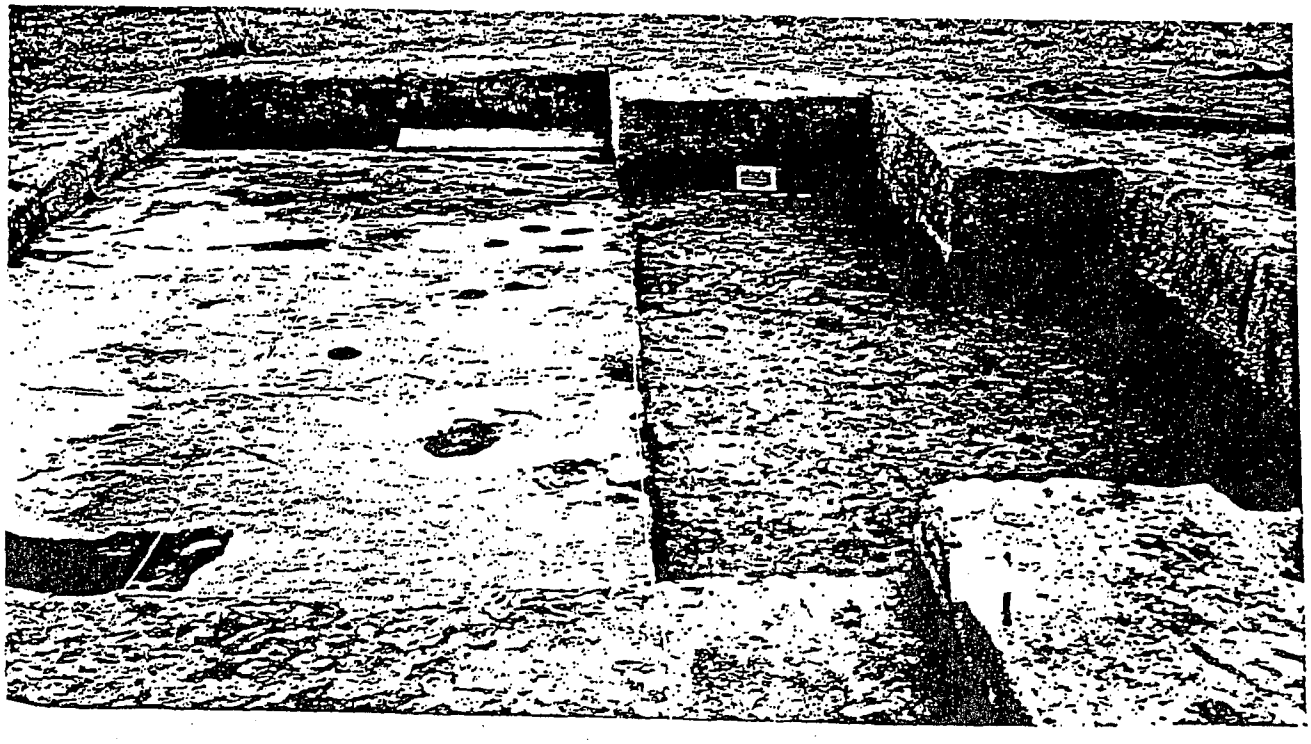


FIGURE 21: Site 38FA48--Photo of Pit I after excavation (View to East). South half is at Level C Surface; North half is at Level D Surface.

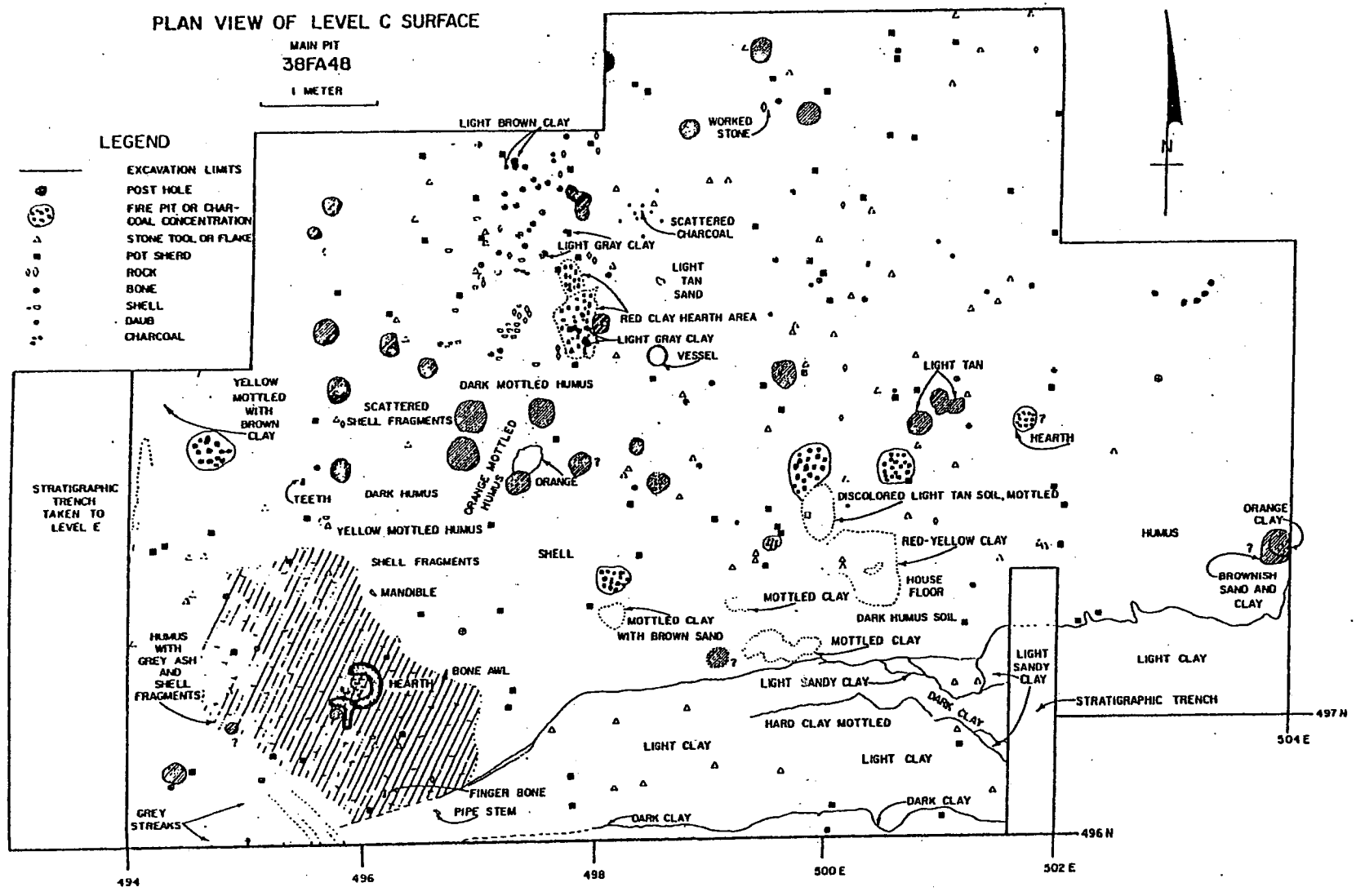


FIGURE 22: Site 38FA48--Map of Surface of Level C in Pit I (Plan View).

Jenks interprets the results as indicating double-wall construction with an opening to the southeast. While there is a definite suggestion of paired postmolds, there is no clear indications of wall or wall-opening arrangement. Regardless of its shortcomings in this case, the program will, I believe, be useful in the future at sites where more structural evidence is present.

An east-west pad of gray clay was seen in the southern section of Pit I. A stratigraphic cross-trench provided the profile presented in Figure 24. Apparently, the bulldozer scars went deeper than suspected, and the clay "pad" is disturbed and mixed soil redeposited by machine.

Artifacts

Introduction

As with previous sections of this chapter, outlying pits will be treated only in passing. Artifacts were few from excavation units other than Pit I, and were largely without good stratigraphic context or feature associations. Although analyzed, artifacts from outlying pits offer little opportunity for interpretation of the site. Notable exceptions are a Savannah River projectile point and associated flakes from the base of Pit III, and a British coin, dated 1772, from the plow zone of one of the outlying test trenches. The projectile point indicates occupation of the site during the Middle Archaic Period. The coin suggests use of the study area, if not the site itself, during the early Historic Period.

Stone Artifacts

Over 3,000 stone artifacts were recovered from Pit I, the bulk coming from Level C (the Pre-Mound midden). Among these artifacts are fire-cracked cobbles, flaked and ground stone tools, cores, and waste flakes. Definitions used will be the same as those given in Chapter 5. In addition, there are several classes of objects not previously defined. These are: fire-cracked cobbles, grooved axes, stone bowl fragments, and perforated stone objects.

Seventy-five fire-cracked cobbles were found in Pit I. Two-thirds were from Level C. All are of quartzite and show the angular fractures and discoloration produced by high temperature. These may have been used for stone-boiling of food, a technique whereby rocks are heated, then dropped into containers of food and water.

Only eight ground stone tools were found. Five of these are pieces of gneiss which show evidence of battering, pecking, and grinding. Suggested function is that of seed, grain, or pigment grinding. One steatite bowl fragment came from Level C. This may be an accidental intrusion into the level, since stone bowls on the Piedmont usually are

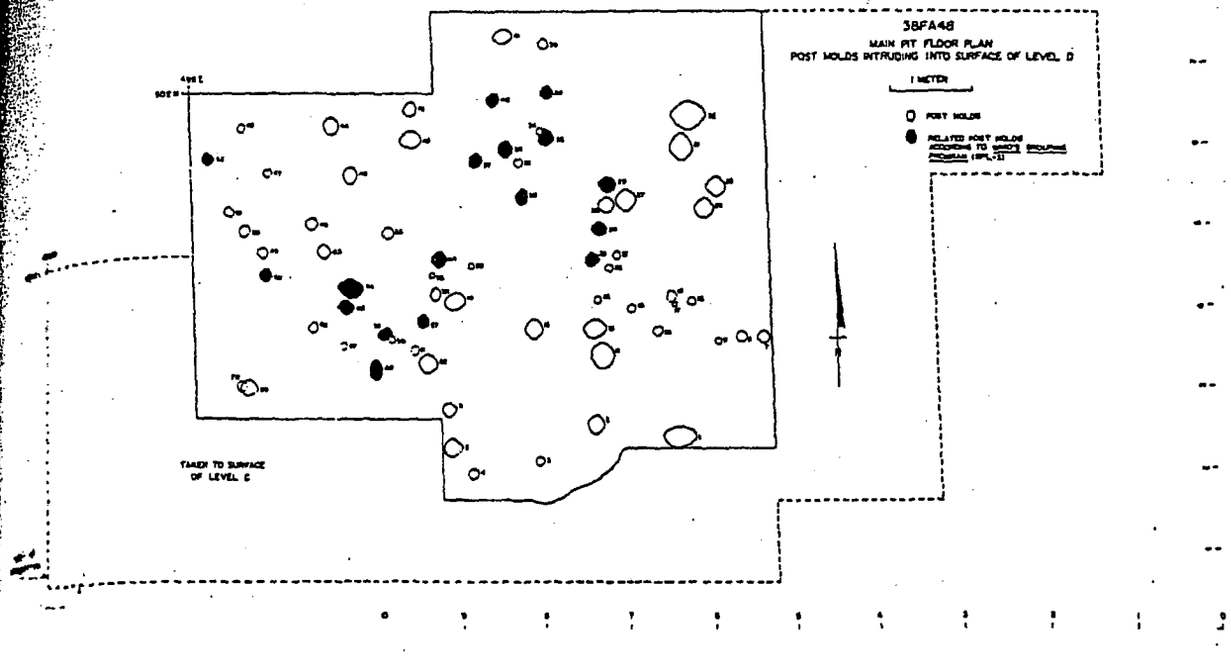


FIGURE 23: Site 38FA48--Map of Postmold Pattern in Pit I (Plan View).

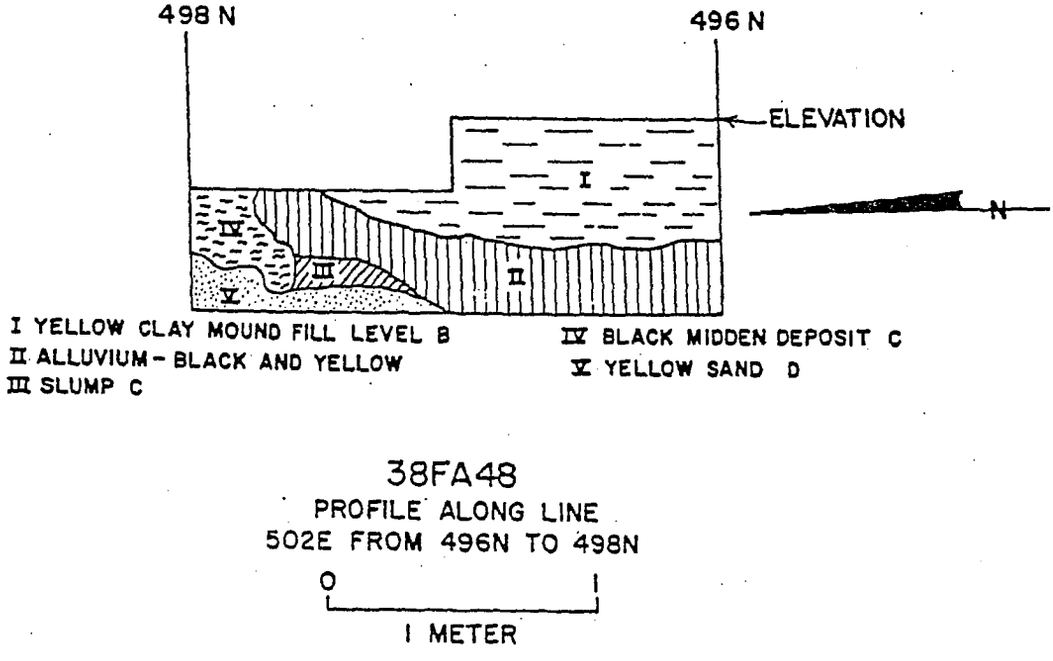


FIGURE 24: Site 38FA48--Drawing of Stratigraphic Profile in Eastern Section of Pit I View to East).

dated to pre-ceramic time periods. A grooved axe fragment of slate came from Level B. The specimen is too incomplete to permit reconstruction of completed form or dimensions. Such axes were not uncommon in the Mississippian Period. One perforated circular steatite object (usually called net sinkers) was found on the surface (Fig. 25).

Eight cores were found (Fig. 26). Both quartzite and chert were represented. One had cortex remaining; the others did not. There is a trend toward end-striking (that is, striking along the long axis) of well-prepared cores.

Waste flakes were predominately of quartzite, with slate and chert flakes as minor elements of the assemblage. A total of 2,984 flakes were recovered from Pit I. Distributions of flakes by material and type is shown in Table 7. The small sample size from Level A precludes statistical comparison, but comparison of percentages between Levels B and C is revealing. While some time depth is indicated at the site, and while site function is thought to have changed through time, there is a remarkable consistency in percentage distributions of flake materials and flake types. This may indicate conservatism through time in stone tool technology. Other observations from the flake assemblage are that the hard-hammer technique is dominant, and that few biface-thinning flakes were found. Core platform preparation is unsophisticated. Simple grinding and stepping techniques were the only treatment noted on flakes. This grinding and stepping may, in fact, have resulted from the causal, unintentional breakdown of platform edges.

TABLE 7

38FA48

Waste Flakes by Level

Material Type	Levels in Pit I		
	A	B	C
Slate	4	8 (9%)	282 (10%)
Quartzite	20	84 (84%)	2415 (84%)
Chert	1	6 (6%)	164 (6%)
Flake Type			
Primary	10	15 (15%)	473 (16%)
Secondary	15	83 (85%)	2388 (84%)

During analysis of flakes and cores, an interesting technique was noted. Two cores and 18 flakes, all of quartzite, which showed evidence of exposure to high heat (Fig. 26) were found in Level C.

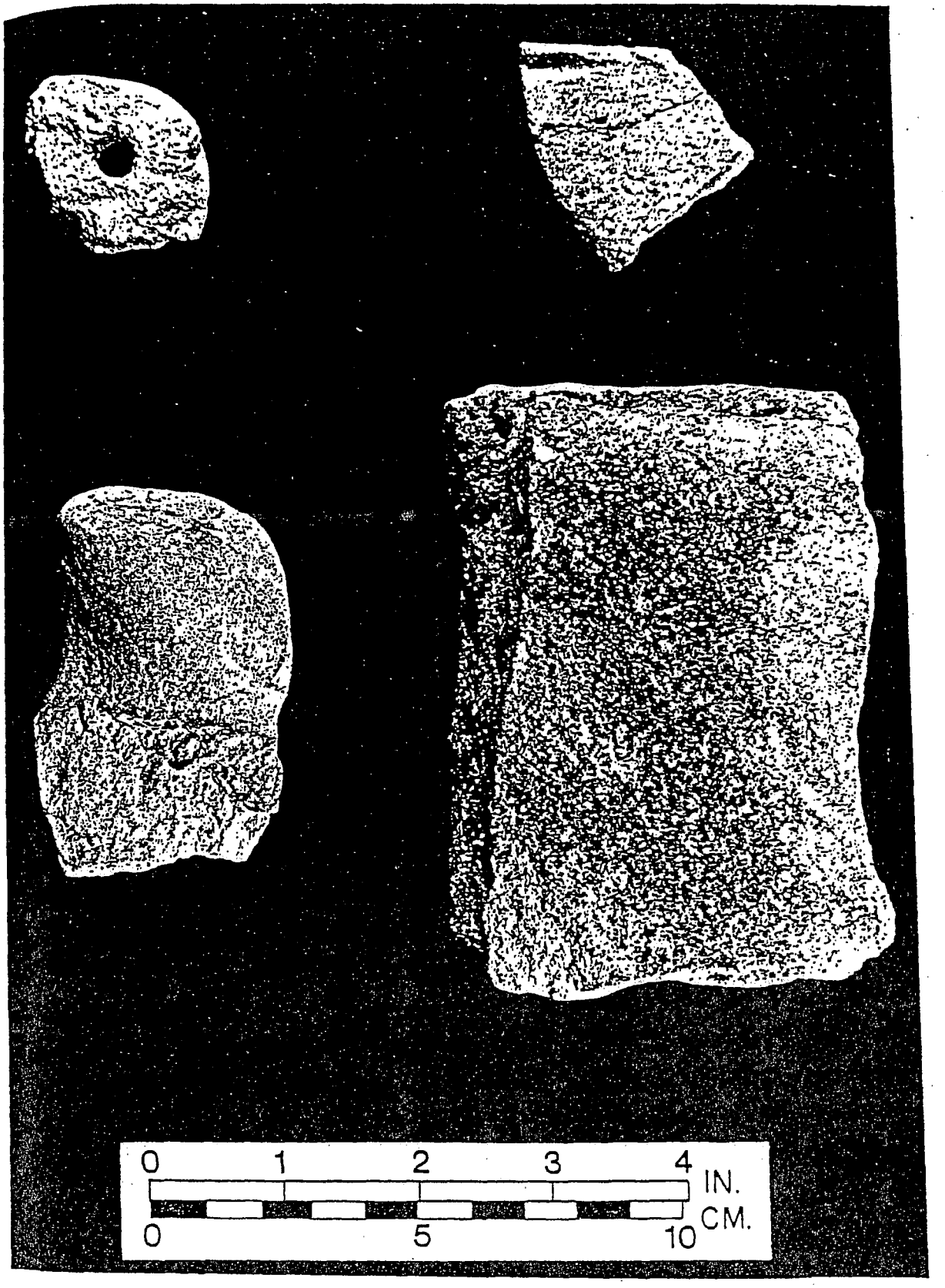


FIGURE 25: Ground Stone from 38FA48 (Top Left: Perforated Steatite Object; Top Right: Polished Steatite Object; Bottom Left: Ground Slate Tool Fragment; Bottom Right: Ground and Pecked Grinding Tool Fragment).

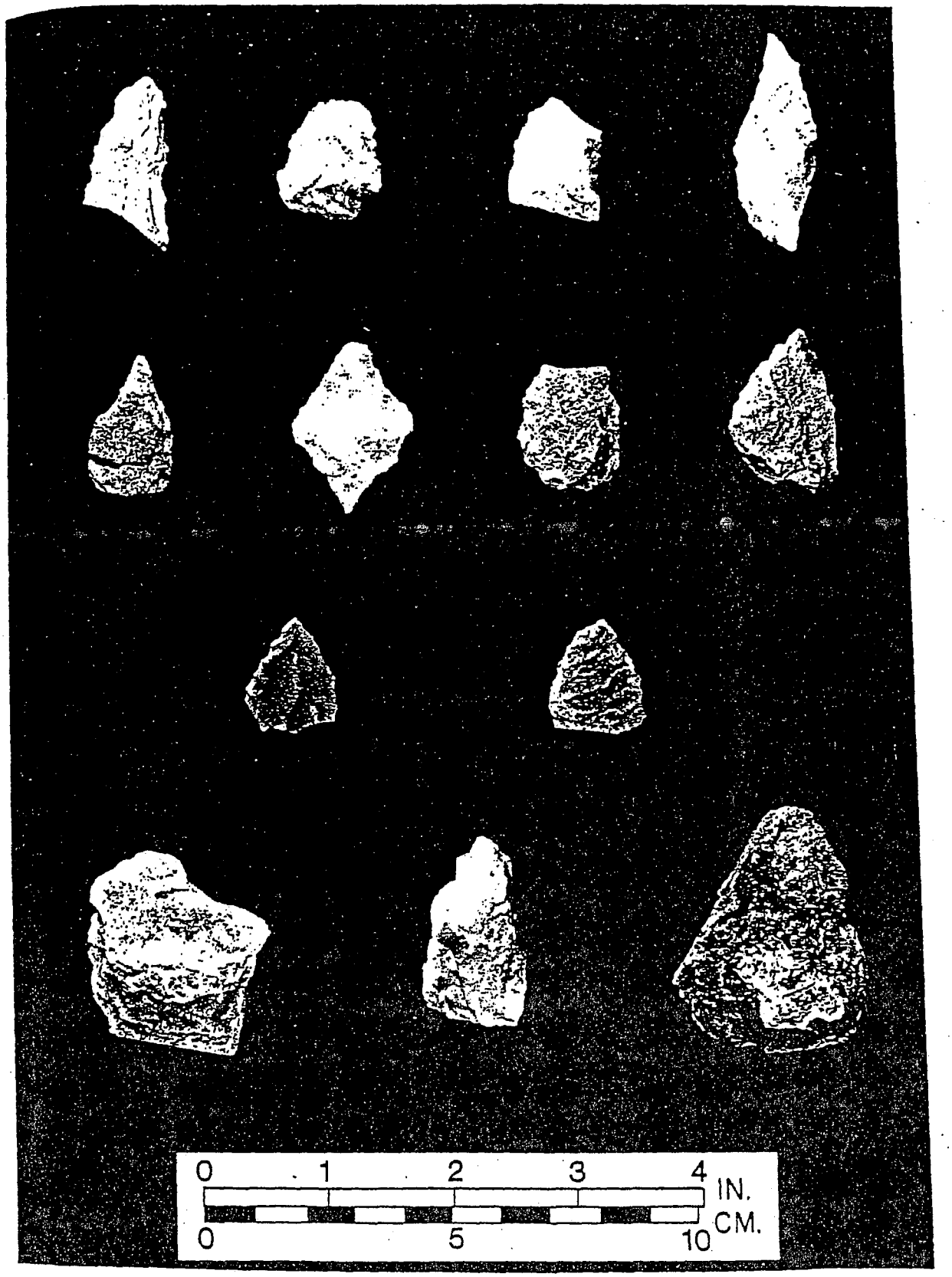


FIGURE 26: Flaked Stone from 38FA48 (Top Row: Biface Fragments; Second Row: Biface Cutting Tools; Third Row: Retouched Flakes; Bottom Row: Cores. The middle core has been subjected to heat.)

In order to make it more suitable for flaking, intentional heat treatment of coarse-grained stone, has been noted in other areas of the country (Crabtree and Butler 1964; Purdy and Brooks 1971). The Blair specimens demonstrated color change from the normal, and a glossy surface texture with a waxy luster. One of the cores had had flakes removed after heat alteration. The presence of the few heat altered artifacts at Blair does not necessarily indicate heat treatment as a technique, but it does offer a field of inquiry for future Piedmont lithic studies.

Distribution of flaked stone tools is presented in Table 8. The predominate material used was a poor grade of quartzite, and tool function could not be inferred for over half the specimens. These unidentified tools are probably biface knives or tool blanks. None of the tools could be identified as scrapers or scraping tools. Functions seem, in all cases, to be directed to cutting activities. Examples of flaked tools are illustrated in Figure 26.

TABLE 8
38FA48

Flaked Stone Tools by Level

Tool Type	Levels in Pit I		
	A	B	C
Biface Knife	1	2	8
Scraper	0	0	0
Tool Blank	0	0	0
Retouched or Utilized Flake			
Cutting Use	2	3	13
Scraping Use	0	0	0
Biface Tool or Tool Blank (Use unknown)	5	4	21
Material Type			
Slate	2	2	14
Quartzite	5	7	28
Chert	0	0	0

Thirty-nine projectile points were recovered, with distributions as indicated in Table 9. Points were classified only by form. Such classification is questionable especially in terms of utility of type-names for Late Ceramic Period projectile points. Inhabitants of the Piedmont seem to have settled on the small, triangular projectile point form as a satisfactory design more than a thousand years ago (see Coe 1964). Typological distinctions in archeological literature have been too subtle to follow. Suffice it to say that projectile

points from Blair Mound are similar to those found elsewhere in contexts which date from about A.D. 1000 to the Historic Period (Fig. 27).

TABLE 9
38FA48

Projectile Points by Level

Type	Levels in Pit I		
	A	B	C
TRIANGULAR			
Straight base			3
Straight base, serrated	1	2	3
Concave base		1	
Concave base, notched			2
Slightly concave base			16
Slightly concave base, serrated	1		5
LANCEOLATE			
Straight base, serrated			1
Corner notched		1	
DIAMOND SHAPE			
Pointed base			1
FRAGMENTS			
Unidentified form		1	1

One other stone object from Blair Mound merits description. This is an edge-trimmed mica disc (Fig. 28), about 4 cm in diameter, which came from the surface of Level C in Pit I. Flakes of mica have previously been noted as items of grave goods in Temple Mound context (Caldwell and McCann 1941:28). Worked mica discs may also have had other decorative magical, or religious uses.

Ceramic Artifacts

Three thousand-eighty seven ceramic sherds were recovered during the excavation at Blair Mound. Carol Weed has provided a detailed account of ceramic sherd descriptions and distributions in the Appendix to this report. Most are sherds from broken vessels, assigned to 28 ceramic varieties within three major types. Also collected were sherd discs, pipe fragments, and baked clay objects. Only one intact vessel was found. This was a burnished and incised bowl with a notched rim (Fig. 29). The bowl was found on the surface

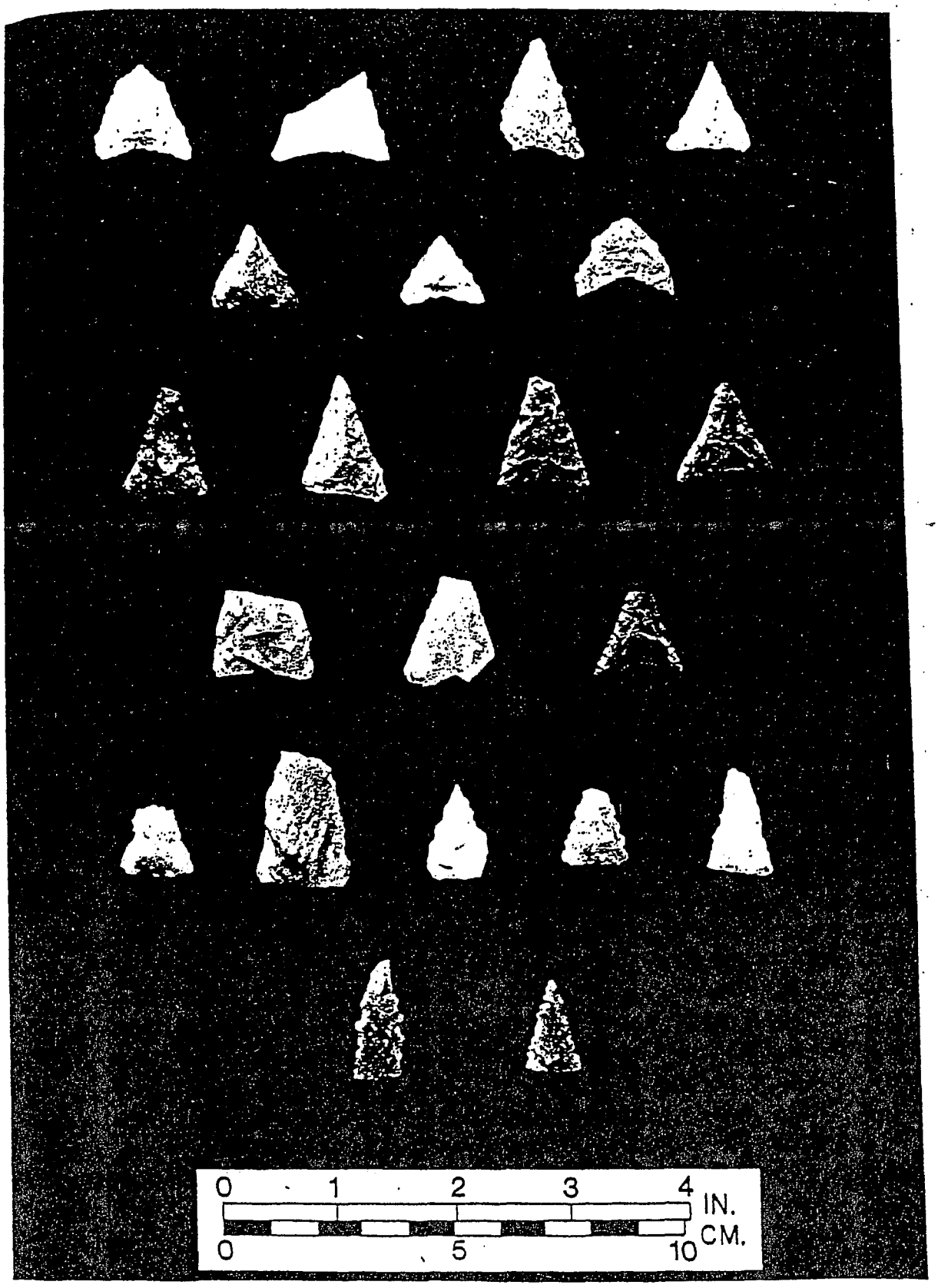


FIGURE 27: Projectile Points from 38FA48 (Top two rows: Quartzite, Triangular, Concave Base; Third Row: Chert, Triangular, Concave Base; Fourth Row: Triangular, Concave-notched Base; Fifth Row: Triangular, Straight Base; Bottom Row: Triangular, Serrated, Straight Base).

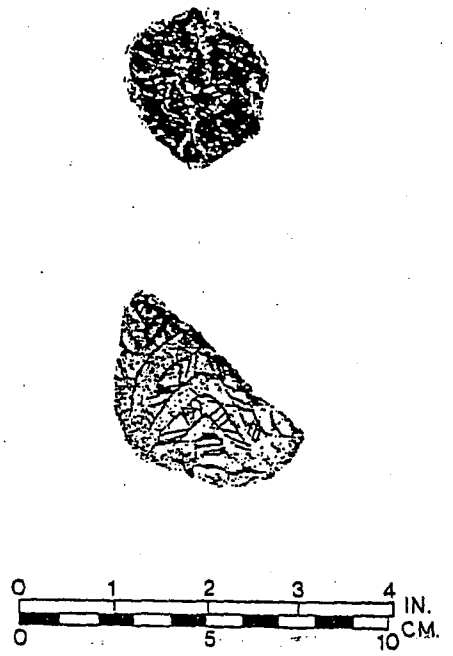


FIGURE 28: Artifacts from 38FA48 (Top: Edge-trimmed Mica disc; Bottom: Incised Ceramic Object).

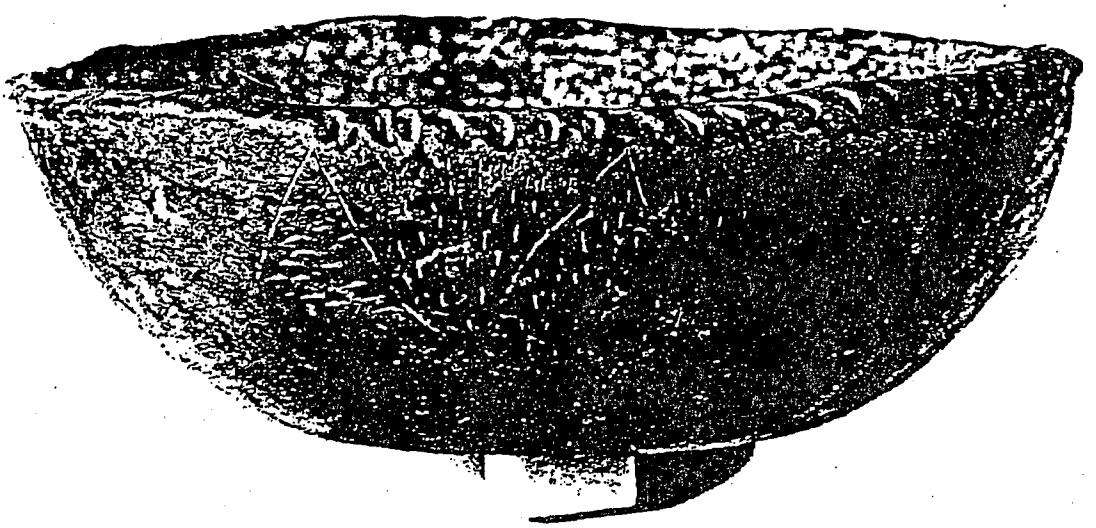


FIGURE 29: Bowl from 38FA48 (Diameter is 17.5 cm).

of Level C in Pit I (see Fig. 22), but is thought to date after the formation of the Level C surface. Indications are that it was incorporated into the base of the artificial mound fill, either on purpose or inadvertantly.

Pottery was classified in an objective manner, but Weed and I have agreed on regional cultural affinities on a subjective basis. There are minor design elements present which are similar to those found in the Etowah-Lamar and Irene Complexes (Caldwell and McCann 1941; Fairbanks 1952; Moorehead 1932). However, in terms of both technology and style, the pottery is most like that from the Pisgah and Pee Dee Complexes of North Carolina (Dickens 1970, 1976; Reid 1967), with Pisgah Elements being dominant. All Blair Mound ceramics belong to the Pisgah phase, as defined by Dickens. Taking ceramic elements as a whole, a median date for the site would be about A.D. 1300, with the understanding that time of occupation could vary a couple of hundred years either way.

Comparison of ceramics from Level C (pre-mound midden) and Level B (mound fill) in Pit I, reveals both change and stability in design elements. As shown in Table 10, surface treatment techniques are similar in most ways, with smoothing and smudging as dominant elements. The major difference seen between levels is the very large shift in prominence from simple stamping to complicated stamping. The complicated stamp design elements, however, are shared between levels (Table 11), indicating no radical intrusion of cultural elements. Check stamp and curvilinear designs are predominant, and occur with almost identical frequency in each level.

TABLE 10
38FA48

Ceramic Sherd Surface Treatment
Counts and Percentages

Treatment	Levels in Pit I	
	B	C
Burnished	31 (8.5%)	61 (9.9%)
Burnished/Smudged	5 (1.4%)	8 (1.3%)
Smoothed	108 (29.9%)	200 (32.5%)
Smudged	75 (20.7%)	97 (15.7%)
Simple Stamp	27 (7.5%)	186 (30.2%)
Complicated Stamp	88 (24.3%)	49 (7.9%)
Check Stamp	10 (2.8%)	9 (1.5%)
Incised	1 (0.3%)	1 (0.2%)
Impressed	9 (2.5%)	1 (0.2%)
Brushed	5 (1.4%)	4 (0.6%)
Punctate/Jab	3 (0.8%)	0 (---)

TABLE 11
38FA48

Stamped Design Elements on Ceramic Sherds
Counts and Percentages

Element	Levels in Pit I	
	B	C
Angle/Line	3 (4.7%)	5 (10.6%)
Angle	3 (4.7%)	0 (----)
Bulls Eye	2 (3.1%)	2 (4.3%)
Broad Groove & Line	0 (---)	1 (2.1%)
Curvilinear	34 (53.0%)	24 (51.1%)
Nested Circles	1 (1.6%)	0 (---)
Line	1 (1.6%)	3 (6.4%)
Line Block	8 (12.5%)	1 (2.1%)
Rectangular Line/Angle	1 (1.6%)	0 (---)
Line Angle	1 (1.6%)	2 (4.3%)
Check Stamp	10 (15.6%)	9 (19.1%)

In addition to ordinary vessel sherds, six circular, worked ceramic discs were found, with occurrences in all levels (Fig. 30). Worked discs are usually interpreted as gaming counters.

Thirteen ceramic pipe fragments were recovered (Fig. 31). All but two were from Level C of Pit I. The fragments were made of a sand and clay paste without temper, and were hard-fired and burnished. Shapes of whole pipes are unknown.

Two other ceramic artifacts were recovered, and these are of uncertain function. One of the pieces (Fig. 30) may be a broken vessel pod, or leg. The other (Fig. 28) is a fragment of an incised baked clay object. Similar elaborate incising has been found on shell, bone, clay, and copper objects from Mississipian Context (Waring and Holder 1945). Such designs are interpreted as having magical and religious significance, and have been assigned to a ritual complex called the Southern Cult.

Bone Artifacts

Five bone artifacts were found, all from Level C, or Level C surface, of Pit I (Fig. 32). Two are split mammal long bones which have been trimmed and sharpened. Function is uncertain. Another is a fragment of antler. Fractures and striations at its tip suggest

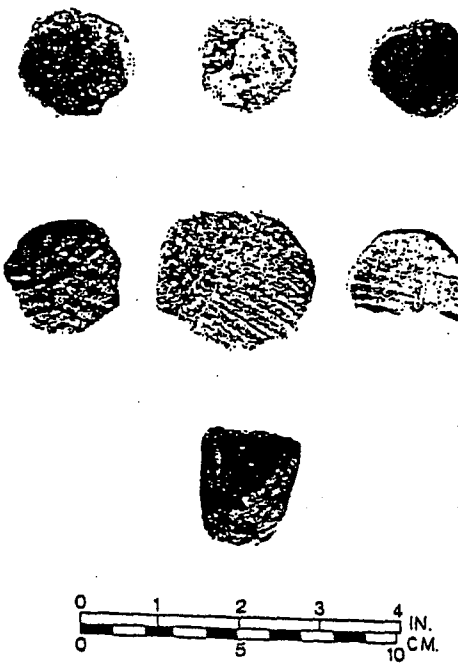


FIGURE 30: Ceramic objects from 38FA48 (First and second rows are worked sherd discs.The last row is a ceramic vessel pod.)

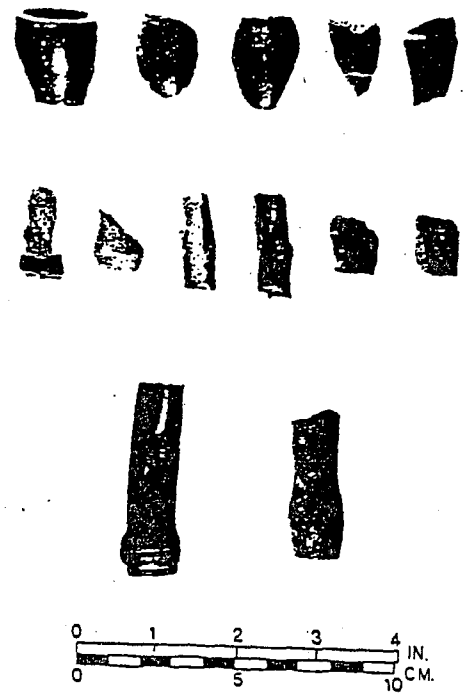


FIGURE 31: Ceramic pipes fragments from 38FA48 (Top Row: Bowl fragments; Second Row: Stem fragments; Bottom Row: Stem F[illegible]

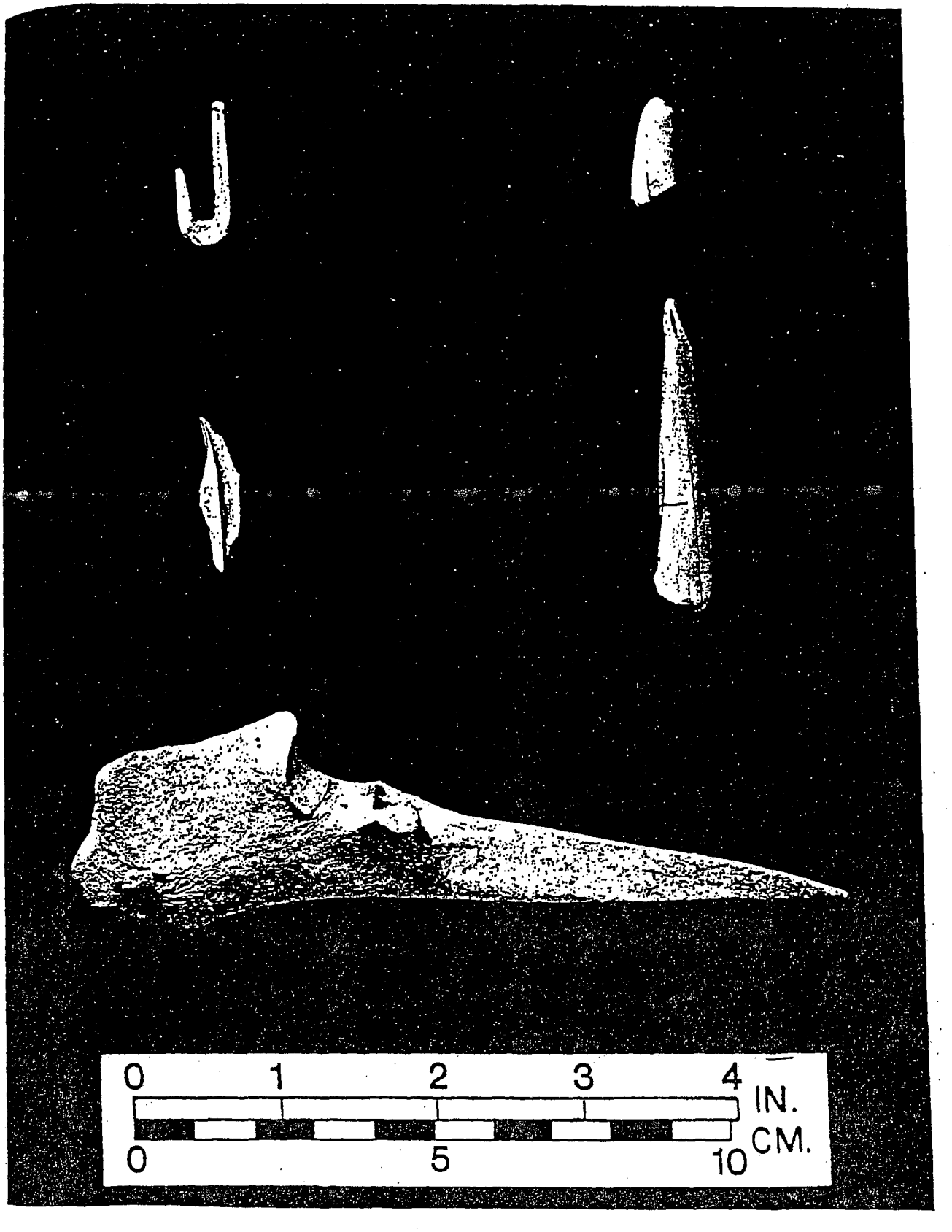


FIGURE 32: Bone and antler tools from Site 38FA48 (Top Row: Bone Hook and Antler Flaking Tool; Second Row: Bone Tool Fragments; Bottom: Bone Awl).

use as a tool for flaking stone. Also found were a bone hook, presumably used for fishing, and an awl made from a deer ulna. The awl was carefully fashioned and exhibits polish along its shaft. It was probably used for working hides or textiles.

Non-Artifactual Remains

Non-artifactual specimens were collected routinely at Blair Mound. Among these were animal bone, shell, soil, pollen, and charcoal. Soil samples were taken from each feature and stratigraphic unit. Pollen sequences were collected at 10 cm vertical intervals in Pits I and II. Charcoal samples were taken when found.

Bone and shell were not formally analyzed. The bulk of the collection came from Level C of Pit I, and comprises remains of deer, small mammals, turtle, fish, and bivalves similar to mussel.

A soil sample from the middle of Level C, Pit I, was analyzed microscopically by Kira Fisher of the Malnutrition and Parasite Project, University of South Carolina. Purpose of analysis was to see if fossil intestinal parasite eggs were present and to see if pollen was preserved at Blair Mound. Fisher found one deteriorated egg similar to those produced by roundworms of the genus Ascaris. Also seen were pollen grains from corn and a number of unidentified species. No pine pollen was identified.

Two charcoal samples were submitted to the University of Georgia for radiocarbon dating. One was from a hearth at the surface of Level C in Pit I. It was given the following date: 755 $\pm$ 90 radiocarbon years: A.D. 1195 (UGa-406).

The other came from a piece of burned wood in a postmold of Pit I. The postmold began at the surface of Level C, went through the level, and intruded into the sterile soil of Level D. The sample may be the remains of a burned post. The following date was provided: 625 $\pm$ 75 radiocarbon years: A.D. 1325 (UGa-405).

Taking dates as given, implications are that Level C (pre-mound midden) was deposited before about A.D. 1200. After a period of time a structure was built directly on the midden at about A.D. 1300.

Summary and Conclusions

Test excavations at Blair Mound proved productive in the discovery of site history, cultural affiliations, function, and research potential. Management recommendations can now be made on the basis of this knowledge.

In summary, the earliest known occupation of the site was in the Archaic period. There may have been small hunting-and-gathering camps at the site, but extent or nature of occupation is unknown. The site remained otherwise unused until late in the Ceramic Period. It is suggested on the basis of radiocarbon dates and ceramic cross-dating, that during the 12th century A.D., a small settlement was established at the site. A midden composed of broken and discarded tools and decayed material was formed on a slight natural rise of the site. At about A.D. 1300, a substantial wattle-and-daub structure, with paired upright posts, was built directly on the midden. A fire is thought to have destroyed the structure and, subsequently, an artificial earthen mound was built upon the structure's ruin. The mound was capped and elevated at least once. The site would have been flourishing by about A.D. 1350, but was abandoned by the time Europeans arrived in the area. Abandonment probably took place before A.D. 1450. In terms of cultural identity, the Ceramic Period occupation is assigned to the Pisgah phase.

Determining function for the site as a whole is difficult. Outside the mound structure-midden area, no features were found, with the exception of one burial. Judging from artifacts and structural evidence at the mound, however, some interpretations can be made. The pre-mound midden reflects an economy with a strong orientation to hunting, fishing, and plant and shellfish gathering, although there is evidence of corn agriculture.

The latter occupations would seem to have focused on the construction of the mound, which was presumably a religious facility, and on maintenance of the mound and its structures.

Paradoxically, there is little change in the kinds or relative quantities of artifacts, or in the technology that produced them. The very fact of the mound's existence, and the seeming absence of other structures at the site, would lead to the conclusion that mound-ceremonialism was the site's sole reason for being during the Period A.D. 1300-1450. Nonetheless, artifact distributions indicate a lack of change in the basic economy or lifeways of the inhabitants.

Equally puzzling is the lack of change in stylistic and design

elements of artifacts. Influences from the Mississippian ritual complex began reaching the site as early as the 12th century, and inhabitants fell fully under the Mississippian sphere soon thereafter. Still, an essential conservativism is evidenced in all aspects of material culture except the architectural. As suggested in the conclusion of Chapter 5, the Mississippian influence on the Carolina Piedmont may have been more apparent than real.

These problems in interpretation lead to a discussion of the site's research potential. On one hand, the site is of low significance: the mound has been greatly damaged by recent agricultural practices; no evidence of other structures was found; and a quantity of artifacts have been recovered sufficient for inter-site comparison. On the other hand, the site has been scarcely touched archeologically by test excavations. There is still the potential for discovery of intra-site activity patterning which would reveal information about the effect of the Mississippian phenonemon on the Carolina Piedmont. Good radiocarbon specimens were commonly found, suggesting that more rigorous dating could be applied to the site. Perhaps of greatest importance are the preserved biological specimens known to exist at the site. These include animal bones, pollen, and fossil parasites. Examination of more of these specimens might lead to a better understanding of late prehistoric economy, dietary patterns, and disease.

The site is eligible for nomination to the National Register of Historic Places because of its potential for contributing information of historical and scientific importance, as specified in Title 36 CFR 800.

SIGNIFICANCE OF THE ARCHEOLOGICAL RESOURCES

The Concept of Significance

The significance of the cultural resources of the Parr Project area may be assessed by reference to a variety of standards. To archeologists, the importance of archeological resources lies in their potential for yielding information relevant to the problems with which the profession is currently concerned. These problems reflect a variety of approaches to the study of culture history, human lifeways, and the processes which operate within cultural systems. One of the criteria for inclusion in the National Register of Historic Places corresponds to this archeological conception of significance; any resources that have yielded, or are likely to yield, information important in prehistory or history are eligible for the register. Virtually any intact cultural resource fulfills this requirement. However in evaluating resources likely to be affected by a proposed project, additional aspects of significance must be considered. Scovill, Gordon, and Anderson (1972: 12-14) have suggested that social and monetary values should also be assessed in order to determine significance for the purposes of the National Environmental Policy Act of 1969.

The Parr resources will be evaluated with respect to three kinds of significance: historical, scientific, and social. All of these aspects of significance are interrelated. Together they form a composite which reflects the value of cultural resources and the loss which would result from their destruction.

No evaluation of monetary significance will be made, however. This is usually calculated as the cost of the maximum possible data recovery, and is therefore a reflection of cost, rather than value. As any shopper is aware, these terms are not synonymous. It should also be noted that this study, while adequate for a general assessment of resource significance, does not provide precise quantified estimates of site type and distribution, which are essential for such cost determinations.

The aspects of the value of the resource base which can be dealt with here are:

1. Historical significance. This can be defined as the potential for yielding information pertinent to the identification of individual cultural groups, periods, or behavior patterns. Scovill, Gordon, and Anderson (1972: 13) interpret this as including resources that provide data useful in the identification and reconstruction of specific cultures, periods, lifeways, and events; that provide a typical or well-preserved example of a prehistoric culture, historic tribe, period of time or category of human activity; and that can be associated with a specific event or aspect of history.

2. Scientific significance. This is the potential for information that can contribute to the understanding and explanation of cultural phenomena. In contrast to historical significance, this involves the formulation of generalizations that can be tested. Within the archeological profession there are a broad range of research approaches. Major changes have occurred, and can be expected to continue to occur, in the ways in which archeological problems are defined and therefore in the variety of scientific contents within which cultural resources may be considered significant.

3. Social significance. This involves the importance of cultural resources for society as a whole. The acquistion of historical and scientific knowledge and the possible practical applications of this knowledge to current problems are aspects of social significance. Other benefits which society may derive from cultural resources include, according to Scovill, Gordon, and Anderson (1972: 14), the economic benefits of archeological research, the educational opportunities provided by such research, and the educational, economic, and recreational value of public exhibits.

In this chapter the Parr Project area resources will be assessed with reference to these three kinds of significance in order to establish their value for archeologists and for society, their importance in the context of the various historic preservation acts, and their eligibility for the National Register of Historic Places. Federal procedures now require that resources potentially affected by a proposed project be evaluated for Register eligibility. This interpretation has been established in the Federal Register, Volume 40, Number 169 (36 CFR 60), published in August, 1975.

The Parr Project Area

Historical Significance

The Historical significance of the Parr resources is a product of their capacity to yield data that may be used to develop a reconstruction or description of the patterns of human behavior that produced these resources. This level of significance is less abstract than that of scientific significance. It is an essential prelude to explanation of behavior, but does not in itself involve explanation.

Sites in the project area date from the Early and Middle Archaic, Woodland, Mississippian, and Early Historic periods. The discussions of culture history, settlement, and subsistence presented in Chapter 4 of this report reflect the historical information to be derived from these sites. This is, however, only a broad outline; much is unknown concerning the subsistence activities, settlement organization and distribution and environmental context of these periods. Further study of the Parr sites could help to determine what resources were used,

the nature of seasonal procurement and processing acitivites, and to what extent natural resources were used after the appearance of agriculture. These resources can also yield information concerning trade and communication networks forms of ceremonial activities, and kinds of technological change.

Scientific Significance

This section does not contain a program of designed research. Instead, lines of inquiry which demonstrate the potential usefulness of the archeological resources will be suggested.

Information available from archeological resources can be useful in resolving several contemporary problems. Humans have learned to adapt to changing, and often harsh, environments without the assistance of complex technology. Long forgotten techniques for living under marginal conditions are important tools for developing areas of the world. For example, Evenari, et al. (1970) have uncovered ancient water-control systems in the Negev that once allowed large groups of people to live in a very arid region. These water control techniques are now being adapted for modern use in that area.

Along the same lines, other possibilities of cultural adjustment may be addressed. How did the village agriculturalists within the study area go about farming? Did they have to divert or conserve water? Did they practice slash-and-burn techniques and, if so, did these techniques work? How many people using the technology of these agriculturalists can live in a place like the study area without exceeding the environmental capacity? How many people can live in this area without agriculture? Can people support themselves by hunting, trapping and fishing? How many people? What happens when a population exceeds the capacity of the resources? The answers to questions of this sort may become crucial in the near future.

Other questions, important equally to anthropologists and other social scientists, are those concerning human response to stress. The ways people behave in times of stress or readjustment are reflected in the ways they organize themselves socially. Social organization is, in turn, reflected in archeological remains. Archeological resources, which represent great periods of time and many diverse ways of social organization, are particularly useful in resolving questions involving long-term response to cultural or environmental pressure.

The issue of understanding human organization in times of stress is not a light one. In recent years climatic variation and population expansion have produced substantial demographic and social change in many parts of the world. The short-term results have too often been chaotic; this may have been in part avoidable through better knowledge of human behavior. The long-term results are unknown, but such results may possibly be predicted through examination of similar situations in the past. It might be prudent in the future to ask questions about optimum group sizes and forms of social organization in crisis situations.

Related questions that could be dealt with in the study area are as follows. How large may a group of people become, given a hunting and gathering economy, before the group splits into smaller groups? How large in an agricultural village? What happens to social organization when the population grows dramatically (as in the Middle Archaic)? What happens to group size when food is short? Does the group aggregate for mutual support, or does it disperse into very small groups? The study area came under the influence of a powerful and sophisticated religious and political force after A.D. 1200. How did the indigenous people react? Did they become acculturated and, if so, how long did it take? Was the acculturation superficial or profound?

Within the archeological resources of the study area lies the potential for dealing with the questions in this section. The history of the area is one of population change, of changing response to the environment, and of different ways of organizing societies. This dynamic series of events holds significance for the scientist.

Social Significance

The public value of the Parr cultural resources consists principally of the contribution which study of these sites would make to public understanding of the prehistory and history of the area and of human behavior and lifeways. The resources are not suitable for development as public exhibits and would consequently provide virtually no educational, economic, or recreational benefits through preservation.

Summary

The significance of the Parr resources lies almost entirely in their capacity to provide information of historical and scientific importance. Having this potential, intact sites within the project area are eligible for nomination to the National Register of Historic Places under the provisions of the Advisory Council on Historic Preservation Procedures for Compliance (36 CFR 800).

It is not possible, given the incomplete coverage provided by this survey, to determine eligibility of all possible individual sites in the Parr Project area. However, the survey has provided adequate information to establish that, as an aggregate, the sites meet the standards established by the Advisory Council on Historic Preservation.

EVALUATION OF IMPACT AND RECOMMENDATIONS

Predicted Impact

The effect of inundation on cultural resources is at present being investigated by the National Park Service in a study conducted in conjunction with the U.S. Army Corps of Engineers and the Bureau of Reclamation. This will provide the first quantified and comprehensive information involving a variety of archeological and environmental situations. It is known, however, that inundation does produce serious disturbance, particularly in those areas affected by fluctuating reservoir levels or in areas characterized by the presence of surface remains without substantial architectural features. It must be predicted, therefore, that the Parr Project will, when completed, produce the loss of virtually all information potential exhibited by the resources. This constitutes essentially all of their value, as sources of data useful in historical and scientific studies and consequently as a contribution to public understanding and education.

The question of adverse impact of proposed dam and reservoir construction on properties within the Parr Project area eligible for nomination to the National Register should be referred to the Advisory Council for consultation as specified in 36 CFR 800.

Recommendations

There are two alternatives in mitigating the adverse impacts of a project on cultural resources. These are preservation of the resources themselves or data recovery in order to preserve the information which those resources may provide. The first choice, site preservation, is particularly pertinent when the resources possess substantial value as public exhibits, when they are sufficently unlike others in existence that no possibility exists of preserving comparable remains as an example of the type, or when the information available from the resources is of such complexity, magnitude, and importance that recovery of a reasonable sample is not feasible.

In the case of the Parr resources, it is believed that a reasonable and realistic data recovery program would adequately mitigate their loss. This data recovery program should be designed to elicit detailed information on site distribution relative to environmental variables, primarily through intensive survey of a sample of the study area, detailed mapping, artifact collection, and analysis. The area intensively studied should be sufficient for construction of a predictive model of archeological and environmental variability within the study area. Following a rule of thumb (see Plog and Hill 1971), I suggest that an additional 15% in area coverage will prove to be an adequate sample size for mitigation, but this figure should be statistically confirmed.

38FA48

APPENDIX
CERAMICS FROM BLAIR MOUND

By
Carol S. Weed

Introduction

"In men's affairs, chaos does not reduce itself to order without a plan (McKern 1939:303)." The plan employed for analysis of the Blair Mound ceramics was structured to utilize the type-variety (Shepard 1956) concept as advantageously as possible. It was felt that pottery from the site represented a viable ceramic group (Shepard 1956:308), and could be handled on a level of categorization based primarily on technological aspects and secondarily on surficial modification. As will be recognized, these are the ideal criteria for the type-variety method. A perusal of the literature concerning pottery of the area showed, not too surprisingly, that while the type-variety method had often been used, the state of ceramic typologies was a classificatory quagmire.

Primarily because of the limited work done in the South Carolina-North Carolina-Georgia axis up until the mid-1960s, little in the way of cross-reference or ceramic comparison had been accomplished. This has left reports littered with site-specific types, varieties, and series, making it extremely difficult to avoid the pitfall of creating new types for each site excavated. While, in fact, the Blair Mound ceramic analysis was based on technical criteria which are site-specific, the paste and temper being from the immediate locale of the site, major divisions are, theoretically, broad enough for general inter-site comparisons.

More specifically, no attempt will be made to add to the already abundant type names, so unless some earnest archeologist reopens the site, no Blair Mound Complicated Stamp or any other similar variation will appear in the literature. This is not to say in any case that inadequate research has been conducted concerning Southeastern ceramics. Most assuredly, some highly sophisticated studies have been formulated and completed (Phillips 1970; Weaver 1963). However, because of the still nascent state of large-scale Southeastern salvage or research operations, the huge excavations of the 1930s not withstanding, no overall, uniform compilation of ceramic technique and data has been accomplished as was done for the Southwest by Colton, Hargrave, Kidder, and Shepard, or for the Midwest by McKern, Guthe, and Phillips. While both Caldwell (1952) and Coe (1952) have presented more than adequate regional descriptions, their work is rapidly becoming dated as more and more small salvage operations are conducted. Although, under Griffin's stewardship, ceramic type

reference sheets are being compiled and published, it is still extremely difficult to compare ceramics realistically site to site or area to area.

While the ills are easily recognizable, the remedy remains more of a mystery. It would be very simple to continue to list the needs where ceramic studies are concerned, but that is neither the aim nor domain of this report. What can be done is to try to amplify upon the theoretical stance taken here and clarify the types and varieties recognized at Blair Mound.

Theory and Technique of Analysis

As was stated earlier it was felt that the most useful method of analysis would be structured on a type-variety framework. McKern (1939:304) perhaps most succinctly discussed the underlying approach to this technique of classification by defining the entire methodology as, "...nothing more than the process of recognizing classes, each class identified by a complex of characteristics." At Blair Mound the classes were three major types, with some twenty-eight varieties identified within the principal divisions.

While it is often acknowledged that type is an abstraction and an artificial construct in terms of its potential in chronology building (Phillips, et al. 1951:66), it is just as readily recognized that the concept is based upon the fact of the technological attributes of the sherds (Shepard 1956:308). Establishment of the three types identified at Blair Mound--Sand With Crushed Quartz, Sand With Uniform Paste, and Sand-Gritty--was based solely on the technical features of the pottery, as can be seen by their working names. This offers at least two advantages to the classifier: 1) it defines readily discernible criteria for the structuring of types and 2) "...it directs attention to the human factor...and thus aids in the definition of a taxonomic unit in terms of cultural factors (Shepard 1956:309)." The types from Blair Mound were, then, established on the basis of the type of temper inclusion (or its absence), paste, hardness, and general surface appearance. It should be stressed that the latter category was only loosely applied and highly subjective. It also was in no way connected with the criteria used in the setting-up of the varieties within the types, a process chiefly concerned with surficial modification. Although type has been repeatedly, and satisfactorily defined (Shepard 1956; Colton and Hargrave 1937; Phillips 1970), variety is harder to deal with.

The definition used here was supplied by Phillips (1970:24-25), who formulated variety to "reflect specific areal and temporal variations in the norms of the type." Therefore, it is highly

conceivable, in fact probable, that spatial and temporal distance from Blair Mound will create new varieties within the type. At Blair, varieties were divided into plain, which included, Burnished, Smoothed, Smudged and Burnished/Smudged; and decorated, which included, Smooth-over Stamp, Simple Stamp, Complicated Stamp, Impressed, Incised, Punctate, and Brushed.

Although traditionally Brushed has been included under plain wares, in at least one instance from Blair, the brushing was regular, and defined by shallow incising. Once the broad varietal and type categories had been established, divisions having been based on a cursory examination of ceramics from surface collection and outlying trench excavation, then a more complete analysis was performed on the assemblage.

In all, 3,087 sherds were analyzed, a relatively small number. Because of time limitations, however, little more than percentage comparisons could be attempted once the formal technical examination of the pottery was completed. Nevertheless, this did reveal some interesting results (Tables 12 through 16; see also Chapter 6). Included in the total number of sherds were the pottery discs and pipe stems, bowls, and bits and pieces thereof. As will be noted in the tables, 723 sherds were unclassifiable, being too small or too weathered for any reliable identification. Therefore, once all anomalies were removed from the count, some 2,364 sherds could be categorized as to type and variety. The following section will describe the major types and the varieties identified within each.

Descriptions

Some clarification will be attempted here to fully explain the types and their varieties. For both Sand with Crushed Quartz and Sand with Uniform Paste, a basic type description has been completed, followed by variety descriptions which expand upon the basic outline. In all cases, of course, varieties possess the same paste and temper as their respective types. However, because so few sherds of Sand-Gritty were recovered, no varieties were established for that type. All variations are explained within the basic type description, and there is a clarifying comment at the end of the statement.

As illustrated in Table 12, 60 percent of the identifiable sherds were sand with crushed quartz, with the two minor types, Sand with Uniform Paste and Sand-Gritty, being represented by 13 percent and 2 percent respectively. Once the percentages for the

types and varieties had been compared, first on a horizontal and then on a vertical provenience basis, the most obvious factor revealed was an appreciable decrease in the amount of Simple Stamp pottery from Level C up to Level A in Pit I. This and other observations are expanded upon in Chapter 6.

The following descriptions are based loosely on the Colton and Hargrave (1937) type description format and on the format used by Coe (1964), the latter of which is more informal. Temper and paste descriptions were completed using only a microscope, and the acid test for particular composition. Because of time limitations, thin-section and more specialized petrographic analyses were not possible.

Type 1 Sand with Crushed Quartz

Illustration: See Figure 33.
Type specimens: Catalogued; Institute of Archeology and Anthropology.
Type site: 38FA48 (Blair Mound).
Method of manufacture: Coiling, paddle smoothing. Built from shaped base.
Firing: Oxidized atmosphere. Fire clouds appear with some frequency.
Paste: Friable to laminated in cross-section. Paste includes plagioclase, feldspar, biotite, and occasional hematite. Some micaeous elements are also present.
Fracture: Erratic, tends to fracture laterally along laminations.
Color: Ranges from light gray to black.
Temper: Angular, crushed quartz bits. Size range not taken.
Surface treatment, exterior: Usually exhibits signs of smoothing, probably with a damp object. There is also primary evidence of use of textile wrapped paddles.
Surface treatment, interior: In several instances evidence of scraping in order to smoothe the surface was seen.
Decoration: See variety descriptions. Primary decorative technique is stamping or punctations, with some incising.
Form: Shallow bowl and cazuela jar forms dominate. Few rims or bases were recovered, making it difficult to determine form with any accuracy.
Rim: Slightly everted flare rims; also straight edge, flat top. Rims predominately notched or slashed, with minority showing hollow reed punctations at top of rim.

Variety - Burnished

Surface: Burnishing done by stone smoothing, cloth buffing. No use of glaze evident. If exterior is burnished, interior will be smoothed or smudged.
Rim: Side-slash rim treatment is prevalent.

Variety - Smudged

Surface: Both in-firing smother smudging and post-firing smudging identified. There is a prevalence of the former category, with 93 percent of smudging occuring on interiors of bowl fragments. Exterior is rarely smudged. When done it is usually accompanied by burnishing or smoothing.
Rim: Treatment includes both side-notched and side-punctate rims. Straight, flat-top bowl rims are prevalent.

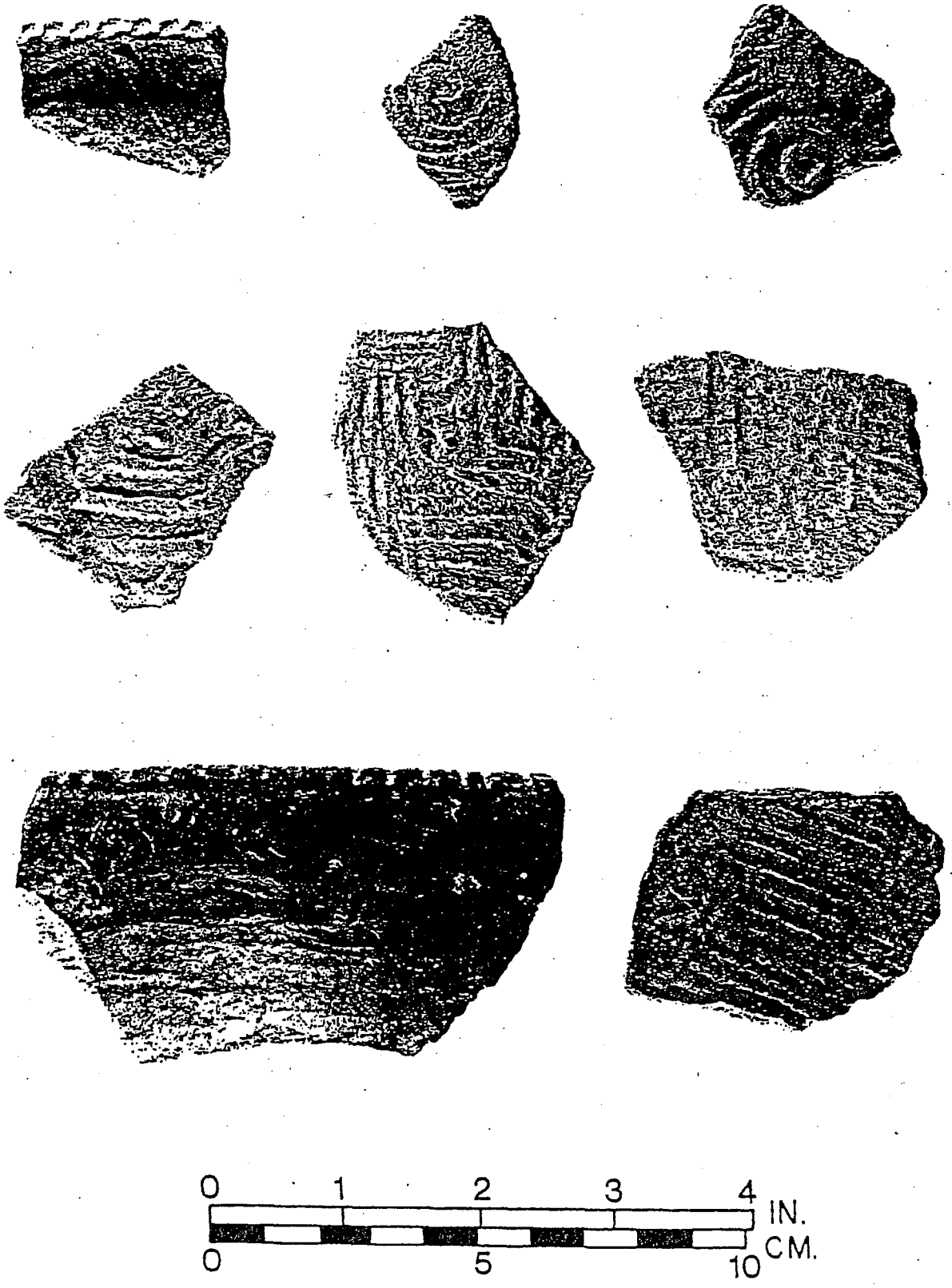


FIGURE 33: Sand with Crushed Quartz Paste Type Sherds from Site 38FA48 (Design elements illustrated include, from top left, Line Angle, Nested Circles, Bulls Eye, Arc Angle, Line Angle, Check Stamped, Smudged and Burnished, and Line Block)

Variety - Smudged/Burnished

Surface: Interior and exterior smudged and burnished. See previous variety descriptions.
Rim: See descriptions of smudged and burnished varieties.

Variety - Smoothed

Surface: Both interior and exterior will show intentional smoothing above that considered normal in treating coiled pottery. Smoothing was done by damp cloth or stone. Variations on the basic theme are exterior smoothed, interior smoothed, or both surfaces smoothed. Surfaces exhibit little in the way of temper dislodgement, but lack the polished surfaces found in the burnished variety.

Variety - Simple Stamp (Fig. 34)

Surface: Exterior surfaces treated with paddles (probably wooden). There is a dominance of straight-line and over-stamped patterns. Designs, as such, are obscure. There is occasional intentional smoothing-over of patterns. Smudging or burnishing is rare. On vessel interiors smoothing is prevalent; smudging or burnishing is rare.
Vessel form: Jars predominate.

Variety - Complicated Stamp

Surface: Exteriors are extensively modified by paddle. Design elements are primarily of a curvilinear variety. Included in the category are undefined curved elements, bulls-eye, nested circles, and arc/angles. Secondary categories include line, angle/line, and line blocks. Little over-stamping is present, but some blurring of design elements occurs. On interiors smoothing or burnishing is common. Rarely is the interior left untreated.
Vessel form: Large bowls and urns are common. Jars are small, and tend to be only slightly shouldered.

Smoothed - over Stamp

This treatment does not achieve the status of a legitimate variety, but sherds are in sufficient number to justify separate listing in the counts and percentages.

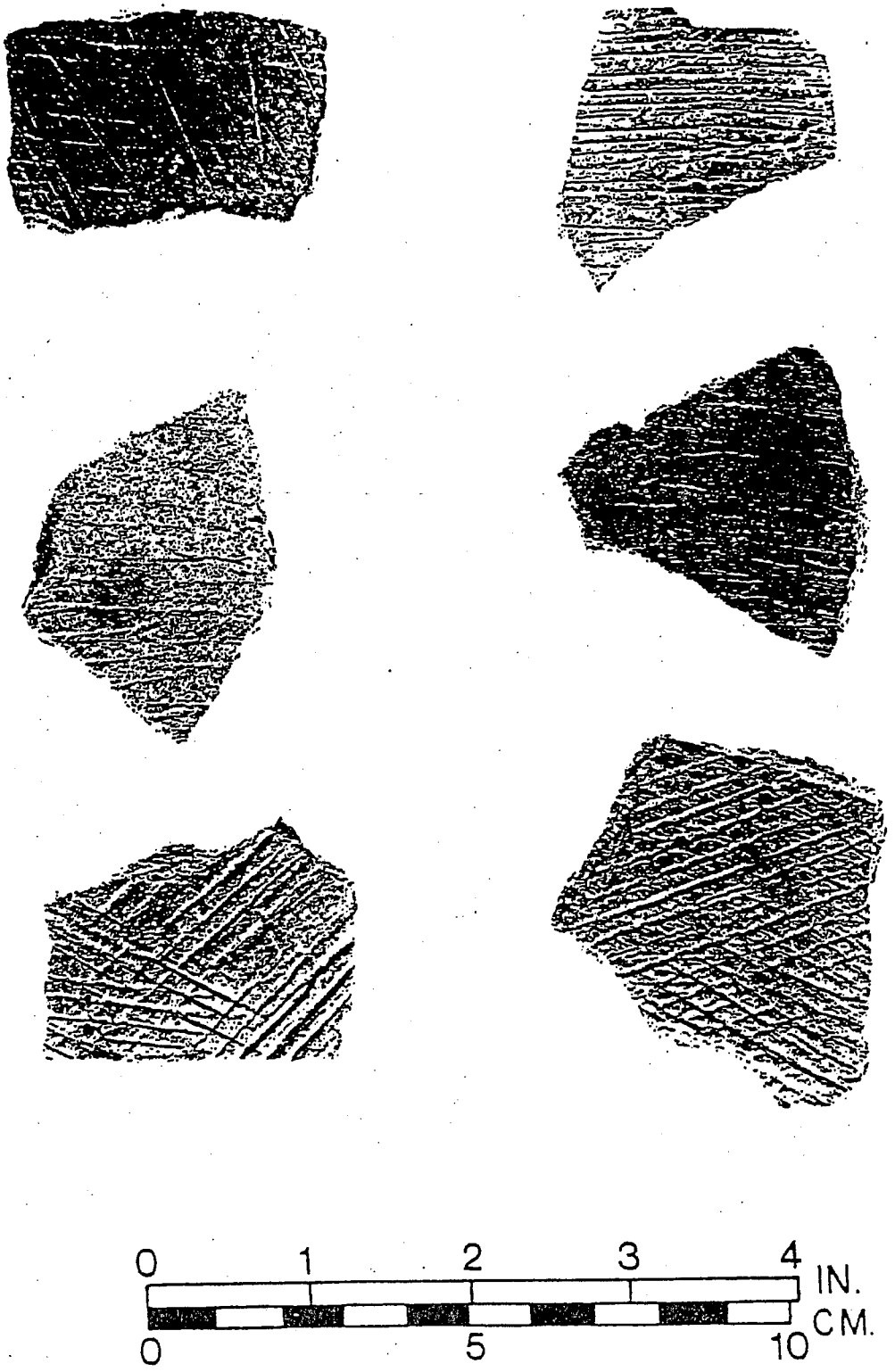


FIGURE 34: Simple Stamped Sherds from Site 38FA48.

Variety - Surficially Modified (Impressed, Incised, or Brushed)

Surface: All modifications of this sort are on vessel exteriors. In the case of brushing, pre-modification of the surface has occurred, then brushing with bunched weeds or stalks has created an erratic surface which in many cases resembles multiple over-stamp simple stamping. Impressed designs were probably made with textile wrapped paddles. In most cases the cord-marking or textile impressions are obscure. In the incised variety, incisions are made using, in most cases, the jab and drag method. Patterns are always clustered lines or angle lines in conjunction with jab and punctations. Most modification of this type occurs on the neck and rim area.

Type 2 Sand with Uniform Paste

Illustration: See Figure 35.
Type specimens: Catalogued; Institute of Archeology and Anthropology.
Type site: 38FA48 (Blair Mound)
Method of manufacture: Coiling, paddle smoothing. Some scraping on interior of vessels.
Firing: Oxidized atmosphere. Fire clouds infrequent.
Paste: Uniform. Paste includes fine sand, occasional quartz pieces, organic material, ash, and infrequently, hematite.
Fracture: Well defined straight fracture.
Color: Buff to dark gray.
Temper: No discernable temper. The paste clay possesses certain plastics which maintained the rigidity of the paste during firing.
Surface treatment, exterior: Usually smoothed through paddling.
Surface treatment, interior: Shows some scraping. Predominance of interior smudging or damp cloth smoothing.
Decoration: Stamping, punctations, and appliques appear with frequency.
Form: Shallow bowls, seed bowls, plates, and cazuela and prominently shouldered jars.
Rim: Slightly inverted bowl rims, plus collared and applique false rims with slightly everted flairs. Notching and punctate jabs present with regularity on both rims and necks of vessels.

Varieties

See varietal descriptions for the type Sand with Crushed Quartz.

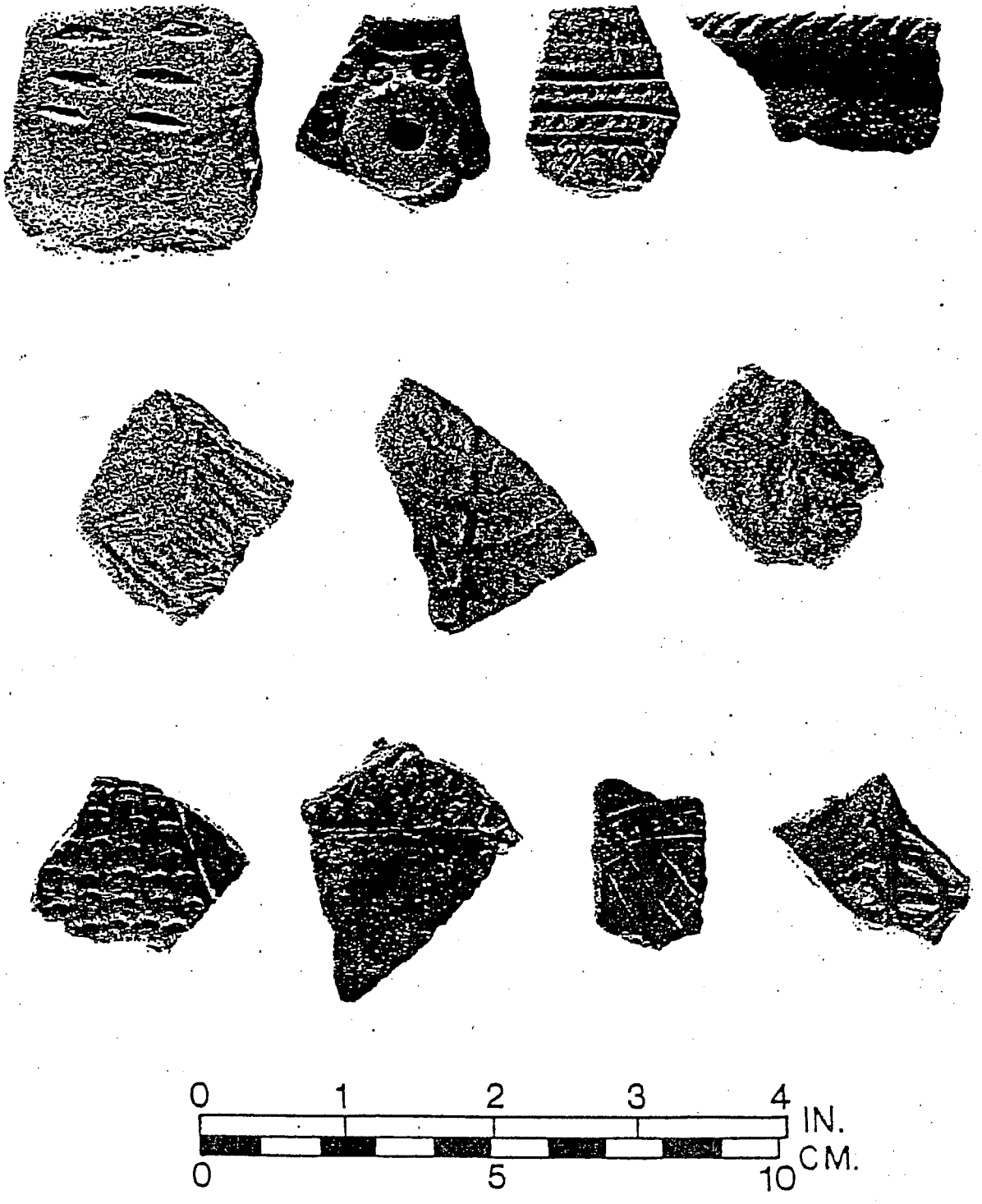


FIGURE 35: Sand with Uniform Paste Type Sherds from Site 38FA48 (Design elements illustrated include, from top left, Rim Collar with Jab, Punctate Node, Line Jab and Diamond Check, Side Slash, Nested Diamond, Divided Circle, Whole Cross, Punctate/Jab, Incised

Type 3 Sand - Gritty

Illustration: None.
Type specimens. Catalogued; Institute of Archeology and Anthropology.
Type site: 38FA48 (Blair Mound)
Method of manufacture: Coiling, paddle smoothing. Built from shaped base.
Firing: Oxidized atmosphere. Fire clouds very infrequent.
Paste: Friable, non-temper paste inclusion is a fine sand.
Fracture: Highly erratic.
Color: Buff/white to dark gray.
Temper: Quartz and garnet bits, plus chunks of feldspar.
Surface treatment, exterior: Little in the way of exterior finishing, except that supplied in paddling to bind the coils.
Surface treatment, interior: Infrequently exhibits damp cloth smoothing. Usual preparation same as for exterior. Interior smudging present in about 2 percent of the sample.
Decoration: Some stamping, usually of a simple or check stamp variety.
Form: No information. Sample too small.
Rim: No information.
Comments: Temper highly evident surficially. As only 1.9 percent of the Blair Mound pottery was of this type, no attempt was made to divide the type into varieties, except on the most general basis.

Varieties

None defined.

Distributions

All ceramics from all proveniences were analyzed, and results of analysis are on file at the Institute of Archeology and Anthropology. Table 12 presents sherd counts and percentages for the site as a whole. In the interest of economy, a listing of ceramic distributions by provenience is limited to Pit I, from which came two-thirds of the sample. Only from Pit I were there sufficient numbers of ceramic sherds, arranged stratigraphically, to permit interpretations (see Chapter 6). Pit I ceramic counts and percentages are given in Tables 13 through 16.

TABLE 12
38FA48

Ceramic Sherds
Total Count And Percentages By Type and Variety

Types & Varieties	No.	%
1. SAND-CRUSHED QUARTZ	525	17.00
Burnished int/ext	35	1.10
side-slash	1	.03
Interior	31	1.00
Exterior	17	.55
smudg. int.	3	.09
Burnish./Smudg. int./ext.	7	.20
notched	1	.03
Interior	10	.30
Smoothed int/ext	143	4.60
Interior	200	6.40
Exterior	17	.55
smudg. int.	1	.03
Smudged int/ext	11	.35
side-notch	1	.03
Interior	233	7.50
side-punctate	1	.03
Exterior	3	.09
Smoothed-over stamp	8	.25
Simple	81	2.60
smudg. int	1	.03
Complicated	6	.19
smudg. int.	1	.03
angle	1	.03
Stamp-undefined	41	1.30
Simple Stamp	242	7.80
Smudg. exterior	1	.03
burnished int.	1	.03
over-stamp	1	.03
Complicated Stamp	37	1.10
angle/line	22	.70
arc-angle	2	.06
angle	3	.09
notched	1	.03
folded-over	1	.03
bulls-eye	3	.09

TABLE 12
Continued

Types & Varieties		No.	%
Complicated Stamp (cont.)			
broad groove & line		1	.03
curvilinear		85	2.70
nested circles		1	.03
line		6	.19
line block		11	.35
	smudg./bur. int	1	.03
rectang. line/angle		1	.03
Check-stamp		40	1.20
diamond-check		2	.06
Incised		2	.06
burnish. int.		1	.03
Impressed		11	.35
Brushed		12	.38
Node/Handle		1	.03
Rim		3	.09
side notch/flat top		1	.03
simple/folded		1	.03
punctate		1	.03
	top	3	.09
	side		
notched		3	.09
Disc		2	.06
Lug Handle		1	.03
2. SAND UNIFORM PASTE		141	4.50
Burnished int/ext		11	.35
	top punc.	1	.03
interior		10	.32
	side punc.	1	.03
exterior		9	.29
	smudg. int.	2	.06
	side slash	1	.03
Smooth int/ext		65	2.10
	notch. top	1	.03
interior		21	.68
	burnish ext.	3	.09
exterior		10	.32

TABLE 12
Continued

Types & Varieties		No.	%
Smudged int/ext		8	.25
interior		24	.77
Smooth-over stamp		2	.06
complicated		3	.09
simple		11	.35
check-stamp		1	.03
Stamp-undefined		9	.29
Simple Stamp		12	.38
over-stamp			
Complicated		9	.29
angled		3	.09
bulls-eye		1	.03
curvilinear		7	.22
whole cross		1	.03
line/angle		4	.12
line block		2	.06
nested diamond		1	.03
punct. jab		3	.09
punc./nodeappl.		1	.03
divided circle		1	.03
Check-stamp		1	.03
Incised		1	.03
Punctate/jab		3	.09
Node punctate		1	.03
Rims		2	.06
side			
	line jab	1	.03
	reed punc.	1	.03
	notched	2	.06
	notch. smud.	1	.03
	jab notch.	1	.03
angled slash		1	.03
collared		1	.03
jab punctate		2	.06
notched		1	.03
smud/burn int/ext			
	top notched	1	.03

TABLE 12
Continued

Types & Varieties		No.	%
Pipe stems or bowl		13	.29
Handle or foot		1	.03
Disc		1	.03
Problematical Clay Object		2	.06
3. SAND-GRITTY		40	1.30
Smooth int/ext			
	interior	1	.03
	exterior	2	.06
Smudged int/ext		1	.03
	interior	1	.03
Simple stamp		4	.12
Complicated stamp		7	.22
	line	1	.03
	curvilinear	1	.03
Check-stamp		2	.06
Rim		1	.03
	punctate		
Disc		1	.03
Stamp-undefined		1	.03
		2	.06
Too Small		723	23.10

TOTAL SHERD COUNT-3087

TABLE 13
38FA48

Ceramic Sherd Count and Percentages
Level A, Pit I

Types & Varieties	No.	JR	BR	%
1. SAND-CRUSHED QUARTZ	28			18.0
Burnished int/ext	1			0.7
side-slash				
Interior			1	0.7
Exterior				
smudg. int.			1	0.7
Burnish./Smudg. int./ext.	4			2.7
notched				
Interior				
Smoothed int/ext	12	1		8.7
Interior	20			13.4
Exterior				
smudg. int.				
Smudged int/ext				
side-notch			1	0.7
Interior				
side- punctate				
Exterior	1			0.7
Smoothed-over stamp				
Simple				
smudg. int.				
Complicated				
smudg. int.				
angle				
Stamp-undefined	6			4.0
Simple Stamp	8			5.4
smudg. exterior				
burnished int.				
over-stamp	1			0.7
Complicated Stamp	3			2.0
angle/line	2			1.3
arc-angle	1			0.7
notched				
folded-over				
bulls-eye				

TABLE 13
Continued

Types & Varieties	No.	JR	BR	%
Complicated Stamp (cont.)				
broad groove & line				
curvilinear	7			4.7
nested circles				
line				
line block				
smudg./bur. int.				
rectang. line/angle				
Check-stamp	2			1.3
diamond-check				
Incised	1			0.7
burnish. int.				
Impressed				
Brushed				
Node/Handle				
Rim				
side notch/flat top				
simple/folded				
punctate				
top				
side				
notched				
Disc	1			0.7
Lug Hangle				
2. SAND - UNIFORM PASTE	2			1.3
Burnished int/ext			1	0.7
top punc.				
interior		1		0.7
side punc.				
exterior	2		1	2.0
smudg. int.				
side slash				
Smooth int/ext	7	2		6.0
notch. top			1	0.7
interior	2			1.3
burnish ext.	3			2.0
exterior				

TABLE 13
Continued

Types & Varieties	No	JR	BR	%
Smudged int/ext	2			1.3
interior	6	1		4.7
Smooth-over stamp				
complicated				
simple				
check-stamp				
Stamp-undefined				
Simple Stamp	1			0.7
over-stamp				
Complicated				
angled				
bulls-eye				
curvilinear				
whole cross				
line/angle	1			0.7
line block				
nested diamond				
punct. jab				
punc./nodeappl.				
divided circle				
Check-stamp				
Incised	1			0.7
Punctate/jab				
Node punctate				
Rims				
side				
line jab				
reed punc.				
notch. smud.				
jab notch.				
angled slash				
collared				
jab punctate				
notched				
smud/burn int/ext				
top notched				

TABLE 13
Continued

Types & Varieties	No	JR	BR	%
Pipe stems or bowl	1			0.7
Handle or foot				
Disc				
Problematical Clay Object				
3. SAND-GRITTY	2			1.3
smooth int/ext				
interior				
exterior				
smudged int/ext.				
interior	1			0.7
simple stamp	3			2.0
complicated stamp				
line				
curvilinear				
check-stamp				
rim				
punctate				
disc				
stamp-undefined				
Too Small	6			4.0
TOTALS	138	5	6	

TABLE 14
38FA48

Ceramic Sherd Count and Percentages
Level B, Pit I

Types & Varieties	No.	JR	BR	%
1. SAND-CRUSHED QUARTZ	91	1		15.8
Burnished int/ext	5			0.8
side-slash interior	6			1.0
exterior	1			0.2
smudg. int.	1		1	0.3
Burnish./Smudg. int./ext.	2		1	0.6
notched interior			1	0.2
Smoothed int/ext	45			8.0
interior	39	2		7.0
exterior	3			0.6
smudg. int.				
Smudged int/ext	8	1	1	1.4
side-notch interior	56		1	9.6
side punctate exterior				
Smoothed-over stamp	2			0.3
simple	4			0.7
smudg. int. complicated	1			0.2
smudg. int. angle				
Stamp-undefined	13			2.2
Simple Stamp	21			3.6
smudg. exterior burnished int. over-stamp				
Complicated Stamp	9	1		1.6
angle/line	1	2		0.6
arc-angle				
angle	1			0.2
notched		1		0.2
folded-over		1		0.2
bulls-eye	2			0.3

TABLE 14
Continued

Types & Varieties	No	JR	BR	%
Complicated Stamp (cont.)				
broad groove & line				
curvilinear	31	1		5.3
nested circles	1			0.2
line	1			0.2
line block	8			1.4
smudg./bur. int.				
rectang. line/angle	1			0.2
Check-stamp	10			1.7
diamond-check				
Incised	1			0.2
burnish. int.				
Impressed	9			1.6
Brushed	5			0.9
Node/Handle				
Rim				
side notch/flat top				
simple/folded				
punctate				
top				
side				
notched				
Disc				
Lug Handle				
2. SAND-UNIFORM PASTE	8*			1.4
Burnished int/ext	8		1	1.6
top punc.			1	0.2
interior	2		1	0.6
side punc..		1		0.2
exterior	4*			0.7
smudg. int.				
side slash		1		0.2
Smooth int/ext	10			1.6
notch. top				
interior	6			1.0
burnish ext.				
exterior			1	0.2

TABLE 14
Continued

Types & Varieties	No	JR	BR	%
Smudged int/ext interior	8			1.4
Smooth-over stamp complicated				
simple	1			0.2
check-stamp				
Stamp-undefined	1			0.2
Simple Stamp over-stamp	1			0.2
Complicated	6			1.0
angled				
bulls-eye				
curvilinear	1			0.2
whole cross				
line/angle	1			0.2
line block	1			0.2
nested diamond				
punct. jab				
punc./nodeappl.				
divided circle	1			0.2
Check-stamp				
Incised				
Punctate/jab	2			0.3
Node punctate			1	0.2
Rims				
side				
line jab				
reed punc.				
notch. smud.				
jab notch.				
angled slash				
collared				
jab punctate		1		0.2
notched				
smud/burn int/ext				
top notched				

TABLE 14
CONTINUED

Types and Varieties	No	JR	BR	%
Pipe stems or bowl		1		0.2
Handle or foot				
Disc				
Problematical Clay Object				
3. SAND-GRITTY	11		1	2.1
smooth int/ext				
interior	2			0.3
exterior				
smudged int/ext				
interior				
simple stamp				
complicated stamp				
line				
curvilinear	1			0.2
check-stamp				
rim				
punctate				
disc				
stamp-undefined	1			0.2
Too Small	100			17.2
TOTALS	556	15	11	

TABLE 15
38FA48

CERAMIC SHERD COUNT AND PERCENTAGES
SURFACE OF LEVEL C, PIT I

Types and Varieties	No.	JR	BR	%
1. SAND-CRUSHED QUARTZ	1			1.0
Burnished int/ext	3			4.0
side-slash				
interior	1			1.0
exterior	3			4.0
smudge. int.				
Burnish./Smudg. int./ext.				
notched				
interior				
Smoothed int/ext	10			14.0
interior	7			9.0
exterior				
smudg. int.				
Smudged int/ext				
side-notch				
interior	5			7.0
side punctate				
exterior				
Smooth-over stamp				
simple	6			8.0
smudg. int				
complicated				
smudg. int.				
angle				
Stamp-undefined	3			4.0
Simple Stamp	2			3.0
smudg. exterior				
burnished int.				
over-stamp				
Complicated Stamp	2			3.0
angle/line				
arc-angle				
angle				
notched				
folded-over				
bulls-eye				

TABLE 15
CONTINUED

Types and Varieties	No	JR	BR	%
Complicated Stamp (cont.)				
broad groove and line				
curvilinear	6			8.0
nested circles				
line				
line block				
smudg./bur. int.				
rectang. line/angle				
Check-stamp				
diamond-check				
Incised				
burnish. int.				
Impressed				
Brushed				
Node/Handle				
Rim				
side notch/flat top				
simple/folded				
punctate				
top			1	1.0
side				
notched				
Disc				
Lug Handle				
2. SAND-UNIFORM PASTE	2			3.0
Burnished int/ext	1			1.0
top punc.				
interior				
side punc.				
exterior				
smudg. int.				
side slash				
Smooth int/ext	2			3.0
notch. top				
interior	1			1.0
burnished ext.				
exterior	1			1.0

TABLE 15
CONTINUED

Types and Varieties	No	JR	BR	%
Smudged int/ext interior				
Smooth-over stamp				
complicated				
simple				
check-stamp				
Stamp-undefined	1			1.0
Simple Stamp				
over-stamp				
Complicated				
angled				
bulls-eye				
curvilinear	1			1.0
whole cross				
line/angle				
line block				
nested diamond				
punct. jab				
punc./nodeappl.				
divided circle				
Check-stamp				
Incised				
Punctate/jab				
Node punctate				
Rims				
side				
line jab				
reed punc.				
notched				
notch. smud.				
jab notch.				
angled slash				
collared				
jab punctate				
notched				
smud/burn int/ext				
top notched			1	1.0

TABLE 15
CONTINUED

Types and Varieties	No	JR	BR	%
Pipe stems or bowl				
Handle or foot				
Disc				
Problematical Clay Object				
3. SAND-GRITTY				
smooth int/ext				
interior				
exterior				
smudged int/ext				
interior				
simple stamp				
complicated stamp				
line				
curvilinear				
check-stamp				
rim				
punctate				
disc				
stamp-undefined				
Too Small	14			19.0
TOTALS	72	0	2	

TABLE 16
38FA48

Ceramic Sherd Count and Percentages
Level C, Pit I

Types and Varities	No	JR	BR	%
2. Sand-crushed quartz	61			5.40
Burnished int/ext	19		1	1.70
side-slash			1	0.09
interior	16		1	1.50
exterior	8	3		1.00
smudg. int.				
Burnish./Smudg/ int./ext.				
notched				
interior	7	1		0.70
Smoothed int/ext	48		4	4.60
interior	97		2	8.70
exterior	9			0.80
smudg. int				
Smudged int/ext	1			0.09
side-notch				
interior	91	2	1	7.40
side punctate			1	0.09
exterior	1			0.09
Smoothed-over stamp				
simple	44		1	4.00
smudg. int.				
complicated	1			0.09
smudg. int.				
angle				
Stamp-undefined				
Simple Stamp	131		2	11.70
smudg. exterior	1			0.09
burnished int.	1			0.09
over-stamp				
Complicated Stamp	8			0.70
angle/line	5			0.40
arc-angle				
angle				
notched				
folded-over				
bulls-eye	1			0.09

TABLE 16
CONTINUED

Types and Varieties	NO	JR	BR	%
Complicated Stamp (cont.)				
broad groove and line	1			0.09
curvilinear	23			2.00
nested circles				
line	2			0.10
line block				
smudg./bur. int.				
rectang. line/angle				
Check-stamp	9			0.80
diamond-check				
Incised				
burnish. int.			1	0.09
Impressed	2			0.10
Brushed	4			0.40
Node/Handle				
Rim				
side notch/flat top				
simple/folded				
punctate				
top			1	0.09
side				
notched				
Disc				
Lug Handle				
2. SAND-UNIFORM PASTE	12		1	1.20
Burnished int/ext	7			0.60
top punc.				
interior	1		1	0.10
side punc.				
exterior	1			0.09
smudg. int.	1		1	0.10
side slash				
Smooth int/ext	25	3		2.50
notch. top				
interior	5			0.40
burnish ext.				
exterior	5		1	0.50

TABLE 16
CONTINUED

Types and Varieties	No	JR	BR	%
Smudged int/ext				
interior				
Smooth-over stamp				
complicated	1			0.09
simple	5			0.40
check-stamp				
Stamp-undefined	4			0.40
Simple Stamp				
over-stamp				
Complicated	2			0.10
angled				
bulls-eye	1			0.09
curvilinear	2			0.10
whole cross				
line/angle	2			0.10
line block	1			0.09
nested diamond				
punct. jab	2			0.10
punc./nodeappl.				
divided circle				
Check-stamp				
Incised				
Punctate/jab				
Node punctate				
Rims				
side				
line jab				
reed punc.				
notched				
notch. smud.				
jab notch.				
angled slash				
collared				
jab punctate				
notched				
smud/burn int/ext				
top notched				

TABLE 16
CONTINUED

Types and Varieties	NO	JR	BR	%
Pipe Stems or bowl	4			0.40
Handle or foot				
Disc				
Problematical Clay Object	2			0.10
3. SAND-GRITTY	2			0.10
smooth int/ext				
interior				
exterior	1			0.09
smudged int/ext.				
interior				
simple stamp		1		0.09
complicated stamp				
line	1			0.09
curvilinear				
check-stamp				
rim				
punctate				
disc				
stamp-undefined				
Too Small	432			38.00
TOTALS	1,110	10	20	

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2.5-106 ERRO Trinkley 1984
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FA 164

SOUTH CAROLINA
DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION
P.O. BOX 191
COLUMBIA, S.C. 29202

August 23, 1984

TO: Robert B. Ferrell, Environmental Program Administrator

FROM: Michael Trinkley, Staff Archaeologist

RE: Archaeological survey of the S.C. 213 extension, Fairfield County, State File No. 20.461, F.A. No. RS-1154(71)

An archaeological survey of the above referenced project was conducted by one of the Department's Staff Archaeologists on August 16 and 17, 1984. The proposed work involves the construction of an extension of S.C. 213 from its intersection with S-16 north and east to S.C. 215 at the intersection of S-247 north of Jenkinsville. The project length is 1.2 miles on new location. The proposed new right of way would minimally be 100 feet, with additional ground disturbance in areas of steep slopes.

The project is situated in the Carolina Piedmont Provenience, which is characterized by rolling topography and a dendretic drainage pattern. Figure 1 shows the area to be heavily dissected and the corridor crosses two active tributaries of Mayo Creek and three other major gullies. The project crosses seven soil series, including Appling loamy sand, 6 to 10% slopes (2.8% of the corridor); Cecil sandy loam, 2 to 6% slopes (11.1% of the corridor); Hiwassee sandy clay loam, 2 to 6% slopes, eroded (8.3% of the corridor); Hiwassee sandy clay loam, 6 to 10% slopes, eroded (2.8% of the corridor); Pacolet sandy loam, 10 to 15% slopes (19.4% of the corridor); Wilkes sandy loam, 6 to 15% slopes (33.3% of the corridor); Wilkes sandy loam, 15 to 40% slopes (22.3% of the corridor) (Hardee 1982). Consequently, about 89% of the corridor is either steeply sloping (over 6% slopes) or is classified as eroded. These areas may be considered to have a low archaeological potential. Lowry (1934) notes that the Jenkinsville area is characterized by severe sheet erosion and frequent erosion. Trimble (1974:3) similarly notes that Fairfield County has suffered erosion to soil depths of over a foot.

Vegetation in the project area is mixed hardwoods and pines. Several stands of pines have been clearcut, leaving open ground now in second growth. The creeks support small communities of aquatic vegetation, but there are no floodplains of sufficient size to support wetland plants.

This survey consisted of a pedestrian survey coupled with occasional shovel tests in the less steeply sloping areas. Particular attention was paid to the logged areas and woods roads since those areas tended to have better surface visibility and to be situated on more level topography.

It should be recalled that large portions of the corridor cross terrain not complicated by the presence of four different survey lines, all of which are within several hundred feet of one another. These lines did, however, allow considerable examination of the corridor topography.

During the survey a single archaeological site, SCHD Fairfield 4, was identified at station 176+00. This site is situated on a north facing ridge nose, about 800 feet east of a tributary of Mayo Creek. Soils in the site vicinity are Cecil sandy loams, 2 to 6% slopes. The site area has been logged several years ago and material was found in the logged area and in a woods road which runs east-west through the site. Site size is estimated to be 50 by 75 feet. Materials recovered include five quartz thinning flakes, one rhyolite thinning flake, one quartz caraway projectile point, and a single whiteware ceramic. The site evidences considerable sheet erosion and one yellow-red clay subsoil is uniformly exposed. Native quartz is common in the site vicinity.

No further investigations at this site are recommended, based on the extent of erosion. Sufficient mitigation has been achieved through recording and collecting the site. No further archaeological investigations appear necessary in the project corridor.

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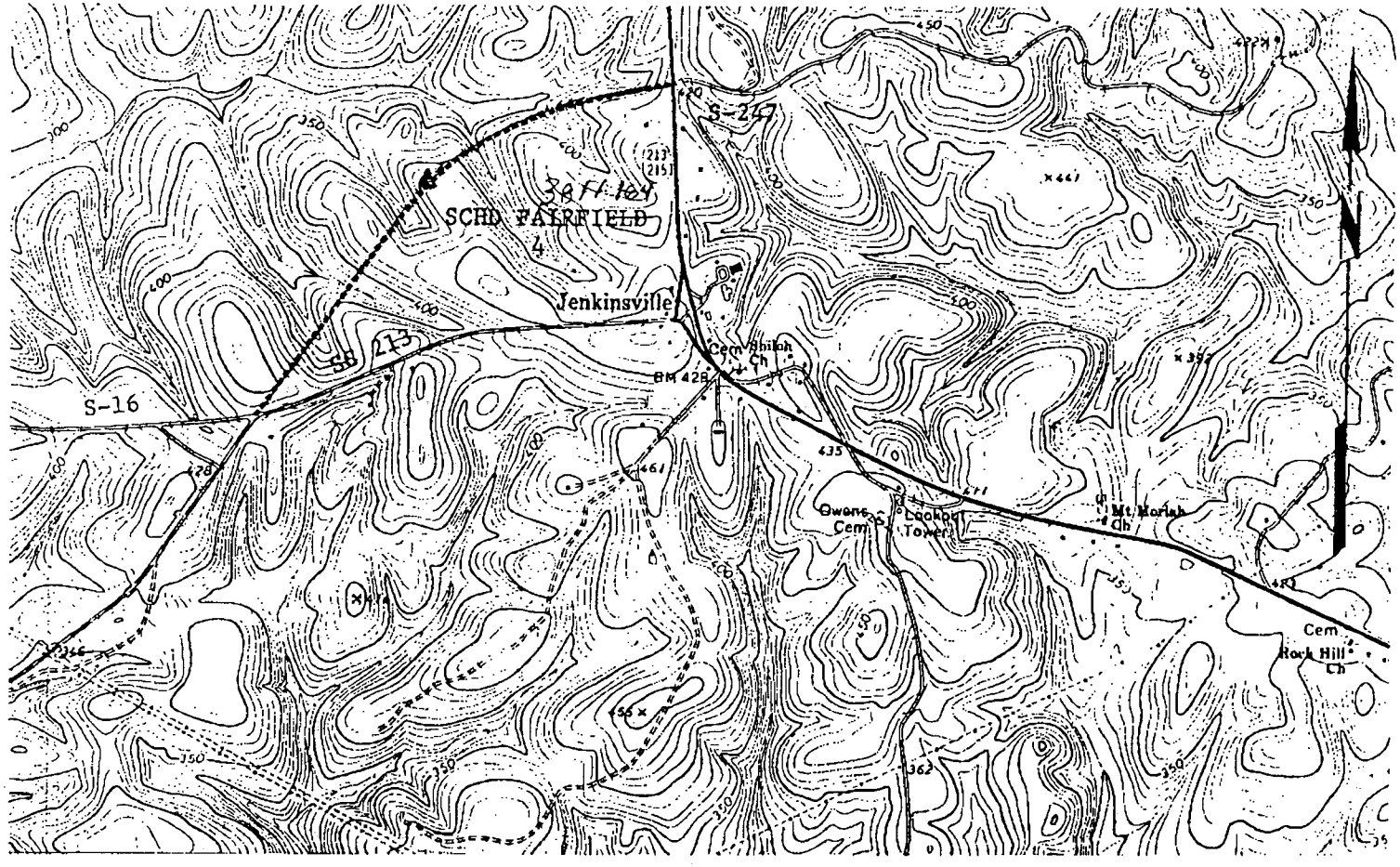

Figure 1. A portion of the USGS Jenkinsville 7.5' topographic map showing the proposed S.C. 213 extension to S.C. 215 and archaeological site SCHD Fairfield 4.

CR-9 2.53-135 (138)

August 16, 2006

Mr. Jonathon A. Bloom
R.S. Webb and Associates
2800 Holly Springs Parkway, Suite 200
Holly Springs, GA 30142

RE: Final Report, *Phase I Archaeological Survey of the Proposed SCE&G Meteorological Tower Site, Fairfield County, South Carolina.*

Dear Mr. Bloom:

Thank you for providing us with the above-referenced report that describes archaeological investigations in Fairfield County, South Carolina. We reviewed the report and concur with your recommendation that archaeological site 38FA38 is not eligible for listing in the National Register of Historic Places. No further work is necessary at this site.

Based on the information provided to our office, we believe the proposed undertaking will have no effect on historic properties.

These comments have been provided to assist you with your responsibilities under Section 106 of the National Historic Preservation Act, as amended, and the regulations codified at 36 CFR Part 800. Please contact me at 803-896-6181 if you have any questions or comments regarding this matter.

Sincerely,

Chad C. Long
Staff Archaeologist
State Historic Preservation Office

cc: Keith Derting, SCIAA

SCEG-283

September 14, 2006

Mr. George Swearingen
Tower Engineering Professionals
3703 Junction Blvd.
Raleigh, NC 27603

Re: Proposed 197-foot Guyed Lattice Tower
SCE&G V.C. Summer Nuclear Power Plant
Fairfield County, South Carolina
SCANA Nuclear Meteorological Tower

Dear Mr. Swearingen:

We received a completed FCC Form 620 for the above-referenced project along with a Phase I Archaeological Survey of the tower site. The survey identified archaeological site 38FA322. On July 27, 2006, Chad Long from our office requested additional testing of 38FA322 to determine the site's eligibility for the National Register of Historic Places.

On August 15, we received a revised copy of the survey report with the additional investigations of the site. Our office concurs with the report's recommendations that site 38FA322 is **not eligible** for listing in the National Register of Historic Places. The proposed tower should have no direct effect on historic properties.

Based on the FCC-standardized 0.5-mile Area of Potential Effect (APE) for the visual effects of a 197-foot tower, our office concurs that no properties included in or eligible for inclusion in the National Register of Historic Places will be visually affected by this project.

These comments by the State Historic Preservation Office are required by the Federal Communications Commission's 2005 Nationwide Agreement For Review of Effects on Historic Properties for Certain Undertakings. If you have questions, please contact me at (803) 896-6169 or dobrasko@scdah.state.sc.us.

Sincerely,

Rebekah Dobrasko

Rebekah Dobrasko
Review and Compliance Coordinator
State Historic Preservation Office

SCE&G®
A SCANA COMPANY

April 9, 2007

Ms. Elizabeth Johnson
State Historic Preservation Office Representative
Central Midlands Region
South Carolina Department of Archives and History
The South Carolina Archives and History Center
8301 Parklane Road
Columbia, SC 29223

SUBJECT: Virgil C. Summer Nuclear Station
New Nuclear Deployment Project
Request for Cultural Resources Information

Dear Ms. Johnson:

South Carolina Electric and Gas Company (SCE&G) is preparing an application to the U.S. Nuclear Regulatory Commission (NRC) for a combined construction permit and operating license (COL) that would allow SCE&G to build and operate up to two additional nuclear units at the Virgil C. Summer Nuclear Station (VCSNS) site in Fairfield County, South Carolina. Although SCE&G is preparing the COL application, the proposed nuclear units are a joint venture between SCE&G and the South Carolina Public Service Authority, commonly referred to as "Santee Cooper." The new units would be jointly owned by SCE&G and Santee Cooper, but would be operated by SCE&G.

As required by the National Environmental Policy Act (NEPA), the NRC will prepare an Environmental Impact Statement (EIS) based, in part, on the information in applicants' COL application. Under 36 CFR 800.8, an agency may incorporate compliance with Section 106 of the National Historic Preservation Act (NHPA) into the NEPA process, and NRC does so by consulting with the State Historic Preservation Office (SHPO) during the EIS preparation process and including the results of that consultation in the NEPA analysis.

The VCSNS site is approximately 15 miles west of the Fairfield County seat of Winnsboro. The closest population center (i.e., having more than 25,000 residents) to the site is Columbia, South Carolina, approximately 14.5 miles southeast of the VCSNS (see attached Figure 2.1-2). The closest community is Jenkinsville, less than 3 miles southeast of the site (see attached Figure 2.1-3).

The existing VCSNS (Unit 1) generating facilities and switchyard are located on the south shore of Monticello Reservoir (see attached Figure 2.1-1). The proposed VCSNS Units 2 and 3 and supporting infrastructure would be built approximately one mile south-southwest of Unit 1. A nuclear exclusion zone, defined as the area within approximately one mile of Unit 1 combined with the area 3,390 feet from the center of proposed Units 2 and 3, would be posted and access to

land portions of this area would be controlled. The boundary of the exclusion zone, shown on attached Figure 2.1-1, also defines the site boundary. The VCSNS property, thus defined, covers approximately 2,560 acres, and includes the southern portion of Monticello Reservoir and parts of SCE&G's Fairfield Pumped Storage Facility (see Figure 2.1-1).

Preliminary to an official agency consultation, SCE&G met informally with Ms. Rebecca Debrasko and Mr. Chad Long on June 5, 2006 to provide them early information on the project and the COL application process. During the visit, SCE&G and Ms. Debrasko and Mr. Long discussed the results of SCE&G's initial research on the potential for cultural resources at the proposed project site and the need for additional cultural resource surveys.

During 2006 and 2007 SCE&G conducted three Phase I surveys of the proposed project site – one at the location of the meteorological monitoring tower, and two on the property affected by the construction of the new units. The survey reports will be available on request.

In brief, the survey of the 17.5-acre meteorological tower site identified one site believed to be the home site of the Revolutionary War patriot, General John Pearson. The site was severely disturbed and therefore, was recommended as ineligible for inclusion in the National Register of Historic Places. The South Carolina SHPO has concurred with this recommendation and determined that the site is not eligible.

During the Phase I survey of the proposed project area, seven archaeological sites were recorded and assessed for their National Register eligibility. All of the archaeological sites were very disturbed and lacked integrity, and all were recommended as not eligible for inclusion in the National Register of Historic Places. General Pearson's grave and an associated DAR monument is recommended as eligible for inclusion in the National Register and the cemetery in which he is buried is recommended as potentially eligible. SCE&G has, subsequently, fenced the cemetery to protect it.

Based on the results of the Phase I surveys, SCE&G believes that the construction of two new units at the V.C. Summer Nuclear Station will not adversely affect cultural or historical resources in the vicinity. SCE&G would appreciate the SHPO sending us a letter identifying any concerns you may have about archaeological or cultural resources in the project area or confirming SCE&G's conclusion that the proposed project will not adversely affect cultural or historical resources at the V.C. Summer Nuclear Station. SCE&G will include a copy of this letter and your response in the COL application that we submit to NRC. Please call Mr. Stephen E. Summer (803-217-7357) if you have any questions or require additional information to review the proposed action.

Sincerely,

Al Paglia
Manager, Nuclear Licensing

April 27, 2007

Mr. Al Paglia
Manager, Nuclear Licensing
SCE&G, New Nuclear Deployment
P.O. Box 88, MC P40
Jenkinsville, SC 29065

Re: V.C. Summer Nuclear Station
Fairfield County, South Carolina

Dear Mr. Paglia:

Thank you for your letter of April 9, which we received on April 16, regarding the Nuclear Regulatory Commission application for the V.C. Summer Nuclear Station. Our office has reviewed and commented upon the proposed meteorological monitoring tower at the station.

We are unable to comment on any concerns we may have for this project until we review the cultural resources survey conducted for the construction of the new nuclear units. Please provide our office with one copy of the cultural resources survey (two if architectural properties in the Area of Potential Effects were identified) for our review.

Please note that Chad Long is no longer with our office. The archaeologist working with me on this project is Chuck Cantley. Chuck can be reached at (803) 896-6181 or ccantley@scdah.state.sc.us.

These comments are provided by the State Historic Preservation Office pursuant to Section 106 of the National Historic Preservation Act, as amended. If you have questions, please contact me at (803) 896-6169 or dobrasko@scdah.state.sc.us.

Sincerely,

Rebekah Dobrasko

Rebekah Dobrasko
Review and Compliance Coordinator
State Historic Preservation Office

Alfred M. Paglia, Jr.
Manager
Nuclear Licensing
New Nuclear Deployment

SCE&G®
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July 9, 2007
NND-07-0006

Ms. Rebekah Debrasko
Review and Compliance Coordinator
South Carolina Department of Archives and History

Dear Ms. Debrasko:

Reference 1: Letter from SCE&G (Al Paglia) to SHPO dated 04-09-07.
Reference 2: Letter from The S.C. Archives & History Center to SCE&G (Al Paglia) dated 04-09-07.

As noted in Reference 1, South Carolina Electric & Gas Company (SCE&G) is in the process of developing a license application to the Nuclear Regulatory Commission for two new nuclear generating units at the Virgil C. Summer Nuclear Station. As part of the site evaluation, SCE&G performed two archaeological surveys of the areas potentially impacted by the construction and operation of the two new units. As requested in Reference 2, a paper copy of each of the associated reports are included with this letter for your review.

In addition, SCE&G has summarized National Register listed properties in counties likely to be crossed by transmission lines associated with the new nuclear generating units. Even though SCE&G does not yet know the exact routing of any potential transmission rights of way, we are also submitting this report for your review.

We look forward to meeting with you regarding this project.

Sincerely,

Al Paglia
Manager, Nuclear Licensing

AMP/SES/tk
Attachments

c: Stephen Summer
Rice, April
Waller, Johnnie
Connor, Steve TTNUS
NND-07-0006

South Carolina Archives & History Center
History & Heritage For All Generations

August 16, 2007

Mr. Al Paglia
Manager, Nuclear Licensing
SCE&G
P.O. Box 88
MC P40
Jenkinsville, SC 29065

Re: V.C. Summer Nuclear Station
Two New Generating Units
Fairfield County, South Carolina

Dear Mr. Paglia:

Our office has had the opportunity to review the reports entitled *Archaeological Survey of Planned Improvements at V.C. Summer Nuclear Station*, the addendum to this report, and the *Summary of All National Register Listed Properties in Ten Counties to be Affected by Transmission Line Rights of Ways Associated with Improvements at V.C. Summer Nuclear Station*. Below are our comments on these reports, and the overall licensing process for the V.C. Summer Nuclear Station.

Archaeology at the Nuclear Station

The reports meet both State and Federal standards for the identification, documentation, and assessment of cultural resources. We concur with the recommendations that the Pearson Cemetery is potentially eligible and the grave of General John Pearson and the associated DAR monument are eligible for listing in the National Register of Historic Places. We understand that SCE&G plans to avoid these resources in order to ensure that **no adverse effect** will occur. Our office recommends that a preservation covenant should be recorded to protect these resources.

All other archaeological sites and isolated finds identified by the survey were recommended as not eligible for listing in the National Register, and we concur with this recommendation. No further work is necessary.

Proposed Transmission Line Corridors

We understand that the final routing for potential transmission line corridors associated with this project is not determined. The summary of National Register properties prepared for the transmission lines should assist SCE&G in determining routing for these lines. SCE&G should consider both listed properties and those properties determined to be eligible for listing in the National Register when planning their routes. Our office maintains GIS layers containing information on known historic properties in South

S. C. Department of Archives & History • 8301 Parklane Road • Columbia • South Carolina • 29223-4905 • (803) 896-6100 • www.state.sc.us/scdah

Carolina. We would be happy to share this information with you, as needed, for planning these transmission lines.

Programmatic Agreement

Our office recommends the development of a programmatic agreement to last the life of the license issued for the V.C. Summer Nuclear Station. This agreement should include our office, the Nuclear Regulatory Commission, SCE&G, and any interested parties as defined under 36 CFR 800. An agreement would ensure that cultural resources are considered in SCE&G's activities under a new license and can address late discoveries of archaeological sites and emergency procedures.

These comments are provided by the State Historic Preservation Office pursuant to Section 106 of the National Historic Preservation Act, as amended. If you have questions on procedural issues, please contact me at (803) 896-6169 or dobrasko@scdah.state.sc.us. If you have questions on archaeological issues, please contact Chuck Cantley at (803) 896-6181 or ccantley@scdah.state.sc.us.

Sincerely,

Rebekah Dobrasko

Rebekah Dobrasko
Review and Compliance Coordinator
State Historic Preservation Office

cc: Keith Derting, SCIAA
Natalie Adams, New South

Alfred M. Paglia, Jr.
Manager
Nuclear Licensing
New Nuclear Deployment

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December 18, 2008
NND-08-0065

Ms. Rebekah Dobrasko
Review and Compliance Coordinator
State Historic Preservation Office
South Carolina Department of Archives and History

Second Addendum to the Archaeological Survey of Planned Improvements at V.C. Summer Nuclear Station

Dear Ms. Dobrasko:

As you are aware, South Carolina Electric & Gas Company (SCE&G) has submitted a license application to the Nuclear Regulatory Commission for two new nuclear generating units at the Virgil C. Summer Nuclear Station. As part of the initial site evaluation, SCE&G performed a series of archaeological surveys of the areas potentially impacted by the construction and operation of the two new units (reference your letter to Al Paglia of August 16, 2007). As the scope of the project became more refined, SCE&G realized that additional archaeological investigation was needed to address areas that were not evaluated in the first studies.

Three bound copies, one unbound copy, and two CDs containing an electronic version of the report entitled "Second Addendum to the Archaeological Survey of Planned Improvements at V. C. Summer Nuclear Station" describing the additional archaeological study are included with this letter for your review. Please respond with your office's concurrence or concerns. We (including the author of the report) would be glad to meet with you to discuss the report if you desire. If you have any questions, please contact Steve Summer by telephone at 803-217-7357 or by email at ssummer@scana.com.

Sincerely,

Al Paglia
Manager, Nuclear Licensing
New Nuclear Deployment

Enclosure:

c: Connor, Steve TTNUS
Rice, April
Stephen Summer
Waller, Johnnie
Filenet

January 28, 2009

The South Carolina Archives & History Center
History & Heritage For All Generations

Mr. Al Paglia
Manager, Nuclear Licensing
New Nuclear Deployment
PO Box 88 MCP40
Jenkinsville, SC. 29065

Re: Second Addendum to the Archaeological Survey of Planned Improvements at V.C. Summer Nuclear Station.
SHPO # 08-CW0056

Dear Mr. Paglia:

Thank you for your letter of December 18, 2008, which we received on December 22, 2008, regarding the above referenced project. We also received three bound copies, one unbound copy, and 2CDs of the archaeological survey conducted by New South Associates as supporting documentation for this undertaking. The State Historic Preservation Office is providing comments to SCE&G pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800.

Based on the description of the Area of Potential Effect (APE) and the identification of historic properties within the APE, our office concurs with the assessment that two archaeological sites (38FA360 and 38FA366) are recommend as potential eligible properties, while six archaeological sites and three isolated finds are recommended as not eligible for listing in the National Register of Historic Places. The potentially eligible sites should be avoided if possible or further evaluated to make a definitive determination of their eligibility should they be impacted by future construction activities.

Since SHPO is not making any substantive comments to the report, we will proceed to distribute the required number of copies to SCIAA for their files.

If you have any questions, please contact me at (803) 896-6181 or ccantley@scdah.state.sc.us.

Sincerely,

Chuck Cantley

Chuck Cantley, MA, RPA
Staff Archaeologist/GIS Coordinator
State Historic Preservation Office

Cc: Natalie Adams, New South Associates

Alfred M. Paglia, Jr.
Manager
Nuclear Licensing
New Nuclear Deployment

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March 17, 2009
NND-09-0054

Mr. Chuck Cantley, MA, RPA
Review and Compliance Coordinator
State Historic Preservation Office
South Carolina Department of Archives and History

Phase II Examination of 38FA360: A Woodland Period Site Along Mayo Creek
V.C. Summer Station

Dear Mr. Cantley:

As you are aware, South Carolina Electric & Gas Company (SCE&G) has submitted a license application to the Nuclear Regulatory Commission for two new nuclear generating units at the Virgil C. Summer Nuclear Station. As part of the initial site evaluation, SCE&G performed a series of archaeological surveys of the areas potentially impacted by the construction and operation of the two new units (reference your letter to Al Paglia of August 16, 2007). As the scope of the project became more refined, SCE&G realized that additional archaeological investigation was needed to address areas that were not evaluated in the first studies.

Three bound copies, one unbound copy, and two CDs containing an electronic version of the report entitled "Phase II Examination of 38FA360: A Woodland Period Site Along Mayo Creek V.C. Summer Station" describing the additional archaeological study is included with this letter for your review. Please respond with your office's concurrence or concerns. We (including the author of the report) would be glad to meet with you to discuss the report if you desire. If you have any questions, please contact Steve Summer by telephone at 803-217-7357 or by email at ssummer@scana.com.

Sincerely,

Al Paglia
Manager, Nuclear Licensing
New Nuclear Deployment

Enclosure:

c: (Without Attachments)
Kenneth J. Browne - Santee Cooper
Stephen A. Byrne
Ronald B. Clary
Jennifer Davis-NRC
William A. Fox, III – Shaw
Project Document Control – Shaw
Frederick P. Hughes - Westinghouse
Randolph R. Mahan
Bill McCall - Santee Cooper
Jan Renfro – Bechtel
Kathryn M. Sutton – Morgan Lewis
DCRM-EDMS (With Attachments)

April 17, 2009

Alfred M. Paglia, Jr.
Manager-Nuclear Licensing
SCE&G
New Nuclear Deployment
P.O.Box 88 MCP40
Jenkinsville, South Carolina 29065

THE South Carolina Archives & History Center
HISTORY & HERITAGE FOR ALL GENERATIONS

RE: Phase II Examination of 38FA360: W Woodland Period Site Along Mayo Creek V.C. Summer Station
SHPO Number 07-RD0154

Dear Mr. Paglia:

Thank you for your letter of March 17, 2009, which we received on March 19, 2009, regarding the Phase II work done at 38FA360. We also received three bound copies, one unbound copy, and two CDs containing an electronic version of the Phase II report as supporting documentation for this undertaking. The State Historic Preservation Office is providing comments to the NRC and SCE&G pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800.

SHPO has reviewed the above-mentioned Phase II testing report. The report meets both State and Federal standards for the eligibility assessment of site 38FA360. We concur with the recommendation that this site is eligible for inclusion in the National Register of Historic Places. This resource should be avoided and not adversely impacted by future construction activities. If this site cannot be preserved in place, then an MOA should be developed among the stakeholders and a data recovery plan submitted to SHPO for approval prior to commencement of any ground disturbing activities.

SHPO has no major comments concerning the draft report and will therefore accept the submitted draft copies as final copies for distribution.

These comments are provided to assist you with your responsibility under pertinent state and federal laws. If you have any questions or comments, please contact me at (803) 896-6181.

If you have any questions, please contact me at (803) 896-6181 or ccantley@scdah.state.sc.us.

Sincerely,

Chuck Cantley

Chuck Cantley, MA, RPA
Staff Archaeologist/GIS Coordinator
State Historic Preservation Office

cc: Natalie Adams, New South Associates
Kieth Derting, SCIAA