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AN ARCHEOLOGICAL SURVEY OF RAWLS AND KINLEY CREEKS, LEXINGTON COUNTY, SOUTH CAROLINA

by

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INTRODUCTION

The Rawls and Kinley Creek archeological survey was undertaken to examine approximately 12 miles of a proposed sewer system in the areas drained by Rawls and Kinley Creeks, which in turn, flow into the Saluda River (Fig. 1). The project area is located in Lexington County. B. P. Barber and Associates were employed by the county to serve as the design consultants for the project. Arrangements were made by B. P. Barber and Associates with the Institute of Archeology and Anthropology for an archeological survey of the impact zone under the guidelines of the National Environmental Protection Agency, U.S. Department of the Interior.

The archeological survey was conducted between July 19-26, 1976 by David Ballenger and Richard F. Carrillo. During the period of the field-work, nine sites were found and recorded.

The results obtained during the archeological survey indicated that sites were not present within the immediate rights-of-way of the sewer systems in either the Rawls or Kinley Creek drainages, although one area (38LX116) would possibly warrant further attention during the construction phase, because of its proximity to the right-of-way (Fig. 1). In addition to the artifacts found in this area, an assortment of artifacts retrieved from the vicinity of the field by a local resident was examined. Although no surface evidence of a site was found in the direct right-of-way, in the interim statement submitted to B. P. Barber and Associates, the location of the site was made apparent. The Institute indicated that it wished to be kept informed when construction was initiated in this location. This is necessary because one of the problems encountered in trying to locate sites was that alluvium deposits, approximately four feet deep,

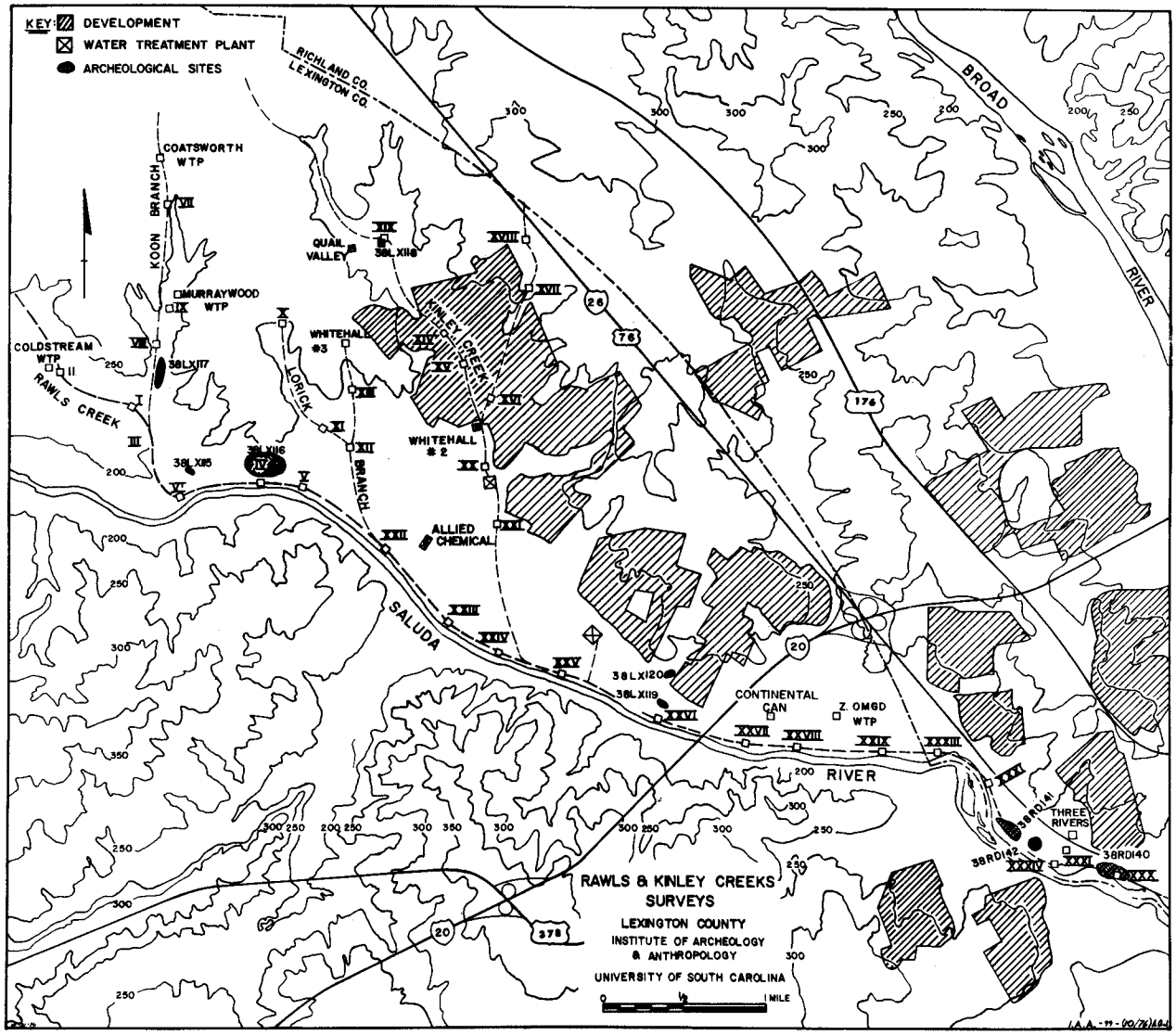
KEY: DEVELOPMENT
WATER TREATMENT PLANT
ARCHEOLOGICAL SITES
RICHLAND CO.
LEXINGTON CO.
COATSWORTH WTP
KOON BRANCH
MURRAYWOOD WTP
COLDSTREAM WTP
RAWLS CREEK
38LX117
38LX85
38LX116
QUAIL VALLEY
38LX118
WHITEHALL #3
WHITEHALL #2
LORICK BRANCH
KINLEY CREEK
ALLIED CHEMICAL
SALUDA
38LX120
38LX119
CONTINENTAL CAN
Z. OMGD WTP
RIVER
BROAD
RIVER
THREE RIVERS
38RD142
38RD141
38RD140
RAWLS & KINLEY CREEKS SURVEYS
LEXINGTON COUNTY
INSTITUTE OF ARCHEOLOGY & ANTHROPOLOGY
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FIGURE 1

occur at these locations and there is a possibility that sites are present below this overburden.

The primary goal of the survey was to make an accurate assessment of any archeological sites which would be directly impacted by construction of the sewers. The second aspect entailed evaluating the significance of the affected sites, in that the criterion for measurement of significance consists of determining the amount of information about the past that a site is capable of producing (Ferguson 1976). Although in the case of the Rawls and Kinley Creek survey this is not a relevant issue; it can become a relevant issue in future surveys in the area and for that reason it is felt that it must be given consideration.

Therefore, it is essential to make an attempt to understand the cultural system in which the site was an active participant. The activities which resulted in the formation of the units with which we are forced to deal, i.e. sites, did not operate as isolated units, but represent components of a larger system. The basic outline of cultural history in the southeastern United States has been defined (Table 1).

Only a minimal quantity of archeological work has been undertaken in South Carolina, particularly in the Piedmont area of the State. This survey is the only work ever undertaken in the Rawls and Kinley Creek drainages. Although some studies have been conducted in the area around Columbia (Ryan 1972; Kimmel 1973; Anderson, Michie and Trinkley 1974; Goodyear 1975), sufficient information has not been generated for evaluating the significance of the sites located in the Rawls and Kinley Creek drainages. A recent study by Ferguson (1976) of the Crane

TABLE 1

A CULTURAL SEQUENCE FOR THE OCCUPATION OF THE SOUTHEASTERN UNITED STATES

Chronology	Cultural Sequence	Subsistence	Trends
1976		Industrial	
	Historic		
1670			
		Agricultural	
	South Appalachian Mississippian -- Late Woodland	Developed horticulture, hunting and gathering	
1000			
500			
	Middle Woodland	Hunting and gathering with horticulture	
A.D.			
0			
B.C.			
	Early Woodland	Hunting and gathering with incipient horticulture	
2000			
	Archaic	Development of generalized hunting and gathering techniques	
7000	Paleo-Indian	Specialized hunting and gathering	

Increase in sedentism, population, and technological complexity

Sequence taken from Ferguson (1976).

Creek drainage system, located northeast of the Rawls and Kinley Creek area, comprises the most extensive study of this region to date. The study served as a basis for the Rawls and Kinley Creek survey. This study attempts to integrate, where possible, the specific sites located in the area to the broader cultural patterns responsible for these sites.

THE IMPACT ZONE AND SURROUNDING ENVIRONMENT

Rawls and Kinley Creeks both flow into the Saluda River. Rawls Creek is located approximately two miles west of Kinley Creek. Koon Branch converges with Rawls Creek approximately three quarters of a mile from the confluence of Rawls Creek with the Saluda River. Two small converging streams form the Lorick Branch which also empties into the Saluda, and are located between Rawls and Kinley Creeks. Several existing housing developments, in addition to newly constructed ones, are located along all of the above mentioned drainage systems. The creek systems in this area are located along the Fall Line which was an important environmental zone when viewed from the point of man's adaptation to the environment (Ferguson 1976).

The lithology of the Rawls and Kinley Creek drainage systems consists of:

> Argillite -- white, gray, and brown;
> Fine-grained laminated argillite;
> Tuffaceous argillite and graywacke; includes felsic and mafic agglomerates, breccias, tuffs, and volcanic flows;
> Outliers having the same lithology occur in the Charlotte belt;
> In the Carolina slate belt typically muscovite-chlorite subfacies of greenschist facies occur (Overstreet and Bell 1965).

In the metamorphic rocks of which this region is composed, many outcroppings of quartz occur. Prehistoric peoples extensively utilized quartz for the manufacture of stone tools (Ferguson 1976).

The soils of the Piedmont, in their natural state, are composed of a shallow topsoil cover underlain by a residual clay subsoil (Craddock and Ellerbe 1966). However, the ecologically destructive farming which took place in the upper Piedmont in the nineteenth and early twentieth centuries caused extensive erosion which filled most Piedmont valleys

with silt that in some areas extends to a depth of fifteen feet (Trimble 1972). As was the case in the Crane Creek drainage (Ferguson 1976), the floodplains of the Rawls and Kinley Creeks are covered with silt deposits averaging between one to two feet in depth. Red clay was encountered below the alluvium in the subsurface tests. As might be expected, most of the extensive deposition was found along the area of the Saluda River.

As significant alterations in soil deposition have occurred over the past 200 years, the vegetation has also been greatly affected. The climax forest growth in the Piedmont would consist of oak, hickory, and other types of hardwoods (Küchler 1964). The adverse effects of extensive logging of the climax forest and farming have resulted in a variety of vegetation such as pines, blackberry, sedge, cane and honeysuckle in the areas of Rawls and Kinley Creeks. In most cases, ground cover consists of thick vegetation.

THEORETICAL CONSIDERATIONS AND RESEARCH DESIGN

The research strategy of this study was similar to that used by Ferguson (1976) and adapted from House and Ballenger (1976).

I. Identification of prehistoric groups using or occupying the Rawls and Kinley Creek Valleys. Identification and tabulation of culturally and/or historically diagnostic artifacts recovered during the survey.

II. Investigation of aboriginal utilization of the creek valleys.

A. Identification of site variability

H (Hypothesis) 1: Intensive habitation sites are present.

I (Implication) 1: Presence of midden.
I2: Presence of artifact classes which suggest habitation, such as fire-cracked rock, steatite and ceramic sherds.
I3: Wide range of tools and debitage.
I4: Favorable location (level, extensive area, sheltered).

H2: Less intensive habitation sites are present.

I1: Favored location, proximity to water source.
I2: Wide variety of tools and debitage.
I3: Relatively high density of artifacts.

H3: Sites for extraction of specific biotic resources are present.

I1: Less favored location, permanent water source not necessarily accessible.
I2: Narrow range of tools and debitage.
I3: Sites will probably be numerous.
I4: Low density of artifacts

H4: Extraction sites for various lithic resources are present.

I1: Sites are present in locations in very close proximity to resource.
I2: At these sites, modified pieces representing debitage and rejected "blanks" or "preforms" are present in high density.

B. Identification of critical biotic resources exploited by prehistoric systems in the creek valleys.

H1: Deer exploited.

I1: Limited range of artifacts representative of cutting functions present in numerous loci and low density.
I2: These loci correspond to zones of optimum deer habitat at least at some season of the year.

H2: Acorns and hickory nuts exploited.

I1: Numerous loci with limited range of artifacts.
I2: These loci in zones of maximum availability and most nutritious acorns and hickory nuts.
I3: Stone plant processing tools at these loci (assuming use of stone vs. wood processing tools and processing at extraction rather than habitation loci).

H3: Exploitative subsystem centered on largest creek banks with their distinctive resources (fish, turtles, raccoons, opossums, etc.).

I1: Numerous habitation and/or extractive sites located in close proximity to large creeks.

C. Patterns of exploitation (difficult to control temporally).

H1: No exploitation with a durable technology.

I1: No cultural remains

H2: Activity proportionate to the rank of streams and the relationship of one stream to another.

I1: A greater density of material will be found in association with the larger streams.

H3: Activity limited to occasional use for various reasons.

I1: Many small widely dispersed loci with low density and narrow range of artifacts.

H4: Activity involving permanent or prolonged seasonal occupation of the creek valleys and exploitation of a variety of resources.

I1: Habitation sites present.

I2: Sites in a wide variety of stream situations.
I3: A broad range of artifacts present in the impact zone.

III. Observe new patterns in the data and construct new hypotheses for future testing.

METHODS AND FIELD TECHNIQUES

Several steps were involved in the process of the archeological survey. Initially, the office of the Historic Preservation Officer for the State of South Carolina was contacted to determine if there were any sites located within the Rawls and Kinley Creek areas on the National Register of Historic Sites. There were no recorded sites. The next step consisted of examining the 1825 Mills' Atlas of South Carolina (1965) in order to check for eighteenth and nineteenth century structures located within the impact zone. None were recorded in the Atlas.

The files of the Institute of Archeology and Anthropology were examined. No sites had been recorded in the impact zone although there were sites recorded immediately below the area on the Saluda River.

The field survey was then initiated in an attempt to locate any sites within the impact zone.

Two methods were employed for examining the impacted areas. One consisted of a 10% randon sampling of 34 areas within the primary impact zone (Fig. 1). These sampling points were 250 feet long units which were subjected to subsurface testing using a posthole digger. This method had been successfully implemented by Ferguson (1976) during the Crane Creek survey. Excavation was undertaken using arbitrary one foot vertical units and the soil was sifted through one-quarter inch hardware cloth. No sites were actually located using this method, although in areas outside the impact zone where evidence of sites did exist on the surface, artifacts were recovered in the posthole samples. Three sites (38LX116, 38LX118, and 38RD140) were located near the random points

using this method. In addition to the random sample, the United States Coast and Geodetic Survey maps of the areas were examined in an effort to make predictions regarding probable site locations. Six sites (38LX115, 38LX117, 38LX119, 38LX120, 38RD141, and 38RD142) were found outside of the impact zone in the areas which had been predicted as possible site locations. In all 39 locations were examined for sites. No sites were found in the random sample using the posthole diggers, although in the predicted sites four posthole samples did produce results. In 38LX119, three posthole samples and in 38LX122, one posthole sample produced artifacts (Table 2).

TABLE 2

TYPOLOGICAL ANALYSIS OF PREHISTORIC MATERIALS FROM RAWLS-KINLEY SURVEY COLLECTIONS

Site Number and Method	Fire crkd (grams)	Chunks	Other Flakes	Thinning Flakes	Flake Tools	Flake Cores	Points	Biface Blanks	Other Biface	Ceramics
38LX115	0	2	26	15	0	0	0	2	0	0
38LX116	0	0	0	0	0	0	0	0	0	1 coarse sand t., plain
38LX117	0	0	0	0	0	0	1 unclass. frag.	0	0	0
38LX118	0	3	12	14	2/2	1	0	0	0	0
38LX119	0	3	21	24	0	0	0	0	1	0
38LX119,ph1	0	1	4	1	0	0	0	0	0	0
38LX119,ph2	0	0	0	1	0	0	0	0	0	0
38LX119,ph3	0	0	1?	0	0	0	0	0	0	0
38LX120	0	4	11	6	1/1	0	0	0	0	0
38LX121	34	13	72	46	0	2	1 Savannah R.	4	2	1 coarse sand t.,incised
38LX122,ph2	0	4	1	2	0	0	0	0	0	0
38LX123	9	4	11	10	0	1	0	1	0	0

Analysis conducted by John H. House.

ph = posthole

ARTIFACT ANALYSIS

The results of the artifact analysis were rather inconclusive because of the limited quantity of artifacts recovered (Table 2); however, some observations warrant discussion. With the exception of one site (38LX118), located near the upper reaches of Kinley Creek, all of the sites producing artifacts (even in a limited quantity) were located along the Saluda River. Sites 38LX115, 38LX119, 38LX120, 38RD140 and 38RD142 tend to support hypothesis (A-H2,I3). In addition one site (38RD140) tends to support hypothesis (A-H1,I2).

Based upon the scant artifactural material recovered from the Rawls and Kinley Creek drainages, it appears that most of the activity is representative of the Archaic Period. The majority of the stone tools and debitage consisted of quartz. Only two sites produced ceramics (38LX116 and 38RD140; Table 2).

EFFECTS OF THE PROPOSED PROJECT

The results of the archeological survey of the Rawls and Kinley Creeks impact zones indicates that the proposed sewer facility will have a relatively minor effect on the archeological resources in the area. Only one site (38LX116) may be directly impacted. This area is quite extensive and although few artifacts were recovered during the survey, a collection of artifacts found by a local resident served to indicate that a site, of unspecified proportions, exists in this area. B. P. Barber and Associates have been previously consulted concerning this site and the Institute will be kept informed when this area is subjected to clearing and construction activities.

ACKNOWLEDGEMENTS

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REFERENCES

Anderson, David G., M. Trinkley and J. Michie
1974 Archeological survey of the proposed Southwestern Beltway Extension and 12th Street Extension in the vicinity of Congaree Creek. *Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series* 60.

Craddock, G. R. and C. M. Ellerbee
1966 *Land resources map of South Carolina.* United States Department of Agriculture.

Ferguson, Leland G.
1976 An archeological survey of a Fall Line creek: Crane Creek Project, Richland County, South Carolina. *Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series* 94.

Goodyear, Albert C.
1975 An archeological survey of the proposed Alternate Three Route, southern alternate, of the Southwestern Columbia Beltway between I-26 and S.C. 48. *Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series* 77.

House, John H. and David Ballenger
1976 An archeological survey of the Interstate 77 Route in the South Carolina Piedmont. *Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series* 104.

Kimmel, Richard
1973 Archeological survey report of the S.C. Department of Corrections' Broad River complex. *Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series* 55.

Küchler, A. W.
1964 Potential natural vegetation of the coterminal United States. *American geographical Society, Special Publication* 36.

Mills, Robert
1965 *Mills' atlas of South Carolina* (1825). Robert Pearce Wilkins and John D. Keels, Columbia.

Overstreet, W. C. and H. Bell
1965 Geologic map of the crystalline rocks of South Carolina. *Geological Survey Bulletin* 1183.

Ryan, Thomas M.
1972 Archeological survey of the Columbia Zoological Park, Richland-Lexington Counties, South Carolina. *Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series* 37.

Trimble, S. W.
1972 Man-induced soil erosion on the southern Piedmont of the U.S.A. In *International Geography*, edited by W. P. Adams and F. M. Helleiner, pp. 454-470. University of Toronto Press, Montreal.