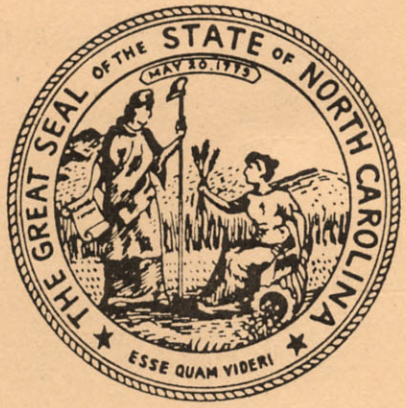
MISCELLANEOUS ARCHEOLOGICAL REPORTS IN THE NORTH CAROLINA PIEDMONT



NORTH CAROLINA ARCHEOLOGICAL COUNCIL

PUBLICATION NO. 7

Published Jointly By The
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North Carolina Department of Cultural Resources

Raleigh, 1978

NORTH CAROLINA ARCHEOLOGICAL COUNCIL

Publication No. 7

1. Hamlet 201 Wastewater Facilities, Wastewater Disposal Plant Site: Archaeological Survey.

   By David A. McLean
   St. Andrews College
   Laurinburg, NC

2. Archaeological Assessment Report: Aberdeen-Southern Pines, NC, 201 Wastewater Facilities.

   By David A. McLean
   St. Andrews College
   Laurinburg, NC

3. Archaeological Assessment Report, Oakboro, NC, 201 Wastewater Facilities.

   By David A. McLean
   St. Andrews College
   Laurinburg, NC

4. Archaeological Assessment Report: Asheboro-Randleman 201 Wastewater Facilities-Treatment and Disposal Areas.

   By David A. McLean
   St. Andrews College
   Laurinburg, NC

5. Archaeological Investigations at the GF-104 (P. Gilmore) Site.

   By Joseph B. Mountjoy
   University of North Carolina
   Greensboro, NC

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R. STEPHEN DAVIS, JR.

Hamlet 201 Wastewater Facilities

Wastewater Disposal Plant Site

Archaeological Survey

Dr. David A. McLean

St. Andrews College

Laurinburg, North Carolina

March 30, 1978

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ABSTRACT

At the request of Moore, Gardner & Associates, Inc., Asheboro, North Carolina, an archaeological survey of approximately 60 acres of land was completed. The area, a proposed wastewater disposal plant site for the City of Hamlet, North Carolina, is located approximately 1700 feet WSW of the SR1812 Marks Creek Bridge. From the point 1700 feet WSW of Bridge bordered on west by Marks Creek to a point 1000 feet WSW; thence SSE 2200 feet; thence NNE 1000 feet; thence WNW to starting point on Marks Creek.

An interceptor route from the wastewater disposal site left this area approximately 500 feet ESE of Marks Creek on the NE perimeter of the site, proceeding NNE approximately 1700 feet to SR1812; thence NW across Marks Creek paralleling SR1812 approximately 500 feet; thence NNE joining line previously surveyed by Dr. David A. McLean and reported in Archaeological Survey of Richmond County 201 Wastewater Facilities: Ellerbe, Rockingham, and Hamlet, May 22, 1977.

With a crew of two, the survey began in the NE corner of said land and was carried out by using a modified 50' by 50' Technique (see Glossary). The modification was to uncover an area 4' by 4', and then test soil to 4 inches in depth over entire 16 square foot area.

Site 1 (see Map) contained 1 rhyolite chip. Site 2 (see Map) contained a fragment of early colonial pottery, identified as blue pearlware with motif painted in underglazed blue.

Site 3 (see Map) contained 2 fragments of colonial pottery identified as white stoneware, and white overglazed with blue. Site 4 (see Map) contained 1 large rhyolite scraper. Site 5 (see Map) contained 8 rhyolite and 5 milky quartz chips, and 1 broken scraper.

All sites are considered INSIGNIFICANT, and it is recommended that construction may proceed.

Project Description

A request was made for an archaeological survey of approximately 60 acres of land for a proposed Wastewater Disposal Plant for the City of Hamlet, North Carolina. Mr. Owen W. Bludau of Moore, Gardner & Associates, Inc., Asheboro, North Carolina, conveyed this request to St. Andrews College and Dr. David A. McLean, Senior Archaeologist. The survey was to be conducted following Technical Specifications (see T-135, attached).

Area to be Surveyed

Beginning at a point approximately 1700 feet WSW of Bridge on Marks Creek, on SR 1812. From this point to a point 1000 feet WSW; thence SSE 2200 feet; thence NNE 1000 feet; thence WNW to starting point on Marks Creek. Also surveyed was the interceptor route which left this area approximately 500 feet ESE of Marks Creek on the NE perimeter of the site, proceeding NNE approximately 1700 feet to SR 1812; thence NW across Marks Creek paralleling SR 1812 approximately 500 feet; thence NNE, crossing SR 1812 joining a line previously surveyed by Dr. David A. McLean and reported in Archaeological Survey of Richmond County 201 Wastewater Facilities: Ellerbe, Rockingham, and Hamlet, May 22, 1977.

Contracting Agencies

St. Andrews Presbyterian College, Dr. David A. McLean, Senior Archaeologist; and Moore, Gardner & Associates, Asheboro, North Carolina.

Personnel

Dr. David A. McLean, Senior Archaeologist

Michael R. Sellon, Associate Archaeologist

Dates of Survey

March 25 and 27, 1978

Contract Specifications

See Technical Specifications T-135, attached

Scope of Work

A cultural assessment, from the prehistoric and historic artifacts found during survey.

Summary of Findings

Four sites were identified on the 60 acre wastewater disposal plant site; while a fifth site was located on the perimeter of the interceptor line route (see Map for the location of all sites).

Site 1 contained 1 rhyolite chip. Site deemed insignificant. Site 2 contained 1 fragment of early colonial pottery, identified as blue pearlware, with motif painted in underglazed blue. Site deemed insignificant. Site 3 contained 2 fragments of colonial pottery: one fragment was white stoneware, while the other was

white overglazed with blue. Site deemed insignificant.

Site 4 contained 1 large rhyolite scraper. Site deemed insignificant. Site 5 contained 6 rhyolite chips, 5 milky quartz chips, and 1 broken scraper. Site deemed insignificant.

Evidence found at all 5 sites would tend to indicate Archaic occupation. No pottery was found. However, typological material was sparse and open to question. All sites are classified as insignificant.

Cultural Environment

The earliest colonial occupation in this area dates from the latter half of the 18th Century. By tree-ring count, it was ascertained that the area has not been cultivated for approximately 40 to 50 years. Prior to this time, it had been used as farmland.

Ecological Environment

The soil in the northern half of the area was light and sandy. The southern half was light and sandy with gravel and some conglomerate material. Most of the soil was covered by pine straw and humus to a depth of 4 inches; in many areas, however, the soil was exposed.

The area was heavily wooded with longleaf, shortleaf, and loblolly pine. The swampy area near Marks Creek contained gum, maple, poplar, oak, and hickory.

Site 1 was approximately 1500 feet from water. Site 2 was

approximately 700 feet from water. Site 3 was approximately 2200 feet from water. Site 4 was approximately 1100 feet from water. Site 5 was approximately 150 feet from water.

Sampling Procedure

The area was surveyed by using a modified 50' by 50' Technique. Under the modification, a 4' by 4' area was uncovered; and the soil was tested to a depth of 4 inches over the entire 16 square foot area. In many places, the topsoil was exposed, so testing was unnecessary. In these exposed areas, the Walkover reconnaissance technique was used (see Glossary for definitions).

Location of Material

All material recovered by St. Andrews archaeologists (unless otherwise requested by owner of land) is placed in the Indian Museum of the Carolinas, Laurinburg, North Carolina.

Evaluation and Recommendations

The location of 5 sites during the survey indicates the presence of colonial and prehistoric occupation in this area. However, the relative paucity of artifacts causes this area to be classified as insignificant, archaeologically.

Our findings indicate that construction activities would do little or no damage to useful archaeological sites. We recommend that work proceed as planned.

David A McLean

Dr. David A. McLean

TECHNICAL SPECIFICATIONS

No. TS-135

CONTRACT TITLE: HAMLET 201 WASTEWATER FACILITIES WASTEWATER DISPOSAL PLANT

PURPOSE:

This survey and the resulting report is to obtain an inventory and evaluation of archaeological or historical resources of cultural value on the land specified under contract title.

SCOPE:

This survey will be made along the proposed lines as presented in Presented in maps furnished by Moore Gardner & Assoc. Asheboro, N.C. to ascertain the existence of archaeological data (including relics and specimens) which should be preserved in the public interest.

OBJECTIVES:

1. Determine if any sites, structures, objects, and districts significant in history, architecture, archaeolgy, or culture exists within the area specified.
2. If resources are found, record, identify, and appraise the significance of each resource.
3. Evaluate the impact of project installation on each resource.
4. Provide recommendations for mitigation of adverse impacts anticipated.
5. Provide estimate of costs required for mitigation (salvage, protection, etc.).

METHODS OF SURVEY:

1. A walk-over reconnaissance survey will be made on land not convered by undergrowth, grass or planted crops.
2. On terrain covered by undergrowth etc., a 12 quart sample will be taken at intervals of 50 feet.
3. Where sites are indicated the dog-leash method will be employed.

REPORTS:

Phase I. A field report will consist of a narrative report setting forth techniques of field work as appropriate and the maps as necessary, to show location and type of significant responses found by field survey techniques. An original and one copy of this report will be submitted when completed. Phase II.

Phase II. If significant sites are found, this Phase will consist of all work necessary to identify, appraise, and evaluate the significance of resources found or located by work in Phase I. Impacts of proposed project installation on each resource will be evaluated. Recommendations for mitigation of adverse impacts will be set forth and an estimate of costs required for salvage or protection, etc. A study report will be prepared in sufficent scope and detail to fully appraise potential projects impacts on historical and archaeological resources as required by the National Environmental Protection Act.

GLOSSARY OF TERMS USED

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Diagnostic Sites

Site: Where one or more artifacts are found

Insignificant Site: Where surface collection is adequate to document previous occupation or activities. No reason to impede construction or destruction of site.

Important Site: Where surface collection is inadequate to document previous occupation and indicate that there is more to be found underground, but not enough to be nominated to the National Registry, but enough to recommend salvage archaeology.

Significant Site: Site or sites with important artifacts that would indicate the need for careful excsvation and preservation. Such a site would be recommended for nomination to the National Registry.

Methods of Surface Examination

Dogleash Technique: Where one end of a ten metre string is tied to the searcher and the other to a post in the center of the site. The searcher rotates in the site until string is wound up, This insures careful survey of site.

50' by 50' Technique: Where visibility of the ground is poor and recovery of artifacts by the walkover technique is poor or impossible, then samples of earth (12 qts.) are removed at 50 sq. intervals, sifted to recover artifacts.

Walkover reconnaissance technique: Where visibility of the ground or earth is good and artifact recovery is good, searcher covers the ground in approximately 10 ft. intervals collecting artifacts lying on top of ground.

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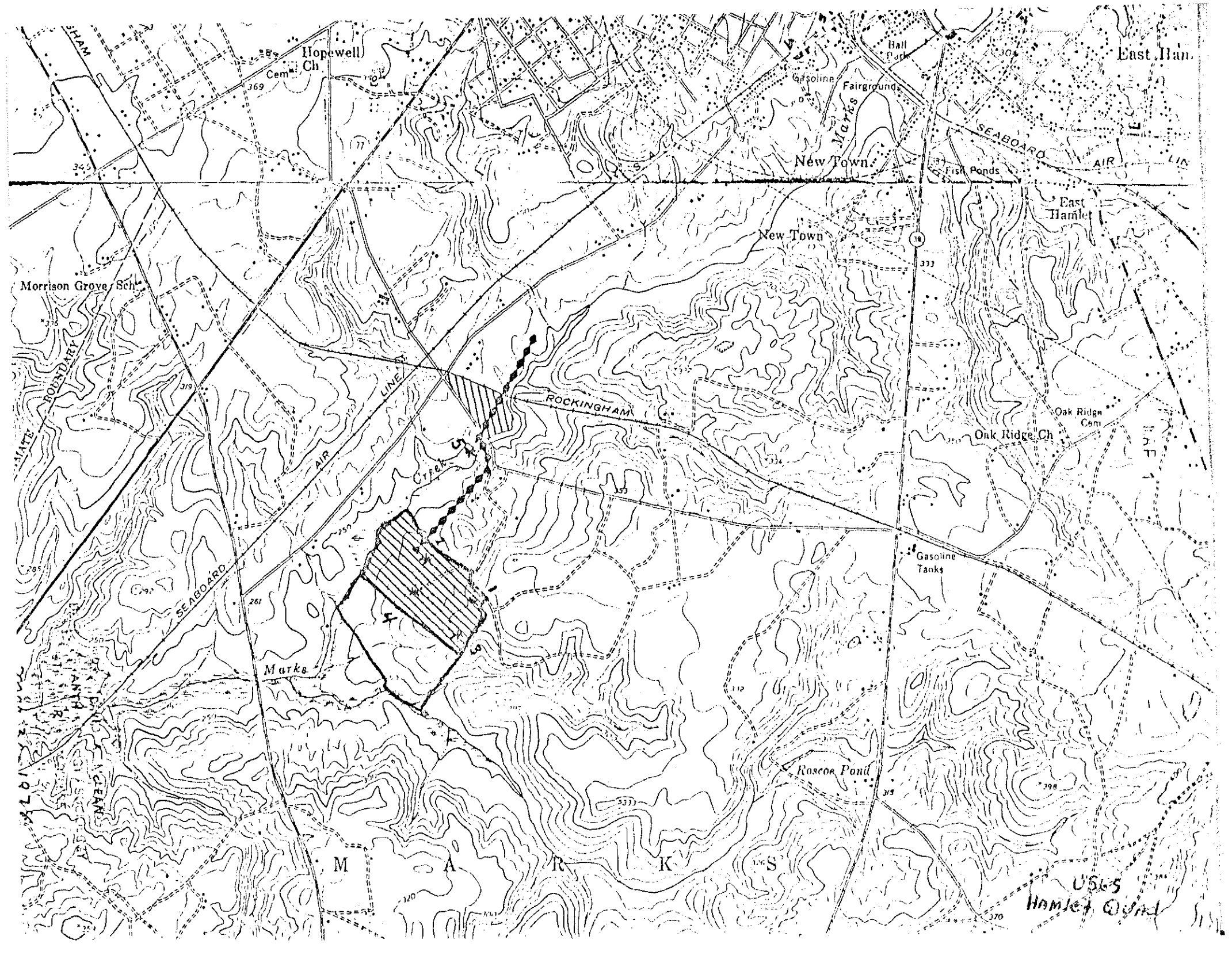
Salvage Archaeology: When survey indicates that mitigating action is necessary and a delay in construction is requested while rapid excavation is made to ascertain and recover as much information as possible before site is destroyed.


Hopewell Ch
Cem
Ball Park
Gasoline
Fairgrounds
East Han
Marks
New Town
SEABOARD AIR LIN
Fish Ponds
East Hamlet
New Town
Morrison Grove Sch
ROCKINGHAM
Oak Ridge Cem
Oak Ridge Ch
AIR LINE
Creek
Gasoline Tanks
SEABOARD
Marks
Roscoe Pond
M A R K S
USGS
Hamlet Quad

250
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212
MAP 2
0
1000

ARCHAEOLOGICAL ASSESSMENT REPORT

ABERDEEN
SOUTHERN PINES

201
WASTEWATER
FACILITIES

Dr. David A. McLean,
Archaeologist

St. Andrews College

Laurinburg

N. C.

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APPENDIX

MAPS

1. Fig. V3 ALTERNATE III 201 Facilities Map
   Henningson, Durham, & Richardson

2. Xeroxed OWNERS MAP

GLOSSARY OF TERMS

PROJECTILE POINT CHART

ABSTRACT

Archaeological Reconnaissance of the 201 Facilities-Aberdeen-Southern Pines Alternate Plan was conducted by Archaeologist from St. Andrews College assisted by four advanced Archaeology Students. Survey began at the outflow of Powell's pond on SR 2053-following surveyed line south of Rays Mill Creek in an S-S-W direction to proposed connection to County regional interceptor approximately 75 yards south of the Aberdeen Lake dam. Where land was not covered with water or marsh, 50' x 50' technique was used. This method produced one pottery sherd at Site I. Returning to Powell's Pond outflow survey followed SR 2042 to SR 2074, thence up 2074 to beginning of SR 2075. One broken projectile point tip (milky quartz) and several (5) chips of milky quartz. Both sides of the road were inspected. 50' x 50' technique used where ground was covered. Both Site I amd Site II (as designated on map 201 Facilities) were considered INSIGNIFICANT.

INTRODUCTION

Project Description:

Archaeological Reconnaissance of Southern Pines-Aberdeen 201 Wastewater Facilities located in Moore County and more specifically in the towns of Aberdeen and Southern Pines, N. C. as described in 201 Facilities Map prepared by Henningson, Durham & Richardson, Engineers, Charlotte, N. C. (Fig. V-3 Alternate III). Area surveyed circled in black in, as follows: Beginning at outflow of Powell's Pond on SR 2053 and following Rays Mill Creek on the southern side on survey line in an S SW direction to proposed connection to County regional interceptor approximately 75 yards south of the Aberdeen lake dam. Returning to Powell's Pond and following both sides of SR 2042 to junction of SR 2074, following SR 2074 (both sides) to junction of SR 2075.

Contracting Agencies:

Board of Commissioners of Moore County and St. Andrews College- Dr. David A. McLean, Archaeologist.

Clearinghouse No. _____

Personnel:

Dr. David A. McLean, Senior Archaeologist
Nelle Dodson, Assistant
Liza Hamill, Assistant
Melanie Coats, Assistant
Holly Carastro, Assistant

Dates: Dec. 1, 1976 and Dec. 6, 1976

Contract Specifications:

(See Technical Specifications No. 121 attached)

Scope of Work:

Cultural assessment, prehistoric and historic Archaeological survey.

Summary of Findings:

No historic archaeological evidence was found in either area A or B. Prehistoric finds as designated by Site I (Area A) and Site II contained the following.

Site I:

1 broken fragment of pottery. Grit tempered, smooth exterior, poorly fired.

Site II

1 broken tip of projectile point, milky quartz
5 chips of milky quartz.

One interesting agenda should be mentioned here. In Area B approximately two hundred yards from starting point near junction of SR 2042 and SR 2070 there was a rather extensive deposit of iron pyrite geodes of exceptionally brilliant color. Bright red, purple and brownish red. Very little grit in the geodes. Area could have been a source of Indian cosmetics as well as tubular--pipes. This area was divided when the present road was built. I suggest that when this area is dug, samples should be taken to be sent to the Indian Museum of the Carolina and the Natural Science Museum in Raleigh.

Area B contained three to four feet of sandy soil with a clay hardpan. Area B also contained Kaolin of a rather gritty nature.

Area A alternated between sand and mud or marshy ground.

Cultural Environment:

Historic:

Area A follows along a creek that was once known as Devil's Gut which was once applied to the present town of Aberdeen. Early settlements of Scots were found around the Bethesda community.

Prehistoric:

Within a ten mile radius prehistoric evidence such as projectile points, scrapers, pottery sherds, etc., indicate that the land was once heavily occupied. 10 miles east a crystal quartz Clovis point (predates Hardaway point--see projectile point chart) The evidence indicates continuous occupation from before 9,000 B.C. to approximately early 1700 A.D. Pottery and stone chips are found in most open fields today. Site surveys in this area have been made by Amateur Archaeologist Reid Voss, of Whispering Pines, N. C.

Sampling Procedure:

In Area A one senior archaeologist and four assistants Surveyed the line taking samples (12 qts.) every 50' where land was not covered by marsh or water. This however was rare as most of the line was marshy. Occasionally when hillocks came down near the area being surveyed we would examine these for possible evidence. Both sides of the surveyed (25' on each side) line were examined.

Area B was parallel to the roads mentioned in description and for the most part were clear of covering. Road cuts and ditch banks were carefully examined. Where area was covered with grass and weed samples were taken at 50' intervals.

Analysis:

Location of Material:

Indian Museum of the Carolinas, Laurinburg N. C.

Site Descriptions:

Site I Area A was located on a small island (100' x 21') between Popular St. and Chestnut St. Twelve samples were taken on the Island but no other artifacts were recovered.

Site II Area B was on the side of a hill on the Southern side of SR 2042 approximately 50 yds. S & W of junction of SR 2074. Sandy soil. Six additional samples taken within a 50' area revealed no additional artifacts.

Analysis:

Pottery sherd was examined under microscope in St. Andrews College Lab.

EVALUATION:

Since the artifacts found were negligible further investigation is not indicated. Project impact on sites found and on the entire line surveyed will not, in my estimation, do dammage to either Historical or Prehistorical heritage.

RECOMMENDATION:

I recommend that the sites be classified as INSIGNIFICANT and should not impede construction. However, I would suggest that the iron pyrite geodes be collected (15 or 20) and retained for the museums previously mentioned.

GLOSSARY OF TERMS USED

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Diagnostic Sites

Site: Where one or more artifacts are found

Insignificant Site: Where surface collection is adequate to document previous occupation or activities. No reason to impede construction or destruction of site.

Important Site: Where surface collection is inadequate to document previous occupation and indicate that there is more to be found underground, but not enough to be nominated to the National Registry, but enough to recommend salvage archaeology.

Significant Site: Site or sites with important artifacts that would indicate the need for careful excavation and preservation. Such a site would be recommended for nomination to the National Registry.

Methods of Surface Examination

Dogleash Technique: Where one end of a ten metre string is tied to the searcher and the other to a post in the center of the site. The searcher rotates in the site until string is wound up. This insures careful survey of site.

50' by 50' Technique: Where visibility of the ground is poor and recovery of artifacts by the walkover technique is poor or impossible, then samples of earth (12 qts.) are removed at 50' sq. intervals, sifted to recover artifacts.

Walkover reconnaissance technique: Where visibility of the ground or earth is good and artifact recovery is good, searcher covers the ground in approximately 10 ft. intervals collecting artifacts lying on top of ground.

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Salvage Archaeology: When survey indicates that mitigating action is necessary and a delay in construction is requested while rapid excavation is made to ascertain and recover as much information as possible before site is destroyed.

ARCHAEOLOGICAL ASSESSMENT REPORT

OAKBORO

201
WASTEWATER
FACILITIES

Dr. David A. McLean,
Archaeologist

St. Andrews College

Laurinburg

North Carolina

TECHNICAL SPECIFICATIONS

No. 124

CONTRACT TITLE: ARCHAEOLOGICAL RECONNAISSANCE OF OAKBORO 201 WASTEWATER FACILITIES

PURPOSE:

This survey and the resulting report is to obtain an inventory and evaluation of archaeological or historical resources of cultural value on the land specified under contract title.

SCOPE:

This survey will be made along the proposed lines as presented in Maps prepared by Moore Gardner & Associates.

Asheboro, N.C.

to ascertain the existence of archaeological data (including relics and specimens) which should be preserved in the public interest.

OBJECTIVES:

1. Determine if any sites, structures, objects, and districts significant in history, architecture, archaeolgy, or culture exists within the area specified.
2. If resources are found, record, identify, and appraise the significance of each resource.
3. Evaluate the impact of project installation on each resource.
4. Provide recommendations for mitigation of adverse impacts anticipated.
5. Provide estimate of costs required for mitigation (salvage, protection, etc.).

METHODS OF SURVEY:

1. A walk-over reconnaissance survey will be made on land not convered by undergrowth, grass or planted crops.
2. On terrain covered by undergrowth etc., a 12 quart sample will be taken at intervals of 50 feet.
3. Where sites are indicated the dog-leash method will be employed.

REPORTS:

Phase I. A field report will consist of a narrative report setting forth techniques of field work as appropriate and the maps as necessary, to show location and type of significant responses found by field survey techniques. An original and one copy of this report will be submitted when completed. Phase II.

Phase II. If significant sites are found, this Phase will consist of all work necessary to identify, appraise, and evaluate the significance of resources found or located by work in Phase I. Impacts of proposed project installation on each resource will be evaluated. Recommendations for mitigation of adverse impacts will be set forth and an estimate of costs required for salvage or protection, etc. A study report will be prepared in sufficent scope and detail to fully appraise potential projects impacts on historical and archaeological resources as required by the National Environmental Protection Act.

ARCHAEOLOGICAL FIELD WORK AND
FINAL REPORT

Applicant: Oakboro Town Council

Project Name: ARCHAEOLOGICAL RECONNAISSANCE OF OAKBORO 201 WASTEWATER FACILITIES

Location: Oakboro N. C. is located in Stanley County on N. C. 742 where the Norfolk & Southern RR bisects N. C. 742. The project under investigation is located North, South and East of the center of Oakboro as designated on USGS map Oakboro Quadrange 1971, and 201 facilities map prepared by Moore, Gardner and Associates, Inc., of Asheboro, N. C.

Area of Project: The following Field and Final report covers area designated in Oakboro, N. C. 201 Wastewater facilities map (planning study) prepared by Moore, Gardner & Associates, Inc., of Asheboro, N. C.

Clearinghouse: Moore, Gardner & Associates, Inc. Asheboro, N. C.

Dates of Inspection: Nov. 8, 11, 12, 1976

Inspection made by: Dr. David A. McLean, Archaeologist representing St. Andrews College

Contract Between: St. Andrews College - Dr. David A. McLean and Moore, Gardner & Associates, Inc.

Contract No.: 124

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PROCEDURE:

Sewer system was divided into eight areas designated on 201 Facilities Map as A,B,C,D,E,F,G,H, to facilitate inspection and reconnaisance, and to distinguish site areas. Surveyor's transit-level, aerial photos, USGS and DOT maps were used in locating exact lines as drawn on 201 Facilities Map. Walkover technique was used when surface of ground was visible, where surface of ground was covered, the 50' x 50' technique was used.

DESCRIPTION:

Area A containing 50 acres, more or less, and beginning on SR 1953 (Barbee Church Rd.) at approximately halfway between Barbee Church property and land owned by Mr. G. Smith-then following SR 1953 to bridge over Long Creek-then thence N.E. following the run of Long Creek to junction of Bear Creek and Long Creek - thence N.W. following run of Bear Creek approximately 600 ft.--thence back to starting point on SR 1953.

Walkover reconnaissance used on plowed areas. Site 3 (all sites indicated in black on 201 map) produced five rhyolite chips and one unidentifiable tip of projectile point. Site 2 produced three rhyolite chips (between pond and Long Creek). Site 1 was thickly covered with grass and weeds, 50' x 50' technique was used, thirty rhyolite chips, one Guilford Point (rhyolite), two Savannah River points. Site 1 is located on a ridge terminating near junction of Bear Creek and Long Creek and West by man-made pond. Area covers approximately 150 meters by 50 meters.

Area B: Leaving bottom land indicated as Site 1 and proceeding W13S as indicated on attached map 10,000 feet. Area covered by crews was 50' on each side of sewer line. Where terrain was visible walkover technique was used- where terrain was covered 50' x 50' technique was used. No sites were located on this stretch. At the end of the 10,000' line (edge of field) where Sewere line runs West, Site 4 produced four rhyolite chips. Where line emerges from woods approximately 1000 yards from SR 1974 produced three rhyolite chips. Where line follows SR 1974 W29S no sites were found. Walkover technique adequate for this last stretch except for two wooded areas.

Area C: Leaving SR 1974 W47N proceeding to SR 1975 no sites were located. Crossing SR 1975 approximately 50 meters on Line N28W, Site 6 produced four rhyolite chips, one broken stem of Savannah River point. 50' x 50' used on this stretch.

Area D: Beginning at end of area C and continuing South on both sides of creek (serving as sewage drainage at present time) Area recently bulldozed and surface visible. No sites were found. Continuing same line from 1st Street to a point SSW of Oakboro (where two lines from Area meet) Ground covered, 50' x 50' technique used. No sites found in Area D.

Area E: Beginning at junction of E & D with two teams covered both drainage branches as designated on map. Branch line that ends near 3rd Street produced no sites. Line following branch on western side and crossing N. C. 205 produced Site 10 containing three rhyolite chips and one guilford point at approximately 60 meters from N. C. 205.

Area F: Beginning at junction of areas C, D & F and following line F, S and W. Ground visible to SR 1976. Walkover technique used. Crossing SR 1976 and following sewer line 50 meters Site 7 produced one broken Savannah River point.

Area G: Beginning where creek and swampy area (near Big Lick) cross N. C. 742 and following creek on both sides to junction G, F,H. Site 8 produced 3 rhyolite chips and one Guilford point. Site 9 contained one rhyolite chip. Area alternating between heavy udnerbrush and open areas, gardens and pastures. Both techniques were used.

Area H: Beginning where creek crosses NC742, 100 meters NW of 10th Street, following both sides of creek to junction E, F, H. Site 11 produced one broken Savannah River point, two rhyolite chips and one Guilford point. This site was in the back yard of one of the residents, but in an area heavily buldozed.

Time Consumed: 7 man days @ 8 hours.

EVALUATION OF AREAS:

Area A

Site 1: It was impossible to evaluate site adequately, however, artifacts found would indicate that further survey should be made before site is destroyed. Grass cover should be removed.

Site 2: Insignificant

Site 3: Insignificant

Area B

Site 4: Insignificant

Site 5: Insignificant

Area C:

Site 6: Insignificant

Area D:

No sites found

Area E:

Site 10: Insignificant

Area F:

Site 7: Insignificant

Area G:

Site 8: Insignificant

Site 9: Insignificant

Area H:

Site 11: Insignificant

CONCLUSIONS AND RECOMMENDATIONS

With the exception of Site 1, other sites produced a minimal amount of artifacts and do not indicate further investigation be made. To the best of my ability to determine, all sites (except Site 1) are to be considered insignificant and do not contain significant historical or archaeological sites.

SITE I, Area A

I do not believe there is enough evidence to recommend Site I to the National Registry, however, I would suggest that it be thoroughly investigated before destruction. I recommend one of the following actions:

When the land is secured for disposal plant that:

1. That the land be plowed in order to give a Walkover Crew adequate exposure of the soil.

or

2. That the land be bulldozed to remove the thick grass covering to give adequate exposure of the soil.

If, after one of the above is done and there is adequate evidence (artifactual) then mitigation or salvage archaeology be carried out.

FINAL REPORT

Due to the small amount of artifacts found and the absence of pottery fragments, I hesitate to give a definitive culture reconstruction. However, the clues would indicate that the area was occupied by Indians of the Archaic period. (See enclosed projectile chart for typological and hypothetical dates)

St. Andrews College
Laurinburg, North Carolina

November 22, 1976

David A. McLean, Archaeologist

GLOSSARY OF TERMS USED

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Diagnostic Sites

Site: Where one or more artifacts are found

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50' by 50' Technique: Where visibility of the ground is poor and recovery of artifacts by the walkover technique is poor or impossible, then samples of earth (12 qts.) are removed at 50' sq. intervals, sifted to recover artifacts.

Walkover reconnaissance technique: Where visibility of the ground or earth is good and artifact recovery is good, searcher covers the ground in approximately 10 ft. intervals collecting artifacts lying on top of ground.

****

Salvage Archaeology: When survey indicates that mitigating action is necessary and a delay in construction is requested while rapid excavation is made to ascertain and recover as much information as possible before site is destroyed.

ARCHAEOLOGICAL ASSESSMENT REPORT

ASHEBORO-RANDLEMAN

201 WASTEWATER FACILITIES-TREATMENT & DISPOSAL AREAS

Dr. David A. McLean
Archaeologist

St. Andrews College
Laurinburg, N.C.

December 27, 1976

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ABSTRACT

The 201 Wastewater Facilities of Asheboro-Randleman (Disposal-Treatment Plant Areas) were surveyed by a two man crew using the 50' x 50' technique as most ground was covered. Evidence uncovered in all sites (except Area A, sites V, VI & VII) indicated only a casual occupation by prehistoric Indians. Sites V, VI and VII as indicated on Area Map A, are rocks piled neatly, two feet high, four feet wide and six feet long. These could have been cairns or burial sites, on the other hand they may be just piles of rocks placed there to be hauled away. However, I would recommend that these sites not be destroyed until careful investigation has been made. Other than these three sites, all other sites in Areas A & B are classified as INSIGNIFICANT and destruction of these sites would not be considered a loss to archaeological research. As Indicated on Historical Site Map, Areas A & B do not contain any known historical sites of significance.

INTRODUCTION

Project Description

Archaeological reconnaissance: for the Asheboro-Randleman 201 Wasetwater Facilities, Disposal and Treatment Areas as indicated on maps furnished by Moore, Gardner & Associates Inc., of Asheboro, N. C.

AREA A

The Asheboro treatment and disposal plant is located N. W. of Asheboro, N. C. on Hasketts Creek approximately 3500 feet from its junction with Deep River. The area contains approximately 45 acres of very hilly, rocky terrain, falling off to Hasketts Creek on the east with very little flood plain area (except for approximately 3 acres N. of Treatment plant) Survey began N. of Treatment plant where Hasketts Creek bends sharply eastward, approximately 700 feet from plant. Topo stakes from previous survey were visible. Following topo stakes samples were taken at or very near each stake for whole of the area surveyed.

AREA B

Randleman Disposal and Treatment plant is located S. W. of Randleman, N. C. on the east side of Deep River. Area surveyed contained approximately 10 acres. Survey began on west side of treatment plant on steep slope that falls off to floodwater plain of Deep River. Plain was marshy and unsuitable for human occupation, and was approximately 25 yards wide. Survey continued around south end of treatment plant and then north

into freshet stream beds and up steep slope to area used for borrow fill. Area steep, rocky and unsuitable for human occupation. Gullies cut in sides of hills were investigated.

Contracting Agencies:

Moore, Gardner & Associates, Inc. Asheboro, N. C. and St. Andrews College-Dr. David McLean, Archaeologist.

Contract No. 126

Clearinghouse No. ___

Personnel

Dec. 21-1976
Dr. David A. McLean, Sr. Archaeologist
Miss Sue Hardee, Assistant
Dec. 22, 23, 1976
Dr. David A. McLean, Sr. Archaeologist
Dr. Stuart Marks, Assistant

Dates:

December 21, 22, & 23 1976

Contract Specifications:

See Technical Specifications No. 126-attached

Scope of Work:

Archaeological Survey of a prehistoric and historic nature.

SUMMARY OF FINDINGS

AREA A

Site I
Polished stone scraper (knife for cutting small objects and scraping hides).. shale

Site II
Archaic hafted axe-chipped, rough finished shale.

Site III
Chipped stone scraper..shale
3 milky quartz chips

Site IV
Projectile point..Morrow Mt. type
See chart.
Broken hoe blade....shale
Chipped scraper.....shale

Site V

Rock cairn or pile 6' x 4' x 2'

Site VI
Same as V

Site VII
Same as V

AREA B

Site I
3 milky quartz chips

Site II
2 milky quartz chips
scraper polished--shale

Site III
6 milky quartz chips
1 " " hoe

CULTURAL ENVIRONMENT

Historic:
Randolph County has been the home of Europeans since the latter part of the 16th century A.D. The first County

Seat was Johnsonville (circa 1775). Industries over their history have been diverse. Pottery was made around 1730 at the Mt. Shepherd Site.

Prehistoric:

Randolph County is a veritable resevoir of evidence of Indian occupation especially in the Caraway Creak basin. The Indian Museum of the Carolinas in Laurinburg, N. C., the Research Lab of Anthropology at UNC Chapel Hill, and the Pembroke State University Museum have tremendous collections from this area. Numerous amateur collectors have many large collections with stone implements typologically dating from 7,000 B.C. to late Colonial times.

SAMPLING PROCEDURE

AREA A

Following topo markers left by previous survey, sampling was taken at each 50' marker. Where sites were identified, the dogleash technique was used. Ditch banks and wash cuts were examined wherever possible.

AREA B

On Dec. 21, 50' samples were taken, ditch banks were observed, and uprooted trees were investigated. On Dec. 23 Dogleash techniques were used in sites I, II, and III and 50' samples elsewhere.

ANALYSIS

Location of Materials

Indian Museum of the Carolinas, Laurinburg, N. C.

Site Descriptions

AREA A

Site I
Right bank on floodwater plain of Hasketts Creek Sandy area.

Site II
Steep slope, area very rocky

Site III
Steep slope, area very rocky

Site IV
Hill-top, outcrop of granitic rock nearby

Site V
50' outside wire fence west of second filter on slope of hill. Rock pile 6' x 4' x 2'

Site VI and VII

Approximately 50' from creek that enters Hasketts creek near entrance of Treatment plant. Area flat--Just above floodwater plain. Rock piles 6' x 4' x 2'

AREA B

Site I
Steep slope, red clay, few rocks

Site II
Floodwater plain approximately 25' from Deep River

Site III
Roots of uprooted tree covered with earth.

EVALUATION

Since artifacts were limited and widely scattered, regions evidently were not used as occupation sites. Perhaps a hunting area. Sites V, VI, and VII may contain grave sites and should be thoroughly investigated.

RECOMMENDATIONS:

To the best of my ability, I would classify all sites in both Areas A & B (with the exception of Sites V, VI and VII-Area A) be classified as INSIGNIFICANT. Sites V, VI and VII in Area A should be mitigated. An Archaeologist with a crew of four should be able to complete these sites' investigation in one day at a cost of approximately $200.00. With the exceptions noted, construction could begin whenever feasible without destroying either historic or prehistoric sites of significance.

GLOSSARY OF TERMS USED

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Diagnostic Sites

Site: Where one or more artifacts are found

Insignificant Site: Where surface collection is adequate to document previous occupation or activities. No reason to impede construction or destruction of site.

Important Site: Where surface collection is inadequate to document previous occupation and indicate that there is more to be found underground, but not enough to be nominated to the National Registry, but enough to recommend salvage archaeology.

Significant Site: Site or sites with important artifacts that would indicate the need for careful excavation and preservation. Such a site would be recommended for nomination to the National Registry.

Methods of Surface Examination

Dogleash Technique: Where one end of a ten metre string is tied to the searcher and the other to a post in the center of the site. The searcher rotates in the site until string is wound up. This insures careful survey of site.

50' by 50' Technique: Where visibility of the ground is poor and recovery of artifacts by the walkover technique is poor or impossible, then samples of earth (12 qts.) are removed at 50' sq. intervals, sifted to recover artifacts.

Walkover reconnaissance technique: Where visibility of the ground or earth is good and artifact recovery is good, searcher covers the ground in approximately 10 ft. intervals collecting artifacts lying on top of ground.

****

Salvage Archaeology: When survey indicates that mitigating action is necessary and a delay in construction is requested while rapid excavation is made to ascertain and recover as much information as possible before site is destroyed.

TECHNICAL SPECIFICATIONS

No. 126

CONTRACT TITLE: ARCHAEOLOGICAL ASSESSMENT OF ASHEBORO-RANDLEMAN 201 WASTEWATER FACILITIES

PURPOSE:

This survey and the resulting report is to obtain an inventory and evaluation of archaeological or historical resources of cultural value on the land specified under contract title.

SCOPE:

This survey will be made along the proposed lines as presented in Maps prepared by Moore Gardner & Associates

to ascertain the existence of archaeological data (including relics and specimens) which should be preserved in the public interest.

OBJECTIVES:

1. Determine if any sites, structures, objects, and districts significant in history, architecture, archaeolgy, or culture exists within the area specified.
2. If resources are found, record, identify, and appraise the significance of each resource.
3. Evaluate the impact of project installation on each resource.
4. Provide recommendations for mitigation of adverse impacts anticipated.
5. Provide estimate of costs required for mitigation (salvage, protection, etc.) .

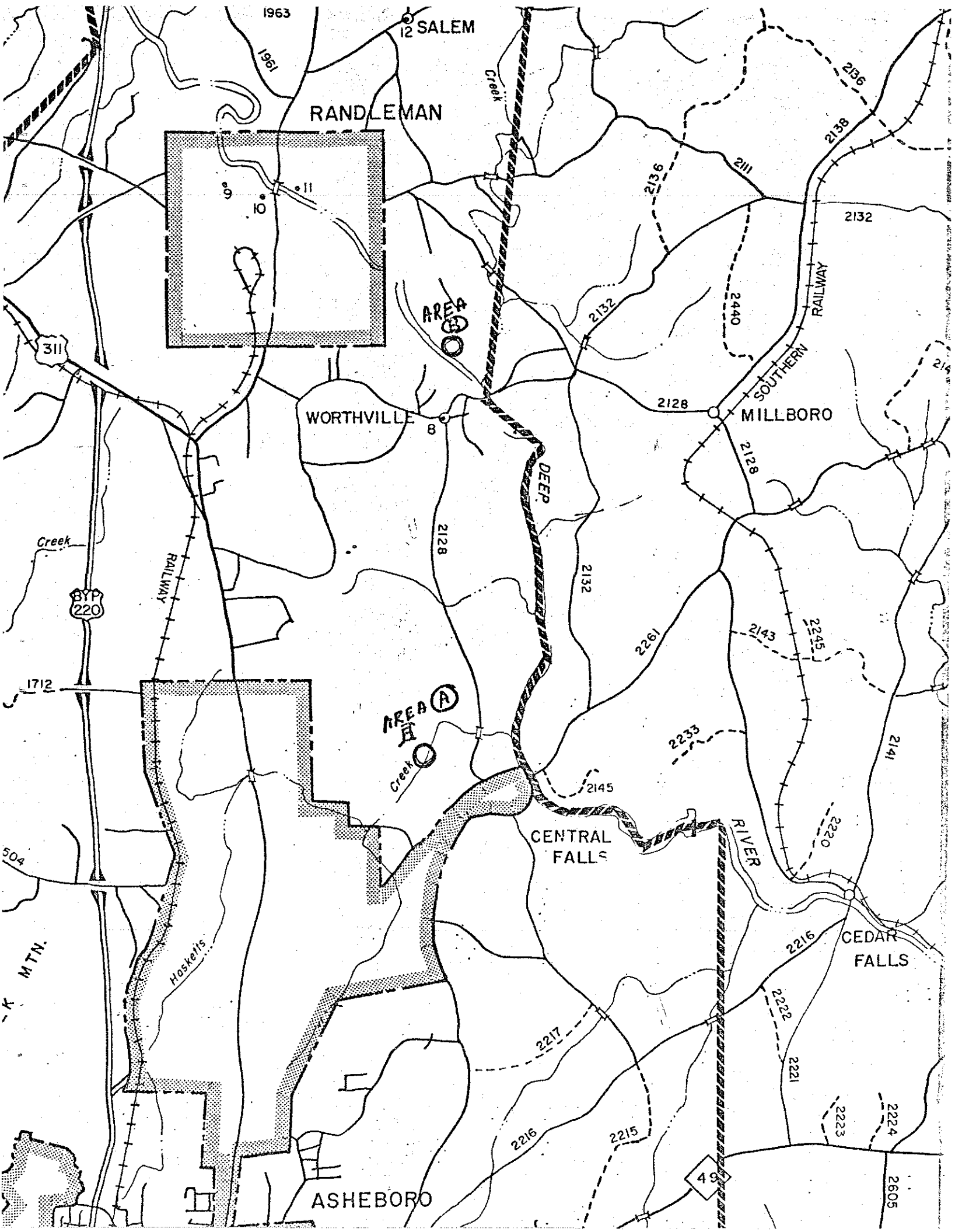
METHODS OF SURVEY:

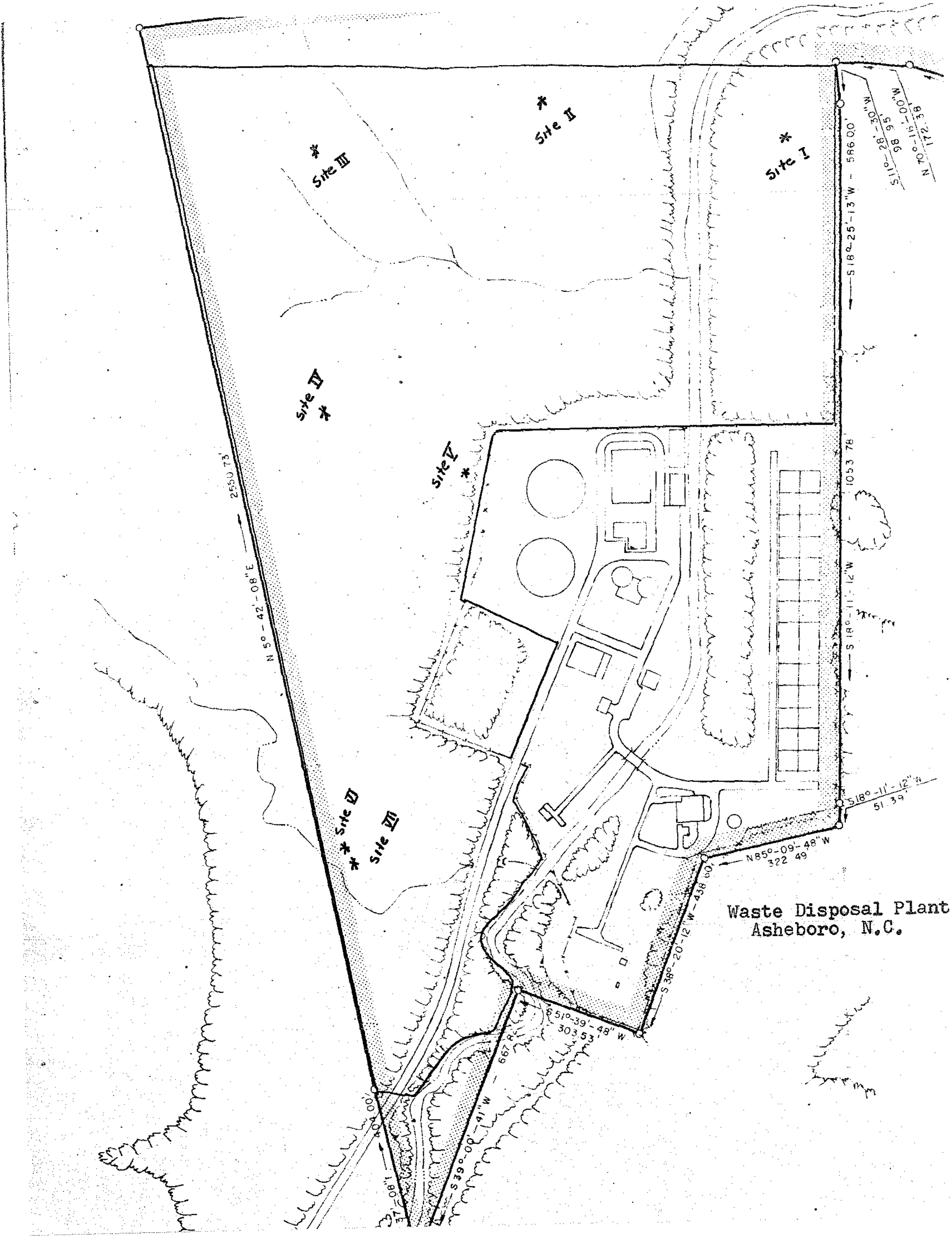
1. A walk-over reconnaissance survey will be made on land not convered by undergrowth, grass or planted crops.
2. On terrain covered by undergrowth etc., a 12 quart sample will be taken at intervals of 50 feet.
3. Where sites are indicated the dog-leash method will be employed.

REPORTS:

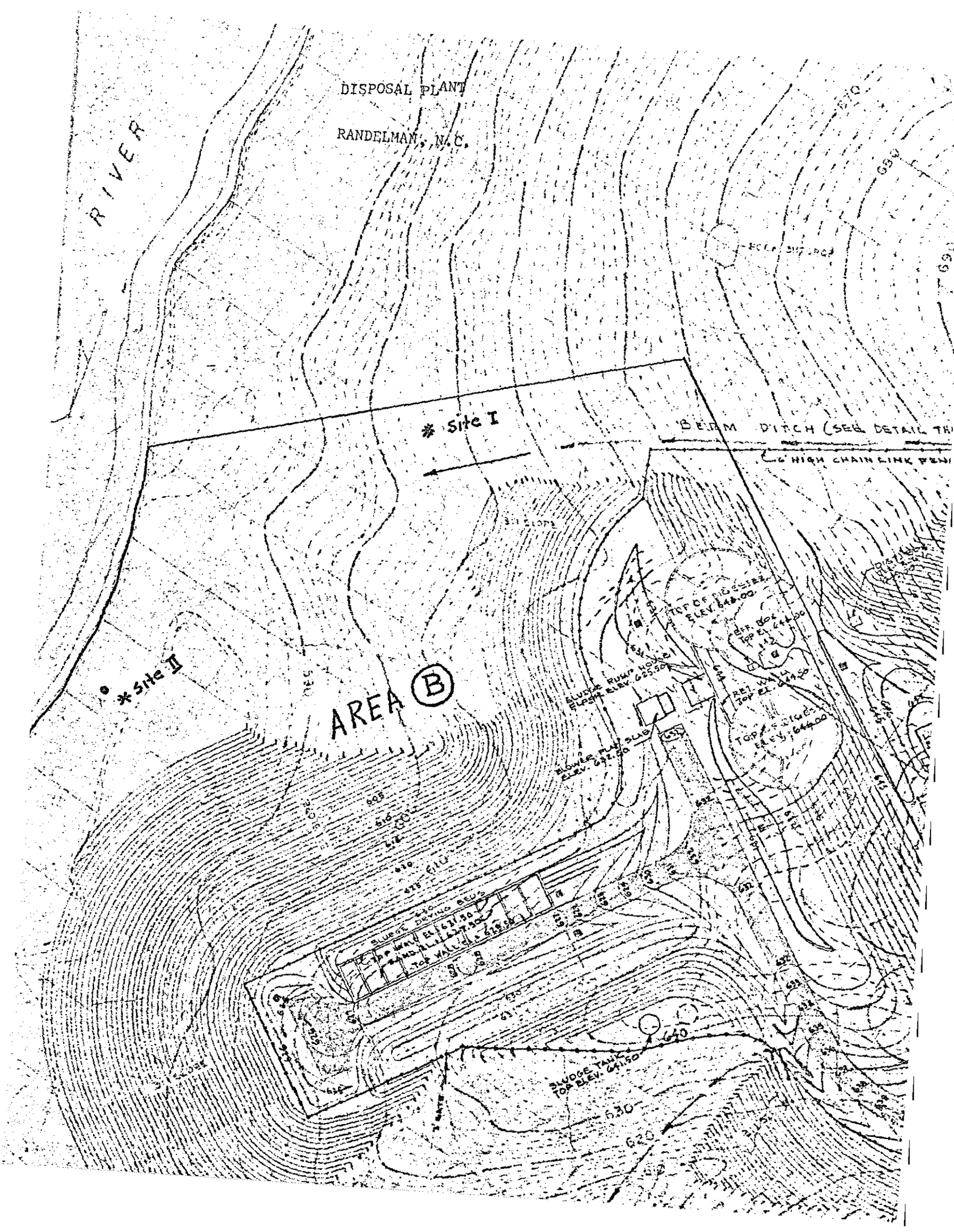
Phase I. A field report will consist of a narrative report setting forth techniques of field work as appropriate and the maps as necessary, to show location and type of significant responses found by field survey techniques. An original and one copy of this report will be submitted when completed. Phase II.

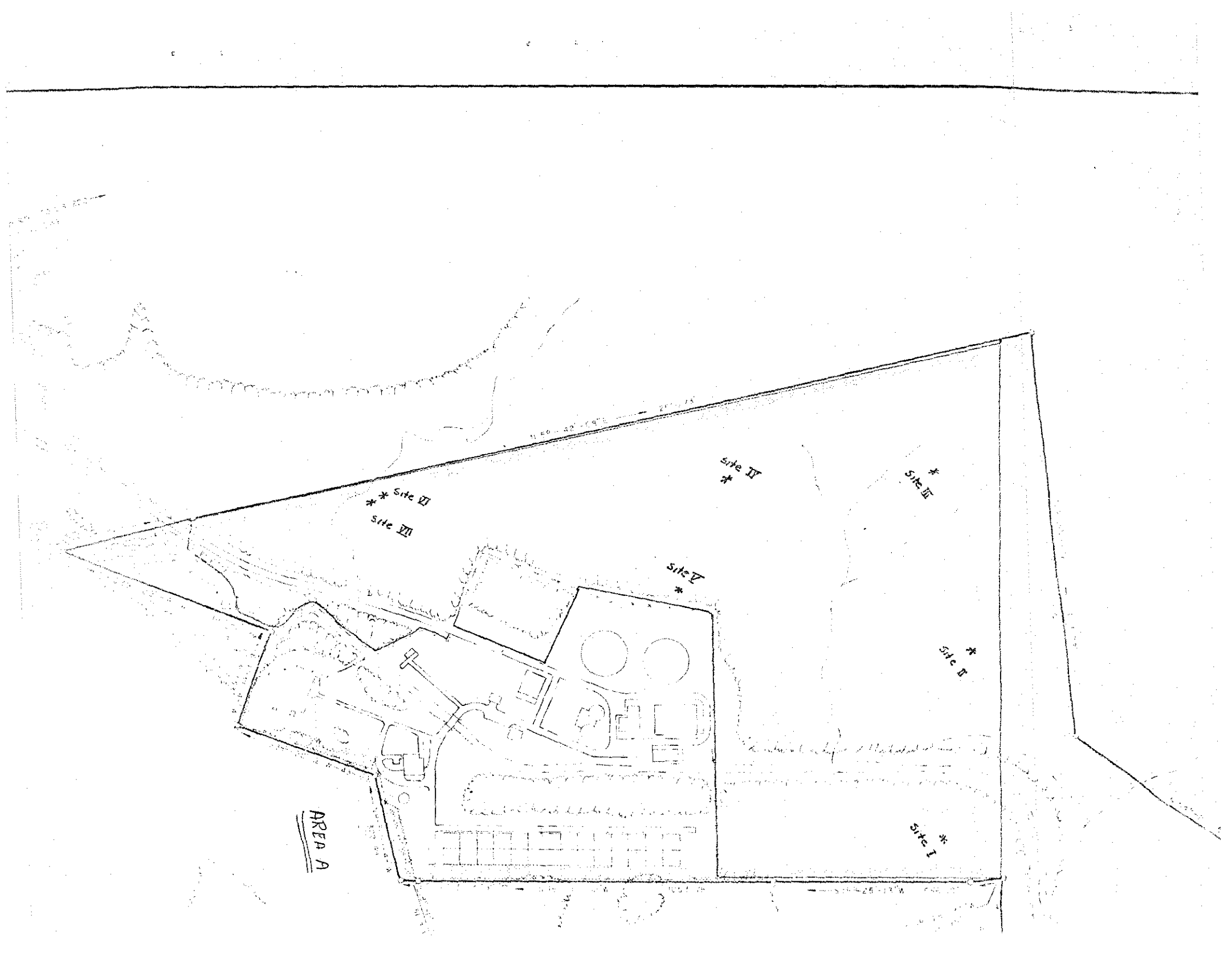
Phase II. If significant sites are found, this Phase will consist of all work necessary to identify, appraise, and evaluate the significance of resources found or located by work in Phase I. Impacts of proposed project installation on each resource will be evaluated. Recommendations for mitigation of adverse impacts will be set forth and an estimate of costs required for salvage or protection, etc. 'A study report will be prepared in sufficent scope and detail to fully appraise potential projects impacts on historical and archaeological resources as required by the National Environmental Protection Act.


1963
12 SALEM
1961
RANDLEMAN
Creek
2136
2138
2111
2136
2132
9
10
11
2132
2440
SOUTHERN RAILWAY
AREA B
311
2128
MILLBORO
WORTHVILLE
8
DEEP
2128
2128
Creek
RAILWAY
BYP 220
2128
2132
2261
2143
2245
1712
AREA A
2233
2141
Creek
2145
CENTRAL FALLS
RIVER
2220
504
MTN.
Haskells
2216
CEDAR FALLS
2222
2217
2221
2223
2224
2216
2215
49
2605
ASHEBORO



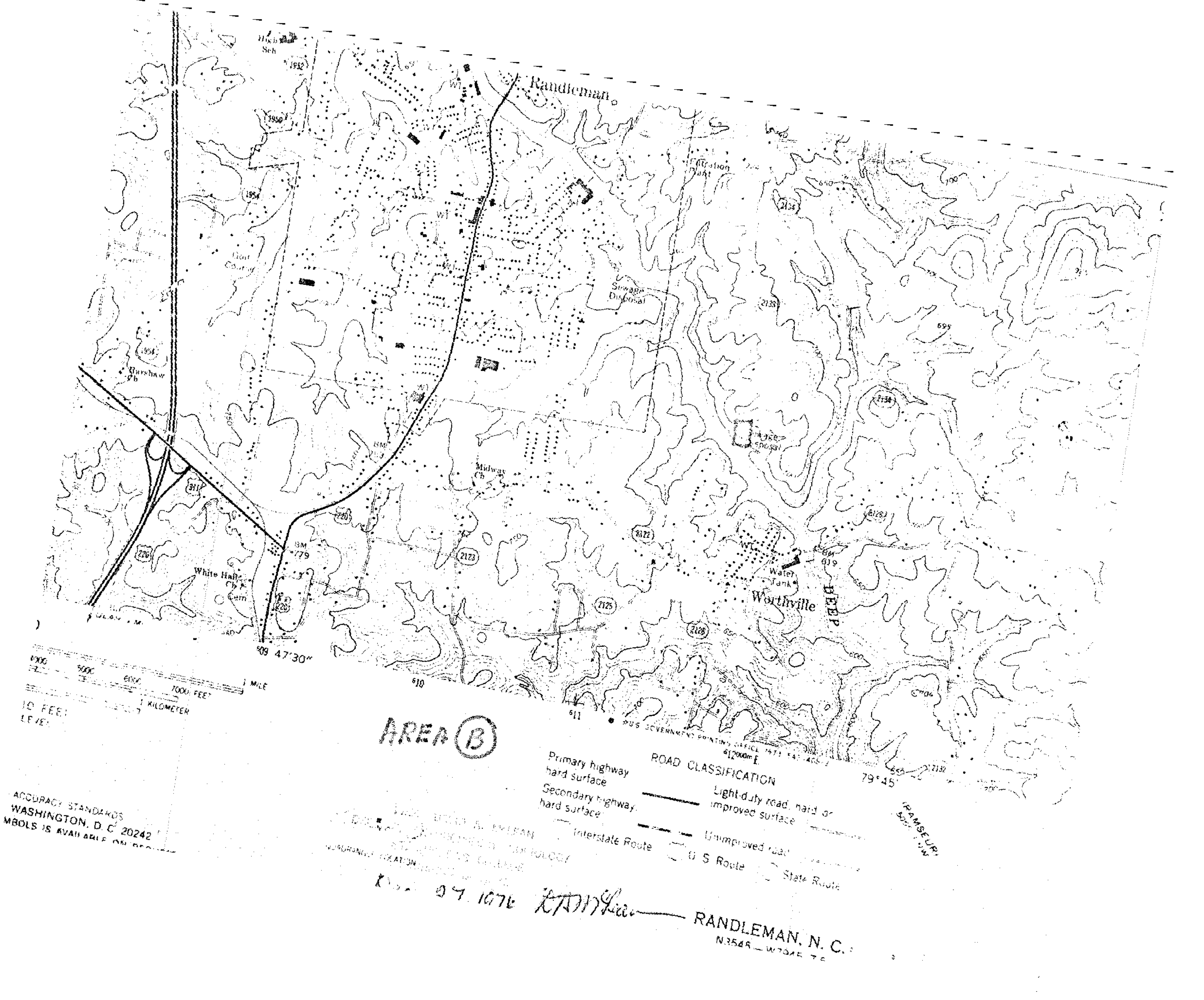
Waste Disposal Plant
Asheboro, N.C.


DISPOSAL PLANT
RANDELMAN, N.C.
RIVER
* Site I
* Site II
AREA (B)
BERM DITCH (SEE DETAIL TH
6' HIGH CHAIN LINK FENCE
TOP OF DIGESTER ELEV. 648.00
EFF. BOX TOP EL. 644.00
REC. WELL TOP EL. 644.50
TOP OF SILO ELEV. 644.00
SLUDGE PUMP HOUSE FLOOR ELEV. 625.50
BLOWER PLANT ELEV. 632.50 SLAB
SLUDGE DRYING BEDS
TOP OF WALL EL. 631.50
TOP WALL EL. 631.50
TOP WALL EL. 628.50
SLUDGE TANK TOP ELEV. 641.50
3:1 SLOPE
640
630
620


Site VI
Site VII
Site IV
Site III
Site V
Site II
Site I
AREA A

Randolph Memorial Park (Cemetery)
RIVER
Sewage Disposal
A
Haskett
Creek
Central Falls
North Asheboro
Pennmad
ASHEBORO
ULAH 9 MI.
609 47'30"
610
611
612000m E.
3957000m N
35°45'
79°45'
4000
5000
6000
7000 FEET
1 MILE
1 KILOMETER
AREA A
ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route
MAP ACCURACY STANDARDS
VEY, WASHINGTON, D. C. 20242
SYMBOLS IS AVAILABLE ON REQUEST
QUADRANGLE LOCATION
Dec 27, 1976
RANDLEMAN, N. C.
N3545—W7945/7.5
(RAMSEUR)
5055 II NW
U.S. GOVERNMENT PRINTING OFFICE 1973-541-405/2

AREA B
* Site I
* Site II
3' GATE
BERM DITCH (SEE DETAIL THIS SHEET)
6' HIGH CHAIN LINK FENCE
BERM DITCH



Randleman
High Sch
Sewage Disposal
Filtration Plant
Midway Ch
White Hall Ch
Cem
Worthville
Water Tank
DEEP
AREA B
ROAD CLASSIFICATION
Primary highway hard surface
Secondary highway hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U S Route
State Route
ACCURACY STANDARDS
WASHINGTON, D. C. 20242
RANDLEMAN, N. C.
79°45'
47'30"
1 MILE
1 KILOMETER
7000 FEET
RAMSEUR

Archaeological Investigations at the GF-104 (P. Gilmore) Site

by

Joseph B. Mountjoy

(1974)

Preface

This report is based on research conducted during the summer of 1973, supported by the Department of Anthropology and the Summer School of the University of North Carolina at Greensboro. It has been prepared because it is believed that the results of archaeological investigations conducted in the State should be documented and deposited in appropriate archives where the information can be preserved and consulted by professional colleagues. It is in that spirit that the manuscript has been prepared, and therefore it is primarily a description of the research conducted and the data collected. Analysis continues at present, and it is hoped that results can be presented more fully at some future date.

We are grateful to the University of North Carolina at Greensboro for supporting this research and teaching endeavor, and want to especially thank Prof. Herbert Wells (Director of the Summer School), Prof. Robert Miller (Dean of the College of Arts and Sciences), and Prof. Harriet Kupferer (Head of the Department of Anthropology). We also wish to acknowledge the helpful council of Prof. Joffre Coe (Director of the Research Laboratories of Anthropology at UNC-Chapel Hill) and thank Mr. and Mrs Paul Gilmore for allowing us to excavate on their land.

The students who took part in the summer work were: Gayle Hill, Janis Johnston, Rebecca Mears, Robert Padgett, Ruby Rufty, and Hal Wright. They conducted individual research projects respectively on soil chemistry, ceramics, flora, geology and stone tool technology, ethnography, and fauna. Much of the following report is due to their efforts.

INTRODUCTION

Our investigations during the summer of 1973 took place in a period of nine weeks, from May 14th through July 15th. However, prior to that time, in the spring, we took several trips to investigate sites which were called to our attention by students or local landowners. We took every occasion available to visit any site without regard to geographical proximity, in order to learn as much as possible about sites in North Carolina prior to the commencement of our summer work. During the summer, we continued to visit sites which were brought to our attention, and inspected certain areas in which we anticipated that sites might be located. This resulted in the location and study of eighteen sites, of which the GF-104 (P. Gilmore) site was one. All sites inspected were reported on State Survey forms and sent to the Research Laboratories of Anthropology in Chapel Hill. Relevant information included a sketch map of the site location and a summary of the artifacts found. All artifacts recovered have been washed, labeled, catalogued, and classified, and are stored in the archaeology laboratory at UNC-Greensboro.

The reasons for selecting GF-104 for more intensive investigation through systematic surface sampling and excavation were various. Not the least of these was convenience, the site being 16.5 miles from the University. This allowed us to live in Greensboro and make use of the laboratory facilities there while commuting out to the site daily. On the other hand, we were intrigued by the sample of artifacts which we had recovered in a general surface collection from the site on April 14th, and the artifacts in the private collection of Mr. Paul Gilmore. Projectile points included Palmer Corner-Notched, Kirk Serrated, Morrow Mountain I Stemmed, Guilford Lanceolate, Savannah River Stemmed, and Randolph Stemmed (Table 2), whereas pottery sherds included

Yadkin Fabric Marked, Pee Dee Complicated Stamped, and Caraway Simple Stamped (Table 2). Such a variety of cultural phases represented in the collections seemed to indicate 8,000 or more years of utilization of this site area by diverse cultural groups. This was especially interesting due to the rather unimpressive location of the site—near the headwaters of the Northern Prong Stinking Quarter Creek. Nothing about this location seemed to suggest why it should be an attraction for different groups of people over such a long period of time. This basic question, then, became the focus for our investigations at the GF-104 site.

A few words must be said here about the process of cataloging and classifying the artifacts recovered. At the outset of the work, we purchased several copies of The Formative Cultures of the Carolina Piedmont (Coe 1964) which we cut up and reassembled into two classification "key" books which could be used in the laboratory or taken into the field. Thus we used that basic reference for all of our classification. Likewise, we perused the Coe monograph to assemble a list of all the different sorts of artifacts which we were likely to find, and added a few items to the list to complete our catalog sheets. Both the catalog and classification are presented in following tables. Such utilization of a basic reference work has many potential pitfalls, but we hope we have not done to great an injustice to Coe's system.

DESCRIPTION OF THE GF-104 SITE

The GF-104 site is located near the town of Julian in the southeastern corner of Guilford County, just north of the Guilford County-Randolph County line, about 1,100 feet east of the juncture of routes 421 and 62 (Fig. 1). The habitation area is found primarily on a terrace and hillside within the 725' to 750' contour interval (Figs. 2-4), on the north side of the North Prong Stinking Quarter Creek, about 45' from the creek at the nearest point. The habitation area encompasses approximately four acres (16,125 square meters), situated within four cultivated fields. The southernmost of these fields is owned by the Gilmore Plant and Bulb Company and farmed by Paul D. Gilmore, and the other three are owned by Andrew L. Blackard. A fifth field, farmed by Noah Hester, was sampled but appears to fall outside the effective site area. The fields were numbered 1 through 5 (Fig. 3).

Field #2 was cleared from what was considered to be virgin timber, about 25 years ago, using a bulldozer. Field #1 was cleared by hand out of pine. When field #5 was cleared, Mr. Hester is supposed to have found pottery there, but neither Mr. Gilmore or Mr. Blackard have found sherds or projectile points there. Mr. Gilmore and his son have collected artifacts from this site for the last 15 years, and Mr. Blackard and his son have collected artifacts here for the past five years or so. The Gilmores have a collection of 689 projectile points from the site, mostly Randolph Stemmed and Savannah River Stemmed, but also including Guilford Lanceolate, Morrow Mountain II Stemmed, Halifax Side-Notched, Yadkin Large Triangular, Caraway Triangular, Palmer Corner-Notched, Kirk Stemmed, Kirk Corner-Notched, Morrow Mountain I Stemmed, Badin Crude Triangular, Pee Dee Pentagonal, and Stanley Stemmed. Other stonework includes quarry blades, drills, fragments of steatite bowls, a hafted broad end-scraper,

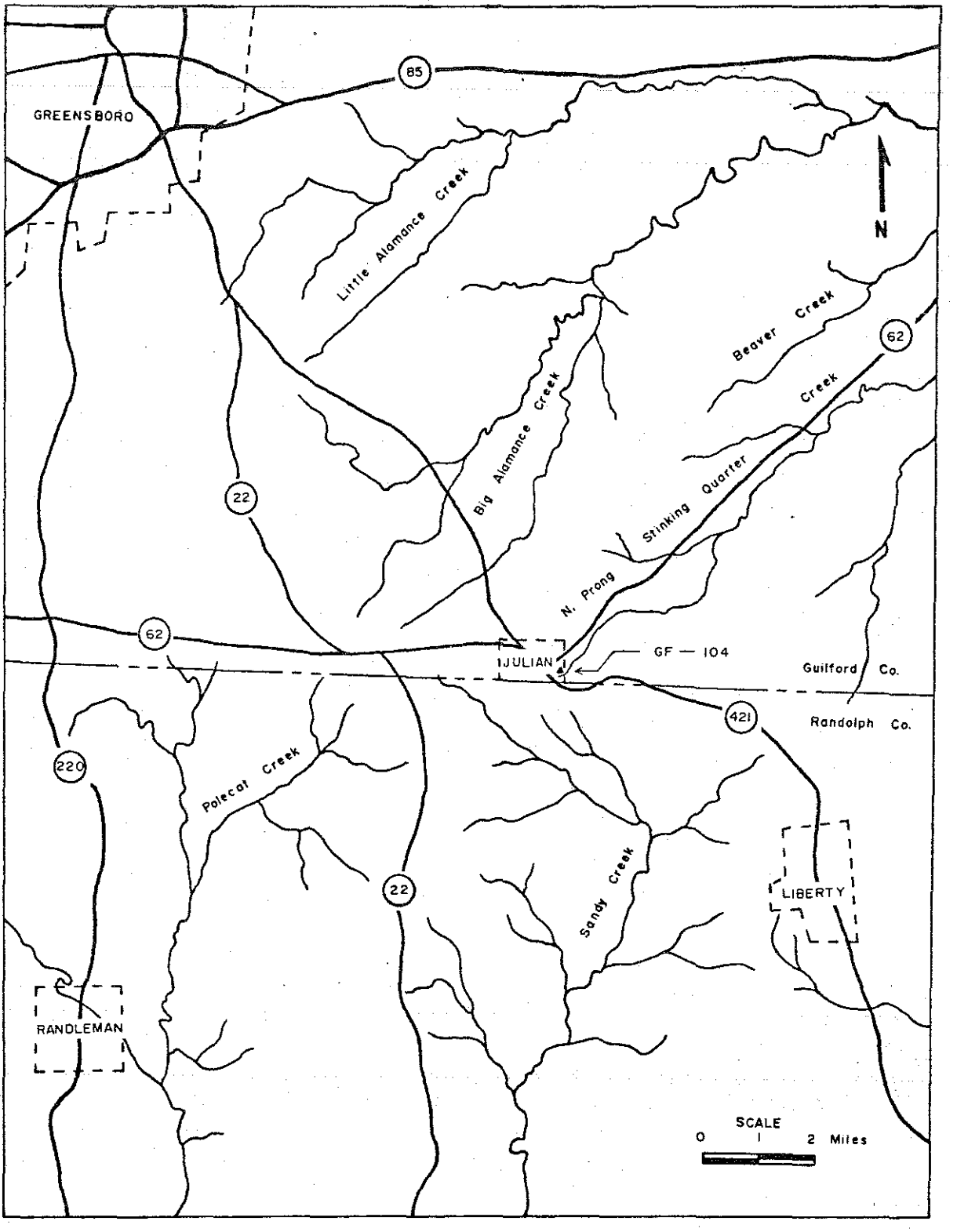


Fig. 1. Location of the GF-104 site.

Fig. 2. Panoramic view of the GF-104 site.

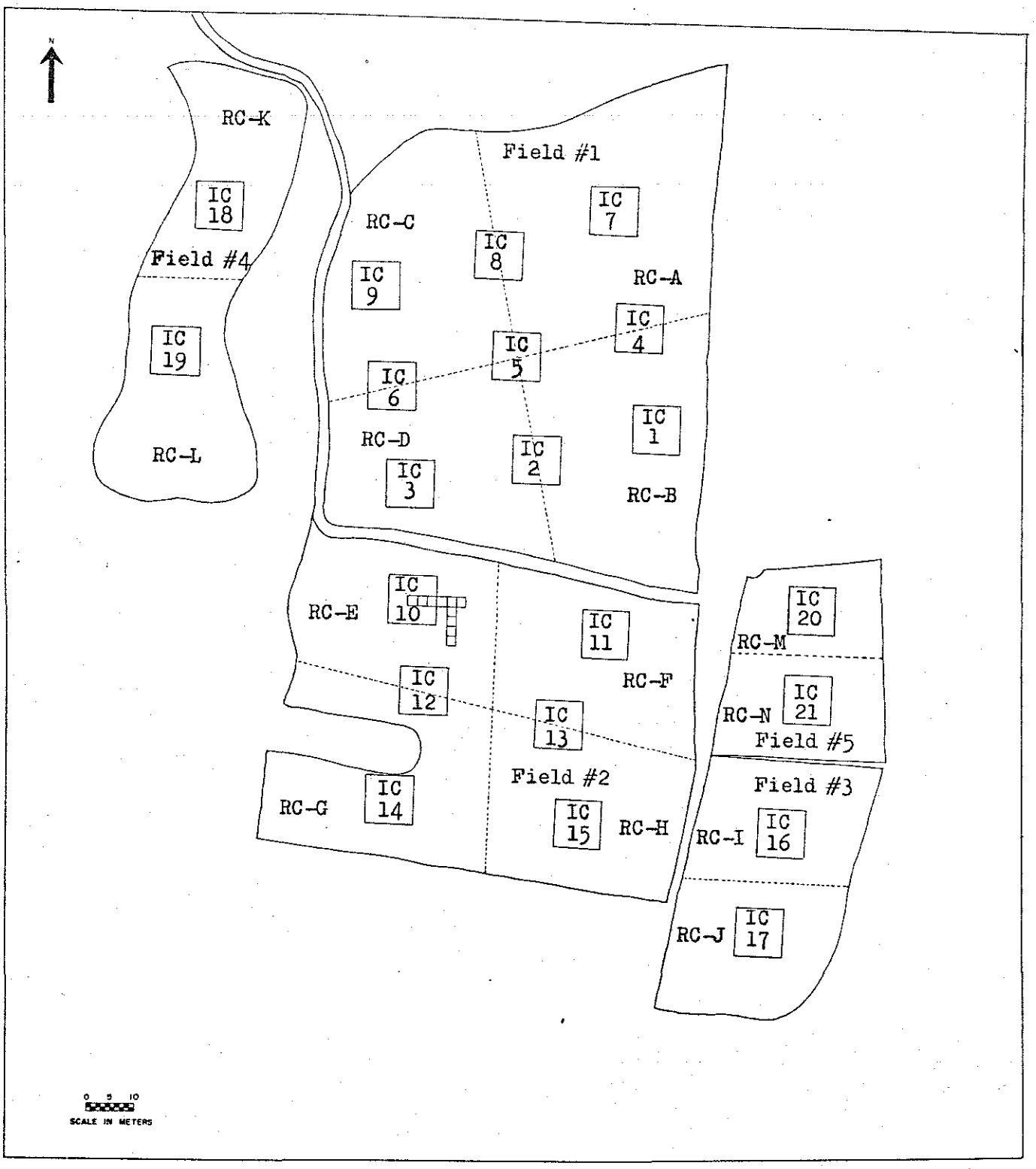


Fig. 3. Overlay of the GF-104 contour map, showing sampling units.

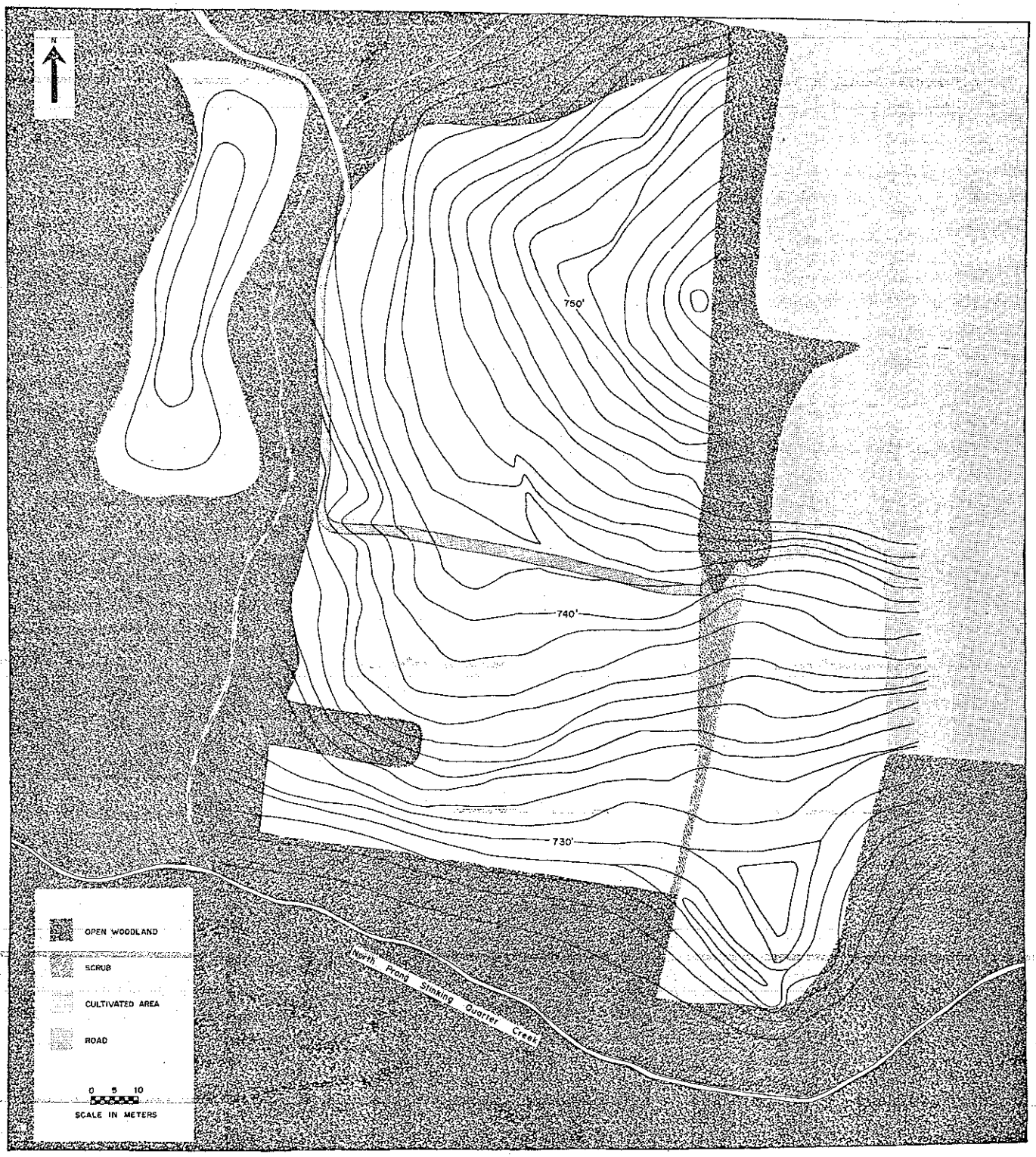


Fig. 4. Contour map of GF-104

a chipped stone axe, and a large flat steatite bead (?). Their collection of artifacts contains, in addition, 451 pottery sherds. Most of those classifiable are apparently Yadkin Fabric-Marked, with some Vincent Fabric-Marked or Cord-Marked, Badin Cord-Marked or Fabric-Marked, and Clements Cord-Marked. The Blackards have about 100 projectile points from the site, plus some sherds, fragments of lug-handled steatite vessels, and part of what seems to be a steatite pipe stem or tubular bead. They also have what is apparently a flat disk-shaped two-hole silver pendant. Both Mr. Gilmore and Mr. Blackard offered the observation that the larger projectile points tend to be found up toward the top of the hill in field #1, and the small points down close to the creek on the small knoll of field #3. The steatite is found, according to them, mostly in the southeastern part of field #2.

In some places down near the creek, small washed out cuts show yellow subsoil. Upslope, the land is tan-whitish in color, with a distinct browning (to orangish) in the southwestern corner of field #2 and extending along the western and southern sides of field #1. The trees to the east of this field are sitting on earth about 10 cm. higher than the tilled field area to the west, probably attesting to rather marked sheet erosion southward down the hillside.

When first visited, in April, field #2 had been plowed and rain-washed, and the other fields were in corn stubble. Subsequently, fields #2 and #4 were planted in milo, and fields #1, #3, and #5 in corn. All these fields border on or are surrounded by wooded areas. Although the study of the vegetation will be presented in greater detail later, it can be noted here that within the three major topographical variants at the site—bottomlands, slopes, and ridges—the main species of trees were Sweetgum, Tulip Poplar, and several

species of Oak. For undercover trees, Hornbeam and Dogwood were the most prevalent, with some Hawthorne being found in the bottomlands. Short-leaf Pine was noted in places but showed signs of dying out in the normal process of development toward a climax forest vegetation.

Bedrock in the area of the site consists of sheared biotite granite that is light-pink to gray in color and is mostly coarse grained. This rock is cut by a large number of greenish schist dikes which have been metamorphosed into slate in some cases. The soil is derived from this bedrock and is a reddish, acidic soil (averaging below a pH of 5.6), with considerable quartz content. The piedmont plateau soils of Guilford County tend to be low in organic matter because the region was originally forested and the type of farming used has not been conducive to the accumulation of organic matter. The soils generally lack free carbonates such as lime, due to the leaching which results from heavy rainfall and extensive drainage networks. The soil at GF-104 can probably be classified as Cecil Sandy Loam, which in virgin areas is gray to a depth of one to two inches, then passes into brown which extends down to eight or ten inches depth. The subsoil is red, stiff, cohesive, smooth clay, which reaches a depth of three feet or more. In cultivated areas, like GF-104, the surface soil often has a light brown or reddish brown color which results from mixing some of the red subsoil with the surface material.

Climate of this area, according to the National Weather Service Office in Greensboro, includes a mean annual temperature of 58.1 degrees Fahrenheit, with a mean of 76.1 degrees in the summer. Mean annual rainfall is 43.05 inches, heaviest in the summer, averaging 12.87 inches, and lightest in the fall, with an average of 9.05 inches. The growing season is approximately 192 days.

Vegetation

As has been noted previously, GF-104 is situated on the northern side of the North Prong Stinking Quarter Creek, about 45' from the creek, and in the area between the 725' to 750' contour intervals. The site area studied was in cultivated fields which are surrounded by woods. The trees in the woods were studied according to three main areas: bottomlands, slopes, and tops of ridges. In general it was noted that all species varieties found were present in all three areas, but there did seem to be some variation as to the relative abundance of individual species by area.

Short-leaf Pine (Pinus echinata Miller) was found in three main places: on the ridge out to the south of field #4, to the east of field #1, and to the east of field #3 (Fig. 3). The pines associated with field #4 covered only the small high portion of the ridge there. Once the slope began, the number of pines declined, and in general these pines showed evidence of dying out. All around them, young trees of Shagbark Hickory (Carya ovata) were cropping up. Small White Oaks (Quercus) were also found growing in these spots. The pines located near field #1 also appeared to be dying out. These pines, however, were surrounded by Tulip Poplar (Liriodendron tulipfera L.) and Sweetgum (Liquidambar stryaciflua L.). No concentration of young trees was noticed in this area, as was the case near field #4. On the other hand, the pines near field #3 did not seem to be dying out. It appears that the disappearance of pines is a good indicator of the area moving from once cleared land to more mature forest cover. Why the pines seemed so healthy near field #3 is not known.

The area across North Prong Stinking Quarter Creek to the south from

field #2 was inspected carefully because it appeared to have older, perhaps virgin, vegetation. This area included the slope up from the creek and the top of the ridge overlooking the creek from the south. Some of the largest trees in the site environs were found here. The dominant species were Tulip Poplar and, collectively, several species of Oak—Black, Red, and White. Next came Sweetgum. Several trees of White Ash (Fraxinus americana) and of Sourwood (Oxydendrum arboreum) were also seen, as well as a small seedling of Winged Elm (Ulmus alata) which was found in the lower portion of the slope and fairly close to the creek. Only one Pignut Hickory (Cary glabra) was recorded for the entire site zone. It was located in this area near the top of the rise, and was quite large and old.

A low wet area was inspected on the west side of field #2. Here, mainly Tulip Poplar and Sweetgum were found, along with a number of Beech (Fagus grandiflora) trees. The trees in this area were generally large.

Only two Red Maple (Acer rubrum) trees were noted in the bottomlands. They were located right next to the creek near the south side of field #2. In the same area a number of Beech trees were noted. Another Red Maple was seen up on the ridge by field #1, but the dominant trees in this area were Tulip Poplar and Sweetgum. Pine was also present, as mentioned before, along with Black and White Oak species, Dogwood (Cornus florida L.), and Hornbeam (Carpinus caroliniana Walt.). At the southern edge of this wooded area, two Copal (Ailanthus altissima) trees were found. These are fast growing and short lived trees which are not native to the New World, and presumably were recently planted here.

The most different of all the areas investigated was that lying in between field #1 and field #4. One of the land drainage gullies which empties into the

creek passes through this low wet area. There are so many different species within this small area that no one can really be called dominant. The trees identified were: White Ash, White Oak, Copal, Beech, Dogwood, Shagbark Hickory, Willow Oak (Quercus phellos), Black Oak (Quercus velutina), and Sweetgum.

Three other species of trees were recorded for the site area in general: Swamp Chestnut Oak (Quercus michauxii Nuttall), Black Willow (Salix nigra Marsh), and Sourwood (Sassafras albidum Nuttall).

There was some attempt to systematically study the other ground cover around the site. Plants noted in the bottomlands include Jewelweed (Impatiens capensis), May Apple (Podophyllum peltatuon), and Green Briar (Similax). Green Briar was also found on the slopes and ridges, slong with Wild Ginger (Hexastyles virginica), Pipsissewa (Chimaphilia maculata), Rattlesnake Plaintain (Goodyera pubescens), Solomon's Seal (Polygonatum biflora), and False Solomon's Seal (Smilacina racemosa). Plants seen in an open, field-type, habitat include Passion Flower (Passiflora incarnata), Queen Anne's Lace (Daucus carota), Blackberry (Rubus argutus), Trumpet Creeper (Campsis radicans), Wolly Mullein (Verbascum thapsis), Horse Nettle (Solanium carolinecse), Morning Glory (Ipomoea purprea), Poke (Phytolacca americana), and English Plantain (Plantage lanceolata).

Local informants were asked to list edible plants which are found in this general area. The common names of these plants are: acorns, hickory nuts, wild sweet potatoes, wild cherries, wild strawberries, blackberries, dewberries, mulberries, blueberries, cattail roots, sassafras roots, sassafras twigs, moss, milkweed leaves, pokeweed leaves, dandelion leaves, stinging nettle leaves, persimmons, pawpaw pods, locust beans, muscadines, foxgrapes, catgrapes, ground cherries, and wild carrots. Some of these, of course, are duplicated in our systematic classification of the vegetation around the site area.

Several sources note that the climax forest for this area is composed of Hickory, Poplar, and Oak trees. Based on this, it would seem that the area around GF-104 is either in or achieving a climax forest state. According to Pinchot and Ashe (1897), this vegetation would be part of a lowland piedmont forest. There are two types of piedmont lowland: loamy alluvial lands (around small streams) which support Beech, Red Oak, White Oak, Maple, and Tulip Poplar trees; and silty lands with more Sweetgum, Blackgum, Bitternut, Overcup Oak, and Swamp Chestnut. The area around GF-104 would seem to be somewhere in between the two. Beech and Red Maple are few, and only located on the banks of the streams. There is some Swamp Chestnut and a lot of Sweetgum, but the Tulip Poplar shows no sign of being pushed out.

Artifact Sampling

As was mentioned previously, when we first inspected the GF-104 site, in April, we obtained a general artifact sample, primarily from field #2. This collection and a few subsequent finds have been grouped as the general "range" collection (designated RC, see Tables 1 & 2) for the entire site. When we decided to spend a major portion of the summer research effort on the GF-104 site, we began to discuss various ways of sampling artifacts from the surface of the area. It was our intent to recover some information about the horizontal extent of the site, the density of artifacts in various parts of the site, and it inspect the possibility of there being functionally or temporally distinct portions of the site area. Toward these ends, we settled on a system of ten-meter squares (100 sq. m.) designated "intensive collections" ("IC"), evenly distributed over each of the fields (Fig. 3), from which all artifacts plus unworked stone and soil samples were collected. The number of sample squares

per field was calculated to cover a minimum of 15% of the total field area. Once those collections had been obtained from a field area the field was divided into quadrants and a "range" collection obtained from each (Fig. 3). Although in theory we had intended to collect only "key" or "marker" artifacts from the quadrants, we actually collected most of the artifacts which were observed. All of the sampling was done after the fields had been tilled and rain had washed the surface. Of course, after initial sampling, subsequent rains revealed some additional artifacts which were added to the appropriate quadrant range collection. The results of the surface sampling are presented in Tables 1-8, and some of the artifact counts are also shown on visual overlays of the site sampling squares (Figs. 5-11).

There are, of course, many reasons why one should be cautious when attempting to infer such things as cultural phase distribution and activity areas at a site such as GF-104 based on surface sampling. Cultivated for many years and artifacts collected from the surface by various people during this time, much of the cultural debris originally there has been removed, and that which remains lies jumbled up in the plow zone. Also of concern is the matter of human error in sampling. Some individuals are more intent and thorough in collecting artifacts than others. However, the method we used seemed to provide the most potential for salvaging the maximum of information from the site.

Judging from the surface sampling data (Fig. 5), all of the fields sampled and most of their respective areas have evidence of aboriginal occupation, but the southeastern corner of field #1 and all of field #5 falling outside the effective site area. Also, the northern end of field #4 shows scant evidence of occupation. The greatest concentration of cultural material is located in the southwestern corner of the site (field #2) and on along the terrace area

TABLE 1A
GF-104 SURFACE SAMPLES

	RC	IC 1	IC 2	IC 3	IC 4	IC 5	IC 6	IC 7	IC 8	IC 9
POTTERY										
Sherds	38		12	9	1					
Plainware	25		5	2	1					
Decorated	13		7	7						
Vessel Forms										
Jars (flare rim)										
Jars (straight rim)										
Jars (conical base)										
Jars (rounded base)										
Bowls (open)										
Bowls (constricted)										
Other forms										
Smoking Pipes										
Beads										
Other										
STONEWORK										
Projectile Points	9		1	1					1	
Quarry Blades	2									
Chipped Stone Hoes										
Chipped Stone Axes										
Chipped Stone Drills										
End Scrapers										
Side Scrapers										
Oval Scrapers	1								1	
Pointed Scrapers										
Other Scrapers										
Other Bifacial	1					1	1			
Thick Flakes Plain	6			1	5					
Thick Flakes Use Chipping	1									
Thin Flakes Plain	131		26	64		11	20	1	42	5
Thin Flakes Use Chipping	7		3	5		1	3	1		2
Hammerstones	1									
Mortars										
Pestles										
Manos				1						
Metates										
Steatite Vessels										
Smoking Pipes										
Pitted Stone										
Atlatl Weights										
Polished Stone Celts										
Polished Stone Axes										
Polished Stone Gorgets										
Rough Rock	17	69	39	9	9	2	16	4	16	20
Cracked Rock		12	5	2	1			1		
Other	4			1			1			
BONE										
Unworked										
Needles										
Awls										
Fish hooks										
Beamers										
Other										

TABLE 1B
GF-104 SURFACE SAMPLES

	RC	IC 1	IC 2	IC 3	IC 4	IC 5	IC 6	IC 7	IC 8	IC 9
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile										
China										
Glass										
Modern Pottery										
Brick										

TABLE 2

GF-104 SURFACE SAMPLES

	RC	IC 1	IC 2	IC 3	IC 4	IC 5	IC 6	IC 7	IC 8	IC 9
POTTERY										
Badin Cord-Marked										
Badin Fabric-Marked										
Badin Net Impressed										
Badin Plain										
Vincent Cord-Marked										
Vincent Fabric-Marked										
Yadkin Cord-Marked										
Yadkin Fabric-Marked	6		3	3						
Yadkin Linear Check Stamped										
Clements Cord-Marked			2							
Clements Fabric-Marked										
Uwharrie Net Impressed										
Uwharrie Brushed										
Dan River Net Impressed										
Pee Dee Simple Stamped										
Pee Dee Plain										
Pee Dee Complicated Stamped	1									
Caraway Plain										
Caraway Complicated Stamped										
Caraway Simple Stamped	2									
Caraway Brushed										
Caraway Corn-cob Impressed										
Caraway Net Impressed										
Gaston Simple Stamped										
Other										
PROJECTILE POINTS										
Hardaway Blades										
Hardaway Dalton										
Hardaway Side-Notched										
Palmer Corner-Notched	1									
Kirk Corner-Notched										
Kirk Stemmed										
Kirk Serrated	1									
Stanly Stemmed					1					
Morrow Mountain I Stemmed	1									
Morrow Mountain II Stemmed										
Guilford Lanceolate	2									
Halifax Side-Notched										
Savannah River Stemmed										
Badin Crude Triangular										
Vincent										
Yadkin Large Triangular										
Uwharrie										
Clements										
Roanoke Large Triangular										
Pee Dee Pentagonal										
Caraway Triangular										
Clarksville Small Triangular										
Randolph Stemmed	2			1						
Other										

TABLE 3A

GF-104 SURFACE SAMPLES

	IC 10	IC 11	IC 12	IC 13	IC 14	IC 15	IC 16	IC 17	IC 18	IC 19
POTTERY										
Sherds	67	4	31	13	3	3	5	3		3
Plainware	53	4	22	8	1	3	5	2		2
Decorated	14		9	5	2			1		1
Vessel Forms										
Jars (flare rim)										
Jars (straight rim)										
Jars (conical base)										
Jars (rounded base)										
Bowls (open)	2	1	2							
Bowls (constricted)										1
Other forms										
Smoking Pipes										
Beads										
Other										
STONEWORK										
Projectile Points	2		3	2			2	1		1
Quarry Blades					1					
Chipped Stone Hoes										
Chipped Stone Axes										
Chipped Stone Drills										
End Scrapers										
Side Scrapers										
Oval Scrapers										
Pointed Scrapers										
Other Scrapers										
Other Bifacial						2		2		
Thick Flakes Plain			1	1						
Thick Flakes Use Chipping				1				1		
Thin Flakes Plain	33	11	155	54	14	25	22	23	3	6
Thin Flakes Use Chipping	7		6		1	2	6	5	1	
Hammerstones										
Mortars										
Pestles										
Manos										
Metates										
Steatite Vessels			1							
Smoking Pipes										
Pitted Stone										
Atlatl Weights										
Polished Stone Celts										
Polished Stone Axes										
Polished Stone Gorgets										
Rough Rock	36	17	66	11	18	13	12	11	23	8
Cracked Rock	9	6	11	9	1	2		1		
Other	1		4					1		
BONE										
Unworked										
Needles										
Awls										
Fish hooks										
Beamers										
Other										

TABLE 3B

GF-104 SURFACE SAMPLES

	IC 10	IC 11	IC 12	IC 13	IC 14	IC 15	IC 16	IC 17	IC 18	IC 19
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile										
China										
Glass										
Modern Pottery										
Brick										

TABLE 4

GF-104 SURFACE SAMPLES

	IC 10	IC 11	IC 12	IC 13	IC 14	IC 15	IC 16	IC 17	IC 18	IC 19
POTTERY										
Badin Cord-Marked				1						
Badin Fabric-Marked										
Badin Net Impressed										
Badin Plain										
Vincent Cord-Marked										
Vincent Fabric-Marked	2									
Yadkin Cord-Marked										
Yadkin Fabric-Marked	9		3	4	2					
Yadkin Linear Check Stamped										
Clements Cord-Marked										
Clements Fabric-Marked										
Uwharrie Net Impressed										
Uwharrie Brushed										
Dan River Net Impressed										
Pee Dee Simple Stamped										
Pee Dee Plain										
Pee Dee Complicated Stamped										
Caraway Plain										
Caraway Complicated Stamped										
Caraway Simple Stamped										
Caraway Brushed										
Caraway Corn-cob Impressed										
Caraway Net Impressed										
Gaston Simple Stamped										
Other										
PROJECTILE POINTS										
Hardaway Blades										
Hardaway Dalton										
Hardaway Side-Notched										
Palmer Corner-Notched										
Kirk Corner-Notched										
Kirk Stemmed										
Kirk Serrated				1						
Stanly Stemmed										
Morrow Mountain I Stemmed										
Morrow Mountain II Stemmed										1
Guilford Lanceolate			1							
Halifax Side-Notched			1							
Savannah River Stemmed										
Badin Crude Triangular										
Vincent										
Yadkin Large Triangular										
Uwharrie										
Clements										
Roanoke Large Triangular										
Pee Dee Pentagonal										
Caraway Triangular										
Clarksville Small Triangular										
Randolph Stemmed										
Other										

TABLE 5A

GF-104 SURFACE SAMPLES

	IC 20	IC 21	RC A	RC B	RC C	RC D	RC E	RC F	RC G	RC H
POTTERY										
Sherds			1	43	1	1	38	15	21	6
Plainware				25			23	9	17	3
Decorated			1	18	1	1	15	6	4	3
Vessel Forms										
Jars (flare rim)										
Jars (straight rim)										
Jars (conical base)										
Jars (rounded base)										
Bowls (open)			1	7			3	1	1	
Bowls (constricted)								1		
Other forms										
Smoking Pipes										
Beads										
Other										
STONEWORK										
Projectile Points			1	5	2	2	16	5	7	3
Quarry Blades							2			
Chipped Stone Hoes										
Chipped Stone Axes										1
Chipped Stone Drills					1					
End Scrapers							2	1		
Side Scrapers								2	1	
Oval Scrapers				1						
Pointed Scrapers										
Other Scrapers										
Other Bifacial			3	6	1		5	2		1
Thick Flakes Plain							3	1		2
Thick Flakes Use Chipping				1		1	1	1		
Thin Flakes Plain			8	65	5	6	128	91	105	26
Thin Flakes Use Chipping	2		2	11	4		16	11	9	9
Hammerstones				1						
Mortars										
Pestles										
Manos								1		
Metates										
Steatite Vessels							1			
Smoking Pipes										
Pitted Stone										
Atlatl Weights										
Polished Stone Celts										
Polished Stone Axes										
Polished Stone Gorgets										
Rough Rock	16	7	1	47	6	4	26	14	35	2
Cracked Rock	1	1		15					1	1
Other			1		1					2
BONE										
Unworked							4			
Needles										
Awls										
Fish hooks										
Beamers										
Other										

TABLE 5B

GF-104 SURFACE SAMPLES

	IC 20	IC 21	RC A	RC B	RC C	RC D	RC E	RC F	RC G	RC H
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile										
China										
Glass							2			
Modern Pottery								1		
Brick										

TABLE 6

GF-104 SURFACE SAMPLES

	IC 20	IC 21	RC A	RC B	RC C	RC D	RC E	RC F	RC G	RC H
POTTERY										
Badin Cord-Marked								2		
Badin Fabric-Marked							2	2		
Badin Net Impressed										
Badin Plain										
Vincent Cord-Marked				1						
Vincent Fabric-Marked				1						1
Yadkin Cord-Marked									1	
Yadkin Fabric-Marked				11	1		9	2	6	2
Yadkin Linear Check Stamped										
Clements Cord-Marked										
Clements Fabric-Marked										
Uwharrie Net Impressed										
Uwharrie Brushed										
Dan River Net Impressed										
Pee Dee Simple Stamped										
Pee Dee Plain										
Pee Dee Complicated Stamped										
Caraway Plain										
Caraway Complicated Stamped										
Caraway Simple Stamped							1			
Caraway Brushed										
Caraway Corn-cob Impressed										
Caraway Net Impressed										
Gaston Simple Stamped										
Other										
PROJECTILE POINTS										
Hardaway Blades										
Hardaway Dalton										
Hardaway Side-Notched										
Palmer Corner-Notched							1			
Kirk Corner-Notched							1			
Kirk Stemmed										
Kirk Serrated			1							
Stanly Stemmed										
Morrow Mountain I Stemmed								1		
Morrow Mountain II Stemmed				2						
Guilford Lanceolate									3	
Halifax Side-Notched							2	1	1	
Savannah River Stemmed			2	1		1	1		1	
Badin Crude Triangular										
Vincent							3		1	
Yadkin Large Triangular										
Uwharrie										
Clements										
Roanoke Large Triangular										
Pee Dee Pentagonal										
Caraway Triangular								1		
Clarksville Small Triangular										
Randolph Stemmed				2					1	1
Other								1		

TABLE 7A

GF-104 SURFACE SAMPLES

	RC I	RC J	RC K	RC L	RC M	RC N			TOTAL
POTTERY									
Sherds	13	10	1	12		1			355
Plainware	10	8	1	5		1			235
Decorated	3	2		7					120
Vessel Forms									
Jars (flare rim)									
Jars (straight rim)									
Jars (conical base)									
Jars (rounded base)									
Bowls (open)				1					19
Bowls (constricted)									2
Other forms									
Smoking Pipes									
Beads									
Other									
STONEWORK									
Projectile Points		10		1					75
Quarry Blades									5
Chipped Stone Hoes									
Chipped Stone Axes		1							2
Chipped Stone Drills	1								2
End Scrapers									
Side Scrapers	1	1							5
Oval Scrapers		2							5
Pointed Scrapers									
Other Scrapers									
Other Bifacial									25
Thick Flakes Plain									20
Thick Flakes Use Chipping									7
Thin Flakes Plain	42	59	1	34	2	1			1219
Thin Flakes Use Chipping	5	11		8					138
Hammerstones		1							2
Mortars									
Pestles									
Manos									2
Metates									
Steatite Vessels									2
Smoking Pipes									
Pitted Stone									
Atlatl Weights									
Polished Stone Celts									
Polished Stone Axes									
Polished Stone Gorgets									
Rough Rock	67	100	1						742
Cracked Rock	5	6							80
Other	1	3			1				31
BONE									
Unworked									4
Needles									
Awls									
Fish hooks									
Beamers									
Other									

TABLE 7B

GF-104 SURFACE SAMPLES

	RC I	RC J	RC K	RC L	RC M	RC N			TOTAL	
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile			2	1					3	
China				15					15	
Glass				10					12	
Modern Pottery									1	
Brick	1								1	

TABLE 8

GF-104 SURFACE SAMPLES

	RC I	RC J	RC K	RC L	RC M	RC N			TOTAL
POTTERY									
Badin Cord-Marked	1								4
Badin Fabric-Marked	1			1					6
Badin Net Impressed									
Badin Plain									
Vincent Cord-Marked		1							2
Vincent Fabric-Marked				3					6
Yadkin Cord-Marked									1
Yadkin Fabric-Marked	2	1							64
Yadkin Linear Check Stamped				1					
Clements Cord-Marked									2
Clements Fabric-Marked									
Uwharrie Net Impressed									
Uwharrie Brushed									
Dan River Net Impressed									
Pee Dee Simple Stamped									
Pee Dee Plain									
Pee Dee Complicated Stamped									1
Caraway Plain									
Caraway Complicated Stamped									
Caraway Simple Stamped									3
Caraway Brushed									
Caraway Corn-cob Impressed									
Caraway Net Impressed									
Gaston Simple Stamped									
Other									
PROJECTILE POINTS									
Hardaway Blades									
Hardaway Dalton									
Hardaway Side-Notched									
Palmer Corner-Notched									2
Kirk Corner-Notched									1
Kirk Stemmed									
Kirk Serrated									3
Stanly Stemmed									1
Morrow Mountain I Stemmed									2
Morrow Mountain II Stemmed									3
Guilford Lanceolate		1							7
Halifax Side-Notched									5
Savannah River Stemmed									6
Badin Crude Triangular									
Vincent		2							6
Yadkin Large Triangular									1
Uwharrie									
Clements									
Roanoke Large Triangular									
Pee Dee Pentagonal									
Caraway Triangular									1
Clarksville Small Triangular		2							2
Randolph Stemmed		1		1					9
Other		1							2

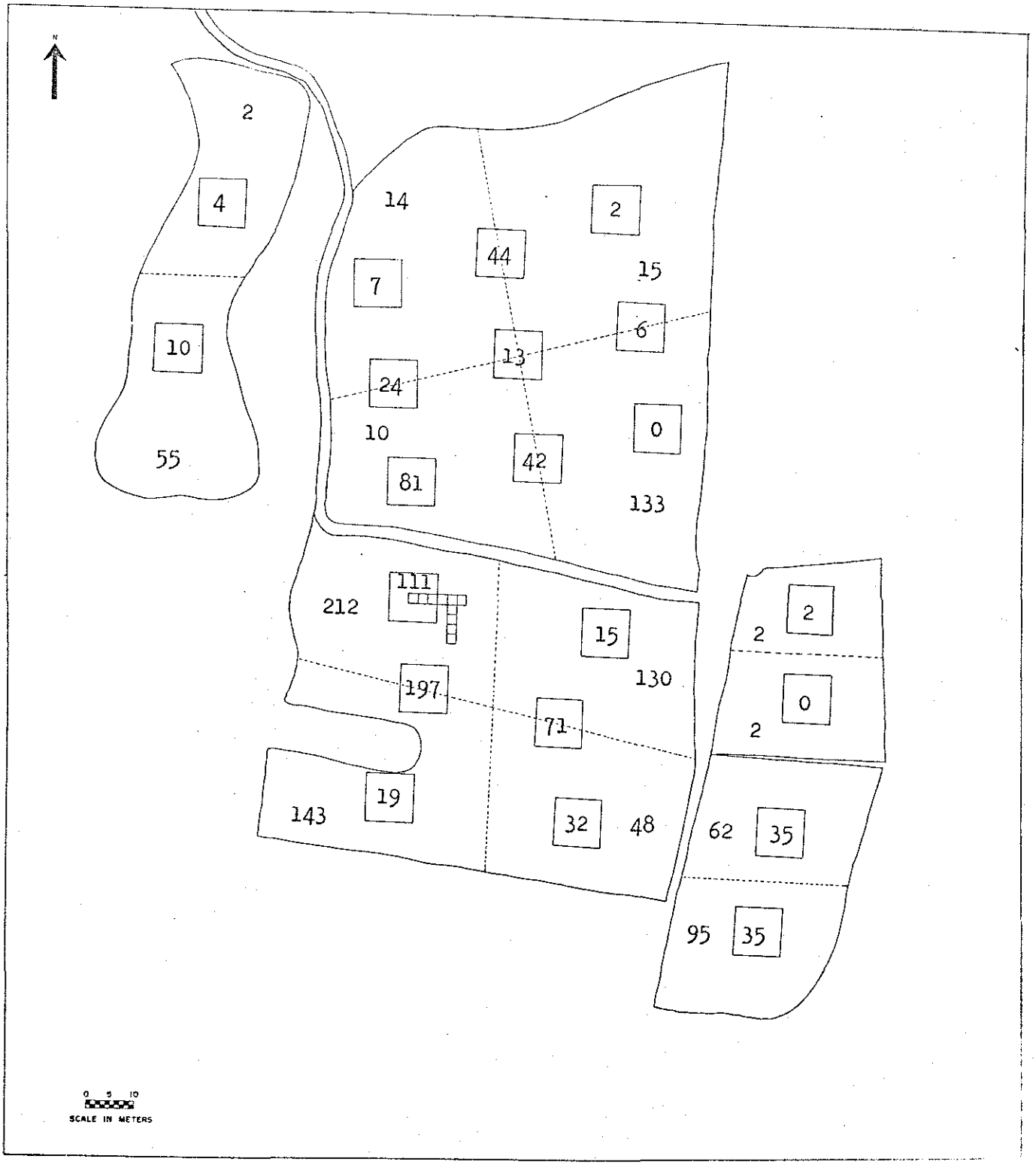


Fig. 5. Distribution of the total artifacts collected from the surface of the GF-104 site.

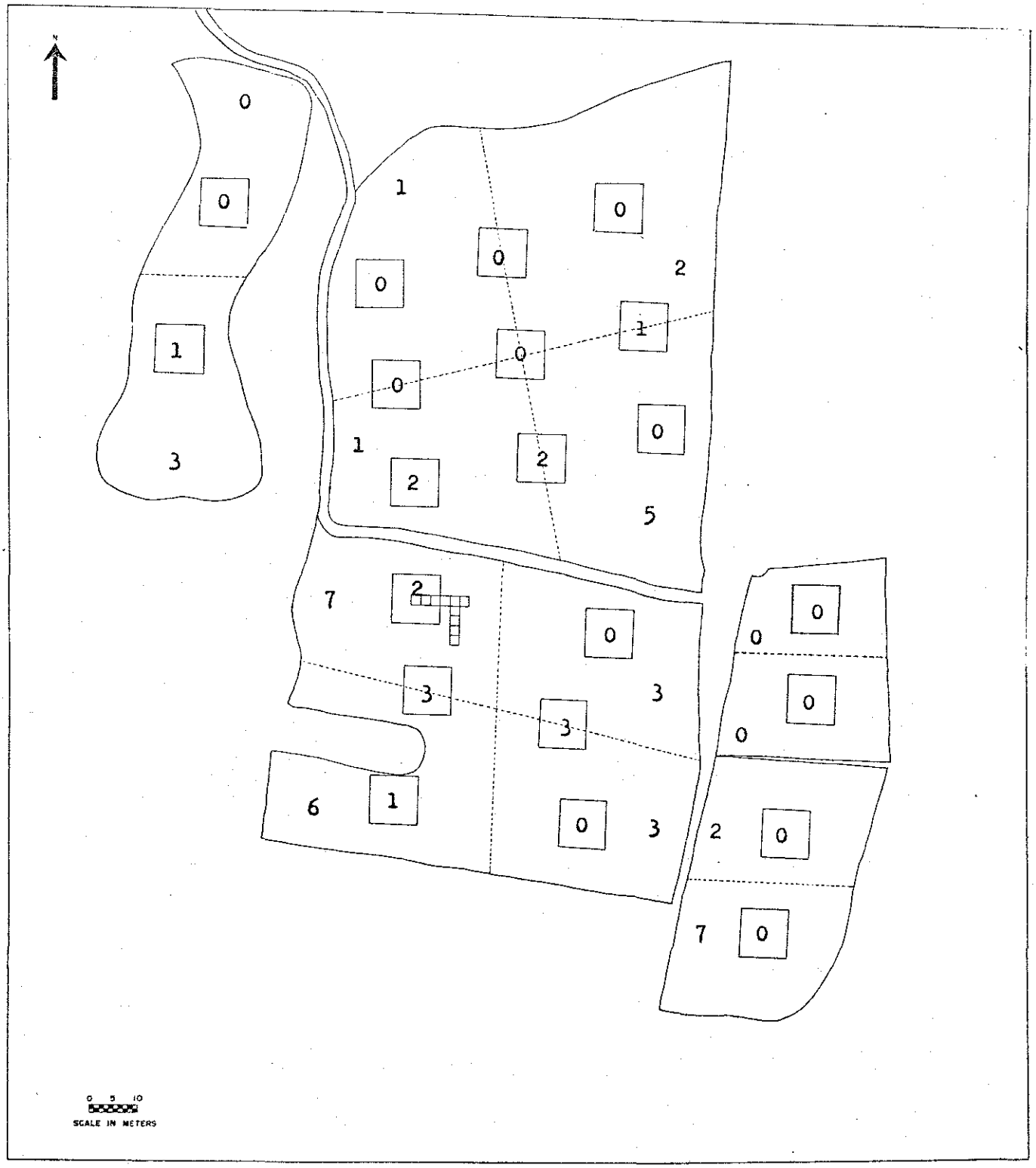


Fig. 6. Distribution of the number of cultural phases represented in the artifacts of each surface sample unit of the GF-104 site.

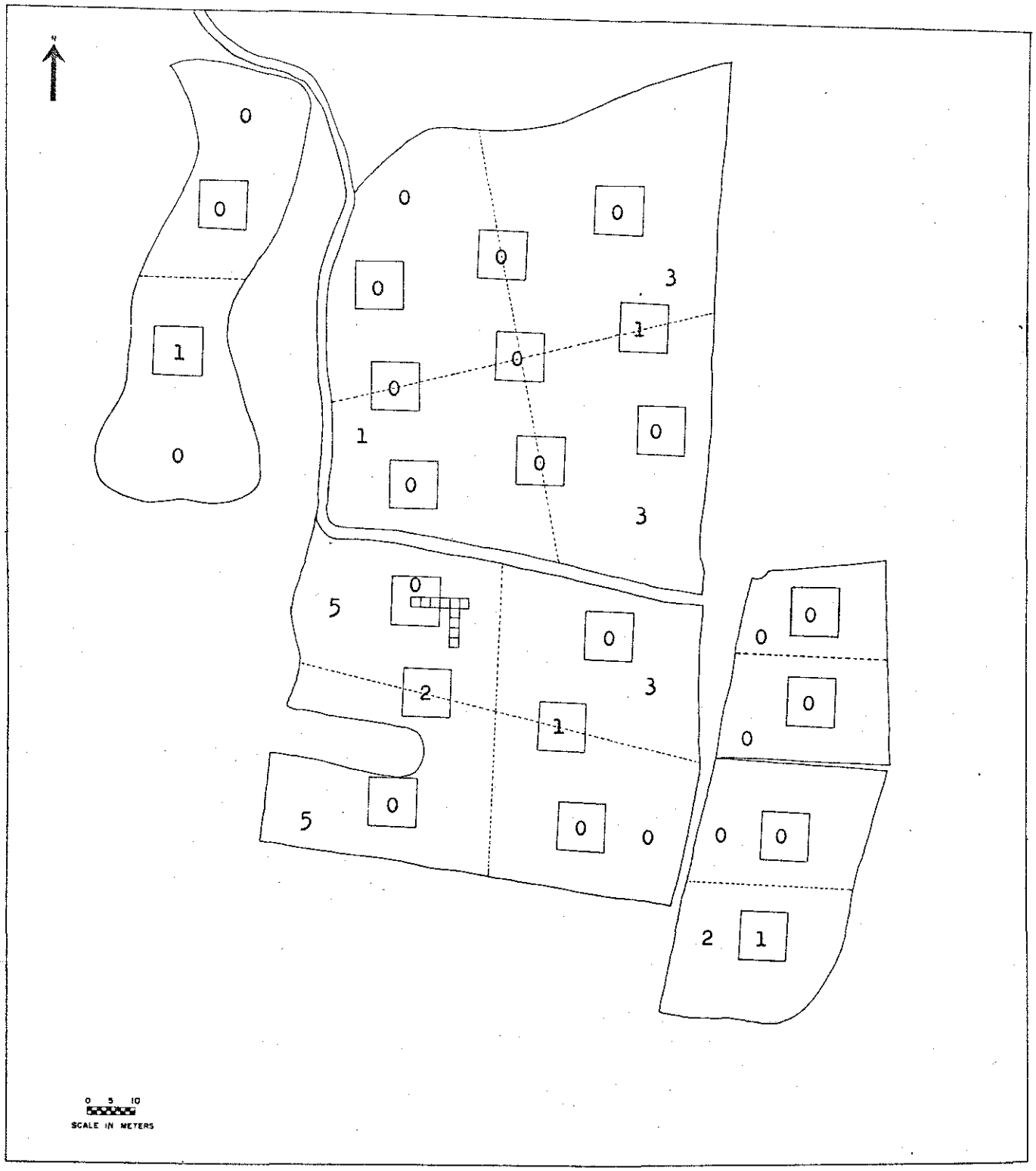


Fig. 7. Distribution of Archaic points collected from the surface of the GF-104 site.

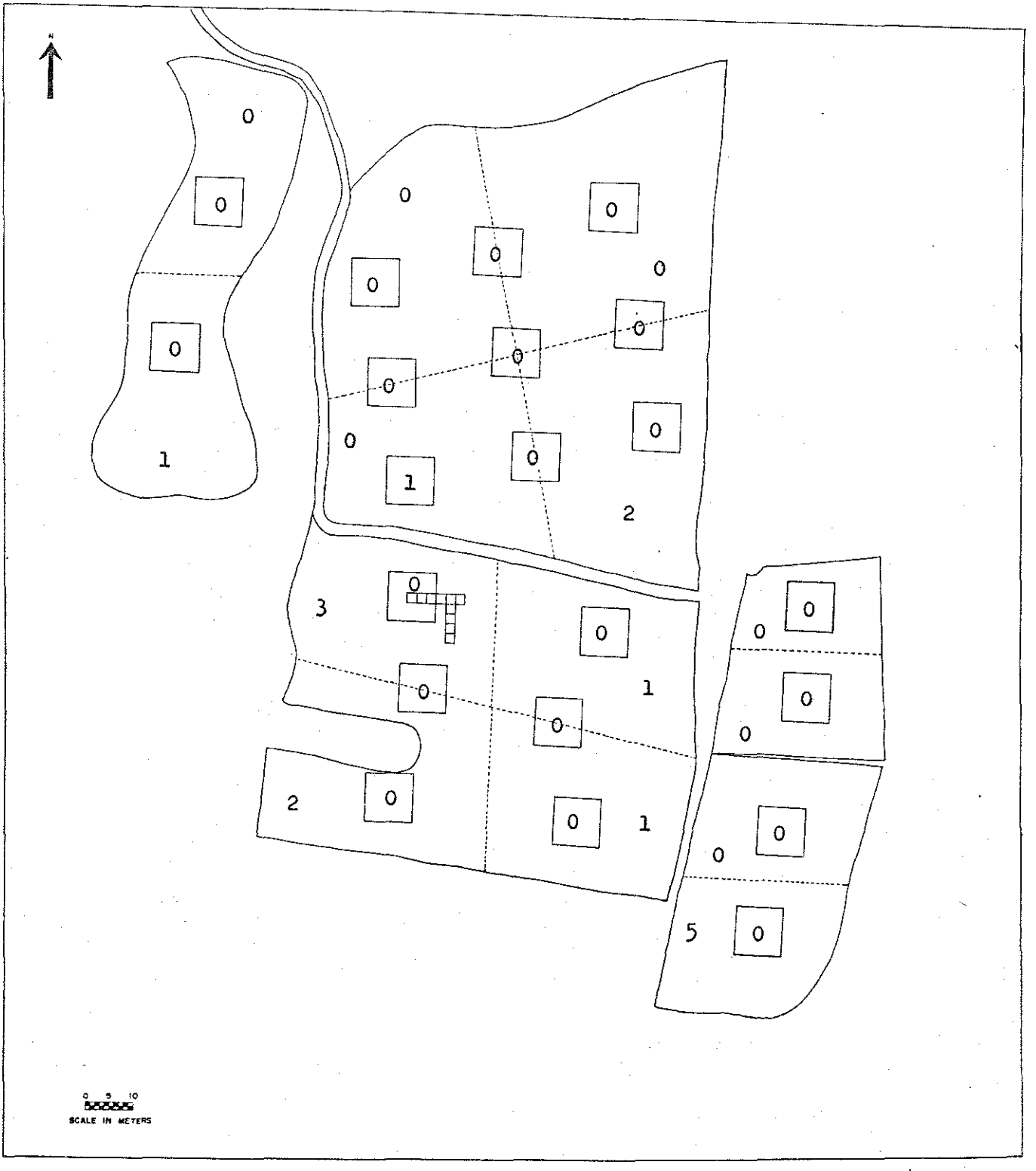


Fig. 8. Distribution of Woodland points collected from the surface of the GF-104 site.

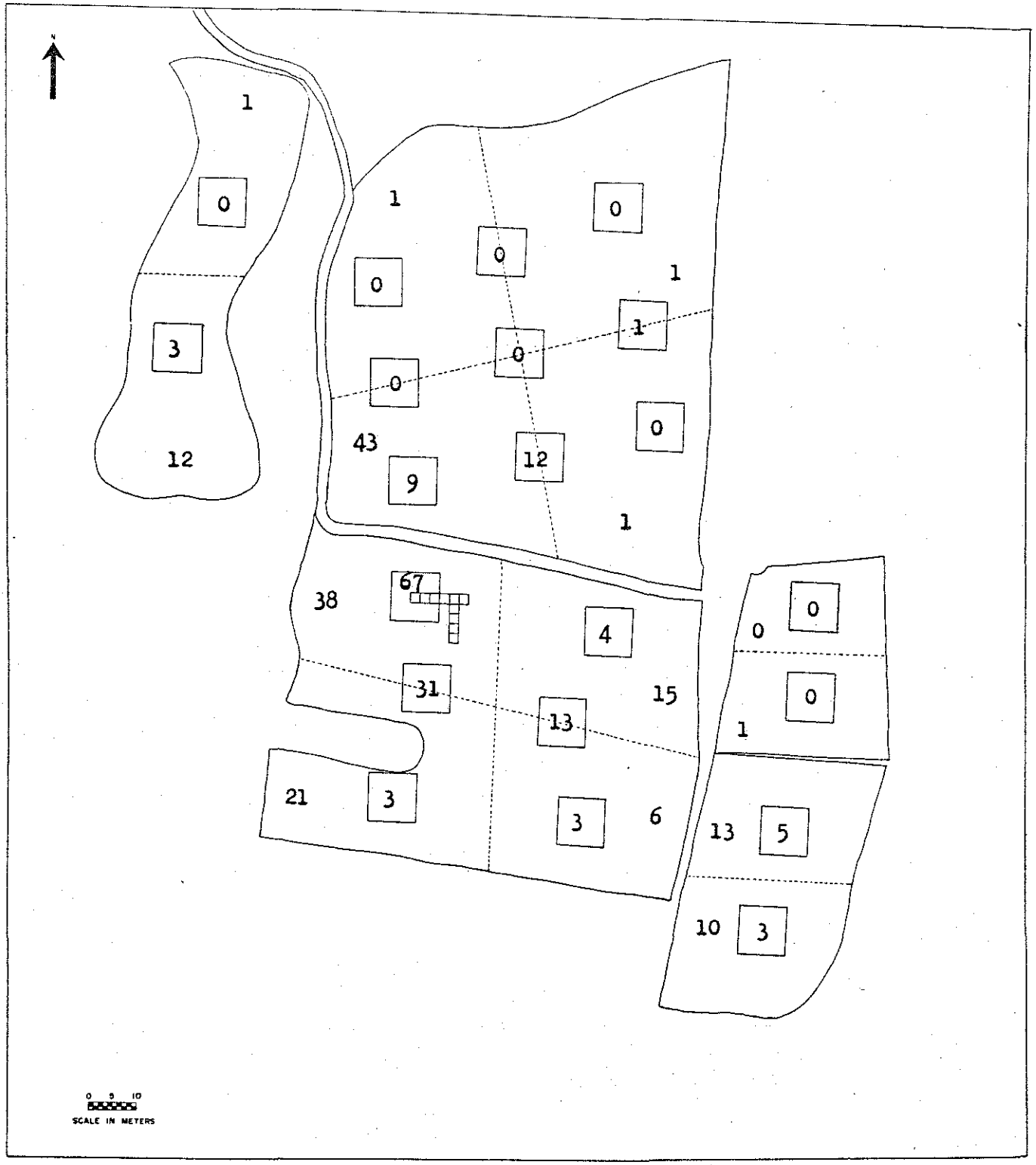


Fig. 9. Distribution of pottery sherds collected from the surface of the GF-104 site.

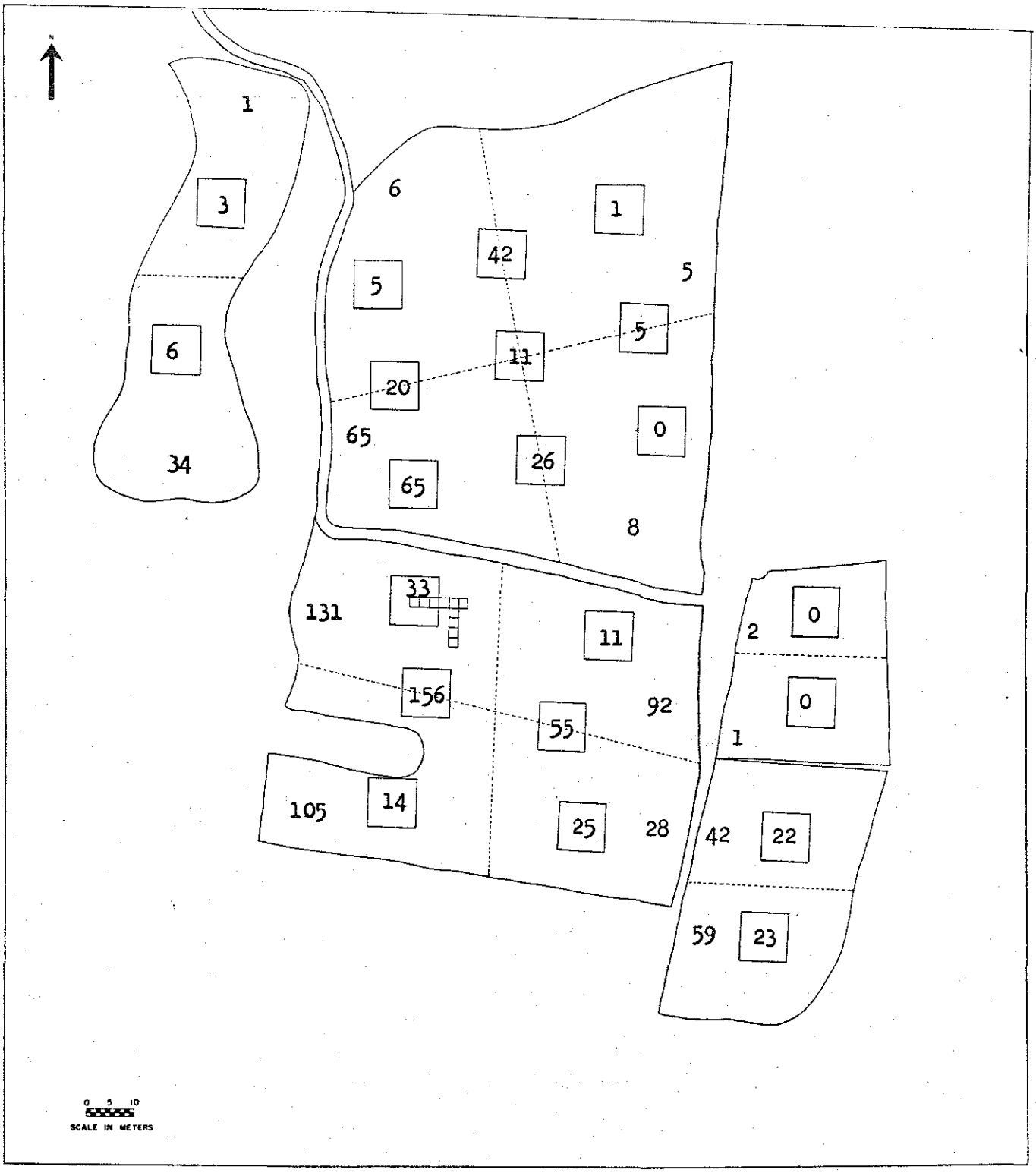


Fig. 10. Distribution of unworked stone flakes collected from the surface of the GF-104 site.

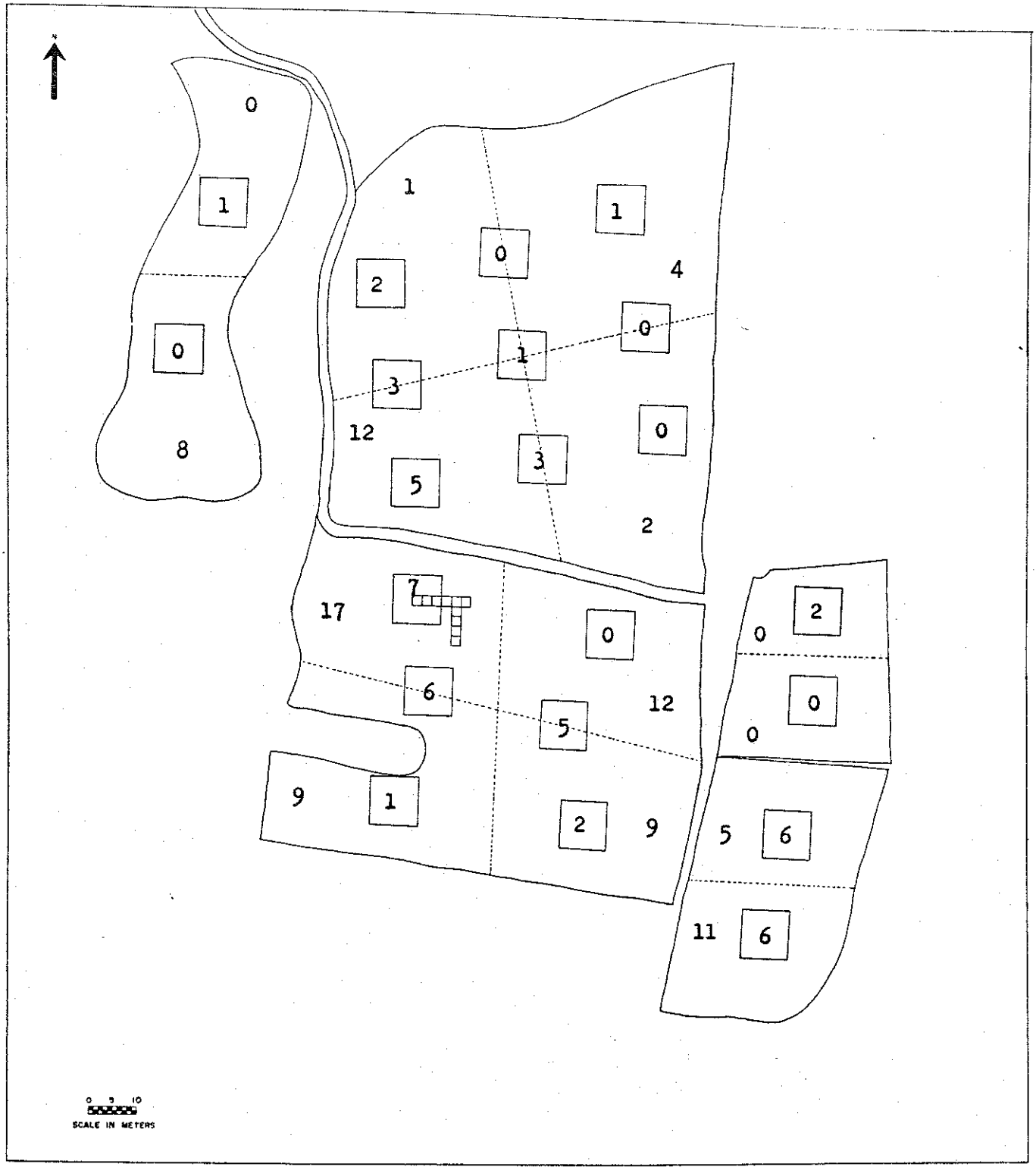


Fig. 11. Distribution of use-chipped stone flakes collected from the surface of the GF-104 site.

which extends east-west through the center of field #2. Part of the concentration extends into the southern and southwestern parts of field #1 on an extension of the terrace area. The density of artifacts drops off somewhat in the southeastern part of field #2, where the land is lower, and then increases on the higher ground of field #3. Figure 6 shows the distribution of all cultural phases (Palmer, Kirk, Lake Mojave, Stanley, Morrow Mountain I, Morrow Mountain II, Guilford, Halifax, Savannah River, Badin, Yadkin, Vincent, Caraway, Clarksville, Clements, and Randolph) represented at the site, based on the projectile points and pottery recovered in the surface sampling. In Figure 1, the presence of each phase is represented by a value of one. Although these could have been split or lumped further, the information sought was intended to give a general idea of cultural diversity in different areas of the site. It should also be noted that many of the pottery sherds and some of the projectile points were not classifiable as to cultural phase. But given these limitations, cultural diversity, which might be taken as an indication of site focus, seesm to be highest on the terrace area in the central and southwestern portions of field #2, and on the hummock of ground in the southern part of field #3. There is also fair diversity of the artifacts recovered in the southeastern quadrant of field #1. This probably reflects the distribution in field #2, since most of the artifacts from that quadrant came from the southwestern part.

By comparing the distribution of Archaic versus Woodland points (Figs. 7, 8), it appears that there is a rather close overlap of the two, except for the northeastern part of field #1, which is the highest area of the field, where the Archaic is represented and the Woodland is not. The frequency of Woodland pottery in that area (Fig. 9) is almost negligable. In terms of

percentage, 14% of Archaic points were found in RC-A and IC-4, whereas only .6% of pottery (Woodland) was found there. Pottery as a whole (Fig. 9), reflects the general concentration of cultural debris in the areas of high ground down close to the creek.

It was believed that the opposition between unworked stone flakes and use-chipped stone flakes (those with chipping along the edge from utilization) (Figs. 10, 11) might reveal a distinction between tool manufacturing areas and scraping or cutting activities. In general, chipping of tools seems to have been done over all of the site area. It may be noteworthy that the distribution of both unworked and worked stone flakes is more extensive than Woodland pottery and projectile points. This is particularly true of the northern part of field #1, and may correlate with the possibility that the higher portions of the site area were more important during Archaic times, with the Archaic occupation more diffuse over the site and the Woodland more concentrated. An alternative hypothesis could be that many of the unworked and worked stone flakes in the northern part of the site pertain to the Woodland period and indicate some sort of different activity by the Woodland inhabitants in the higher and more northerly portion of the site. Analysis of patina on stone flakes, both utilized and non-utilized, might yield some valuable information along these lines, but has not yet been done.

EXCAVATION AT GF-104

Once the surface sampling had been completed, all the collections were washed, labeled, cataloged, and preliminarily classified as to cultural phase. Then, certain data were plotted on overlay maps of the site area in the hope that this might generate some potentially fruitful lines of investigation which could be pursued through excavation. We settled on the selection of the area with the greatest concentration of artifacts and diversity of cultural phases—the northwestern portion of field #2, and began the first two-meter square of the excavation in the center of IC-10 (Fig. 3).

We had hoped that there might be some undisturbed cultural deposit down below the cultivation zone, but excavation at the first square (N1-E1) ended at a depth of 15 cm., on top of sterile red clay subsoil with no discernable cultural features (Fig. 12). We proceeded to extend the trench to the east four more squares, looking for subsoil features such as post molds, trash pits, or burials. When this strategy proved unproductive, we decided to extend the trench from square N1-E5 four squares south to square S4-E5 (Fig. 13). We had noticed in excavating the east-west trench that the artifact count seemed to increase as the trench was extended eastward (Tables 9, 10). But when we excavated the trench southward, the artifact density decreased (Tables 9, 10). Therefore, the last square excavated at GF-104 was an extension of the east-west trench out farther to the east (N1-E6) to see if the artifact density would continue to increase in that direction. It did not (Tables 9, 10).

In all the area excavated (Fig. 14), the depth of the cultural deposit was consistently close to 15 cm., occasionally reaching a depth of 20 cm. where soil had been piled up somewhat during tilling, notably on the southern end of the north-south trench. The artifact tabulations are given in Figure 15 according

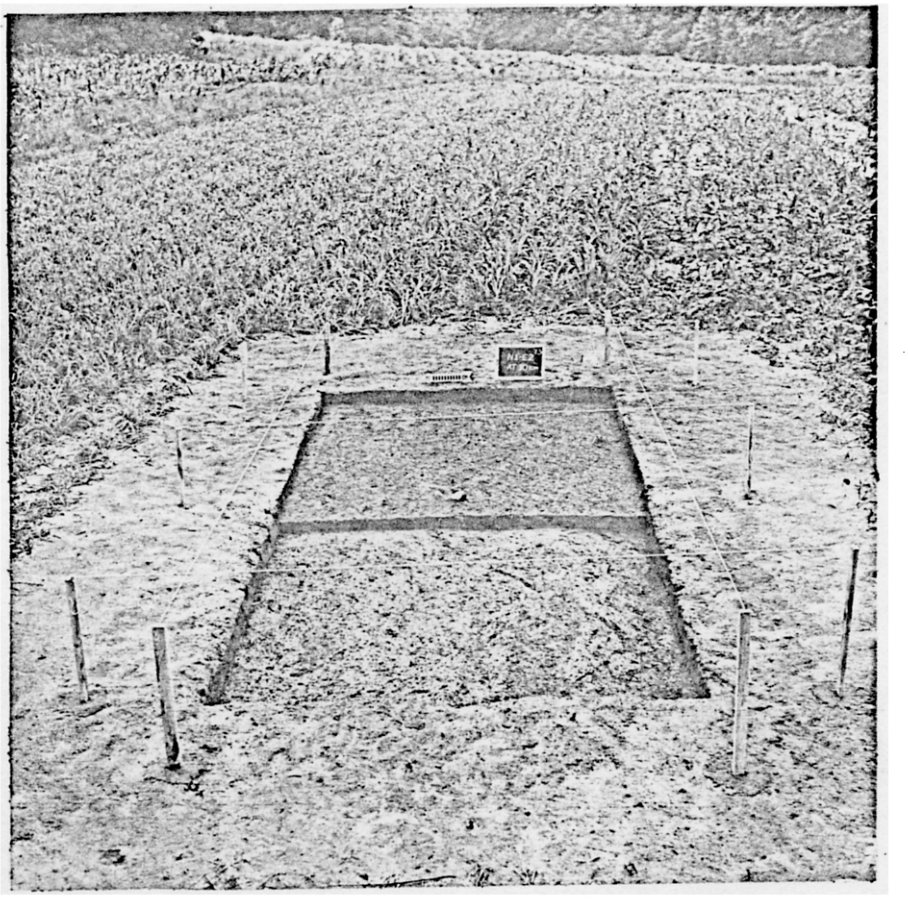


Fig. 12. The east-west trench at GF-104, with N1-E2 at 10 cm. depth.

Fig. 13. Laying out the southern extension of the trench at GF-104.

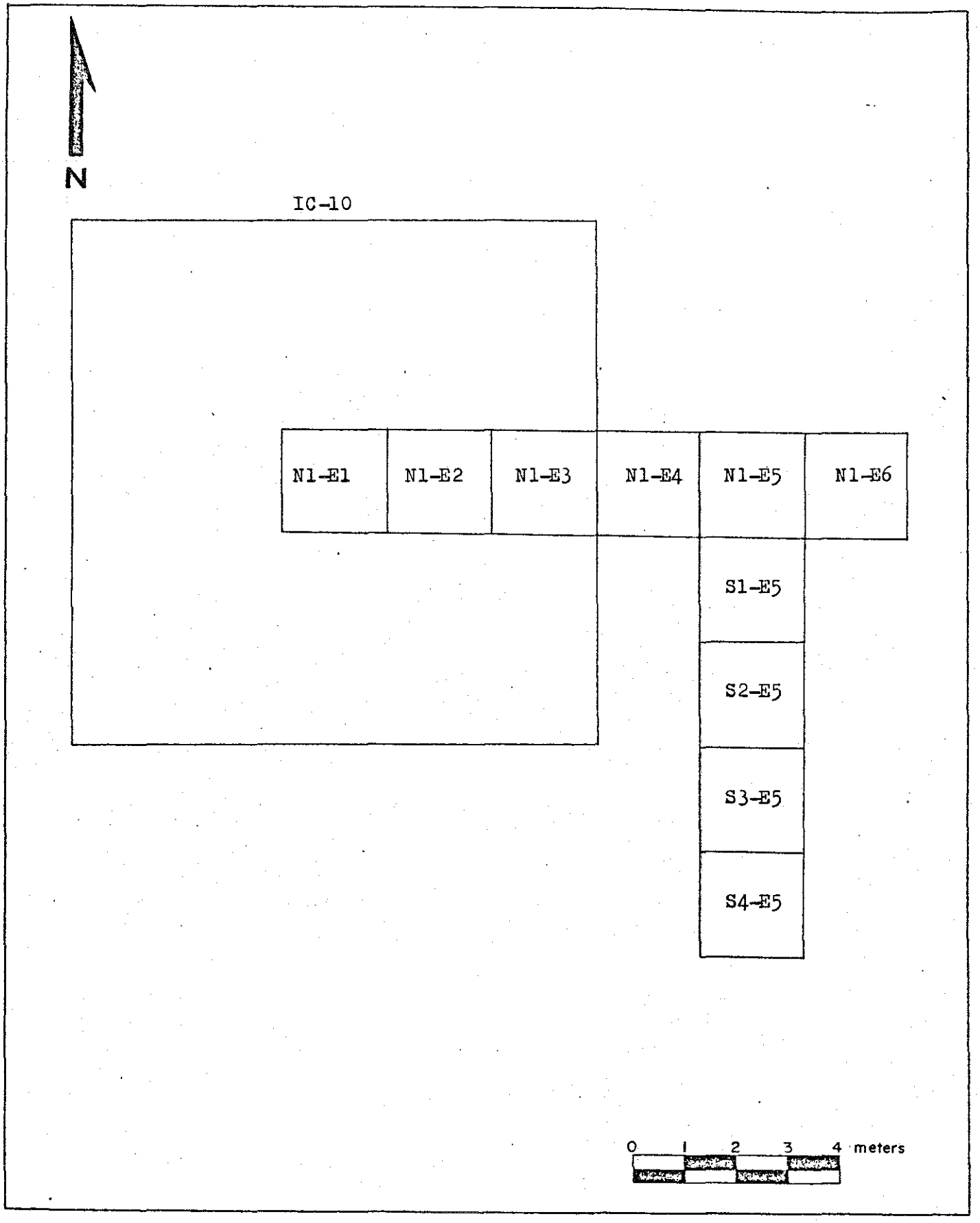


Fig. 14. Excavated squares at the GF-104 site.

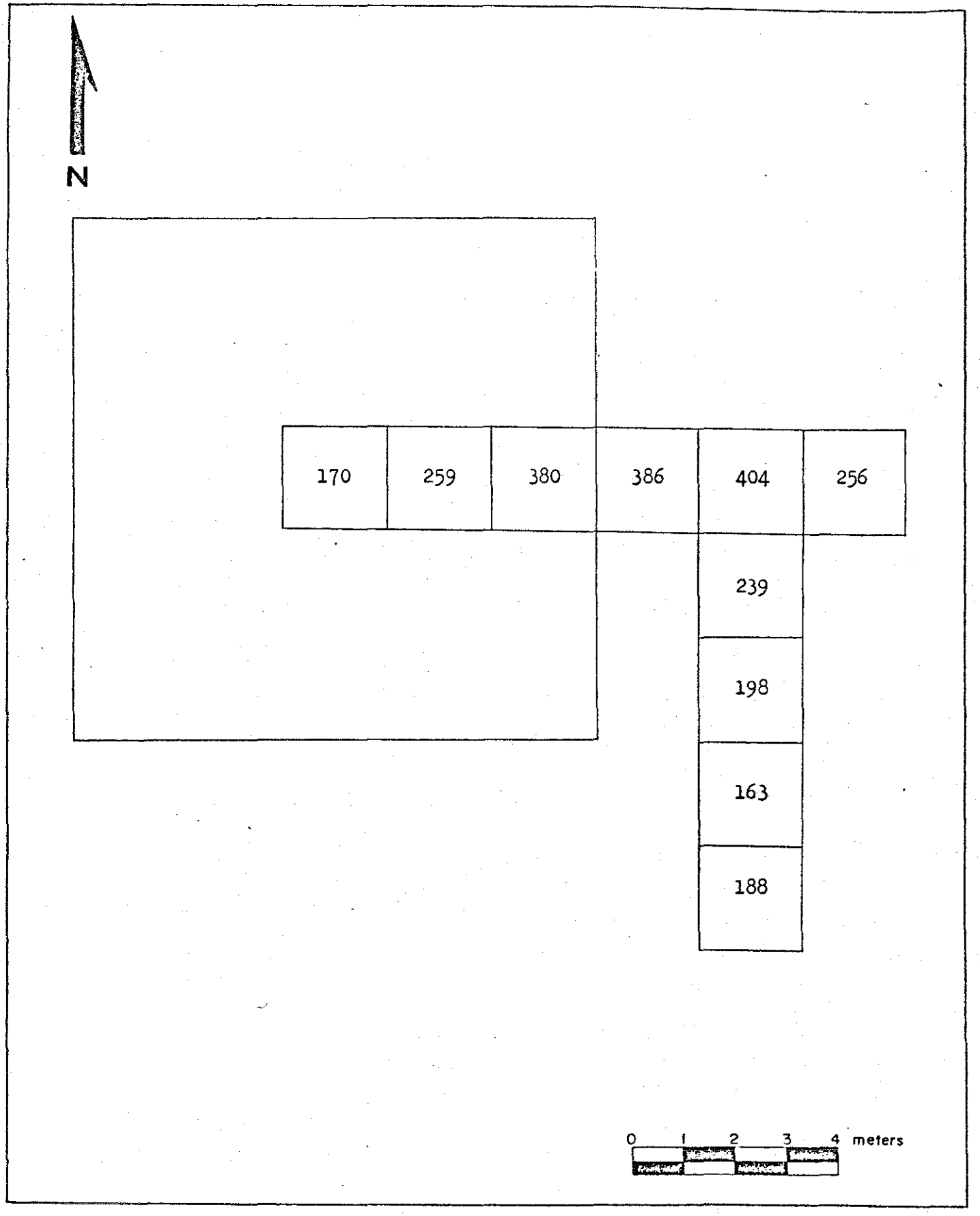


Fig. 15. Artifact density according to excavated square.

TABLE 9A

GF-104 EXCAVATED SAMPLES

	N1 E1	N1 E2	N1 E3	N1 E4	N1 E5	N1 E6	S1 E5	S2 E5	S3 E5	S4 E5
POTTERY										
Sherds	66	98	168	132	124	100	70	50	65	61
Plainware	26	58	91	84	52	75	35	27	30	34
Decorated	40	40	77	48	72	25	35	23	35	27
Vessel Forms										
Jars (flare rim)										
Jars (straight rim)										
Jars (conical base)										
Jars (rounded base)										
Bowls (open)	4	1		3	2	3	2	3	1	3
Bowls (constricted)						1	1			
Other forms										1
Smoking Pipes	1	1								
Beads										
Other			1							
STONEWARE										
Projectile Points	1		1	5	4	4	3	8		
Quarry Blades	1						1			
Chipped Stone Hoes										
Chipped Stone Axes										
Chipped Stone Drills										
End Scrapers										
Side Scrapers										
Oval Scrapers										
Pointed Scrapers										
Other Scrapers										
Other Bifacial						1	1	5	1	
Thick Flakes Plain			2	5	1			1		1
Thick Flakes Use Chipping		3	1		1	1				
Thin Flakes Plain	88	146	200	226	263	142	153	123	92	120
Thin Flakes Use Chipping	13	11	16	18	11	8	11	10	5	6
Hammerstones										
Mortars										
Pestles										
Manos										
Metates										
Steatite Vessels			1					1		
Smoking Pipes										
Pitted Stone										
Atlatl Weights										
Polished Stone Celts										
Polished Stone Axes										
Polished Stone Gorgets										
Rough Rock	76	71	76	104	50	54	62	59	67	99
cracked Rock	8	11	10	15	26	16	18	5	21	18
Other				4	2	1		1		
BONE										
Unworked										
Needles										
Awls										
Fish hooks										
Beamers										
Other										

TABLE 9B

GF-104 EXCAVATED SAMPLES

	N1 E1	N1 E2	N1 E3	N1 E4	N1 E5	N1 E6	S1 E5	S2 E5	S3 E5	S4 E5
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile										
China										
Glass										
Modern Pottery										
Brick										

TABLE 10

GF-104 EXCAVATED SAMPLES

	N1 E1	N1 E2	N1 E3	N1 E4	N1 E5	N1 E6	S1 E5	S2 E5	S3 E5	S4 E5
POTTERY										
Badin Cord-Marked		1	1							
Badin Fabric-Marked		6	6	6	1	1	1	3	1	2
Badin Net Impressed										
Badin Plain										
Vincent Cord-Marked	3	1	1			2		2	1	1
Vincent Fabric-Marked	1		8	4	8		5	2	2	4
Yadkin Cord-Marked	2									
Yadkin Fabric-Marked	27	29	37	39	61	31	29	15	28	16
Yadkin Linear Check Stamped										
Clements Cord-Marked						1				
Clements Fabric-Marked						3			1	4
Uwharrie Net Impressed										
Uwharrie Brushed										
Dan River Net Impressed										
Pee Dee Simple Stamped										
Pee Dee Plain										
Pee Dee Complicated Stamped										
Caraway Plain										
Caraway Complicated Stamped										
Caraway Simple Stamped										
Caraway Brushed										
Caraway Corn-cob Impressed										
Caraway Net Impressed										
Gaston Simple Stamped										
Other	7	3	24		1	41		1	2	
PROJECTILE POINTS										
Hardaway Blades										
Hardaway Dalton										
Hardaway Side-Notched										
Palmer Corner-Notched										
Kirk Corner-Notched										
Kirk Stemmed										
Kirk Serrated										
Stanly Stemmed										
Morrow Mountain I Stemmed								1		
Morrow Mountain II Stemmed										
Guilford Lanceolate						1				
Halifax Side-Notched										
Savannah River Stemmed								1		
Badin Crude Triangular										
Vincent										
Yadkin Large Triangular										
Uwharrie										
Clements										
Roanoke Large Triangular										
Pee Dee Pentagonal										
Caraway Triangular	1									
Clarksville Small Triangular										
Randolph Stemmed		1		1		2	1	3		
Other						1	2	3		

to excavated square, and the amount of artifact bearing soil assumed to be approximately the same in each. As can be seen in Figure 15, the general field observations about changing artifact density from square to square in the trench were rather accurate. It is noteworthy that this seems generally true of artifact density but deviates somewhat when one considers pottery sherds, projectile points, or stone flakes individually (Tables 9, 10).

Soil Analysis

Soil samples were collected from various parts of the GF-104 site and surrounding vicinity, including the center of each surface sample Intensive Collection square, four of the excavated trench squares, and places in the woods surrounding the site (Figs. 16-20). The soil at each of these locations was described as to color, texture, and mechanical composition. It was also subjected to chemical analysis for pH, nitrogen, phosphorous, and potassium, using a LaMotte (model STH-5) soil testing kit.

Microscopic examination of the particles of soil in the samples from the 21 Intensive Collection squares revealed that the mineral composition of the soil is predominantly white quartz, often as much as 80% of the sample. Yellow, purple, pink, and clear quartz were consistently present in lesser quantities. The quartz particles are worn and glossy, caused by abrasion with other grains.

The soil acidity readings are recorded for the surface samples and the excavated area in Figures 16 and 20. Three samples from the bottom to the top of the slope on the southern side of the creek which are not illustrated in the Figures were respectively 4.8, 5.0, and 5.0. All of the soil tested within the GF-104 site can be classified as acidic, varying from moderately acid through strongly acid to very acid. Such acidity normally can be traced to the fact that alkaline materials, chiefly calcium and magnesium, are lost from soil through

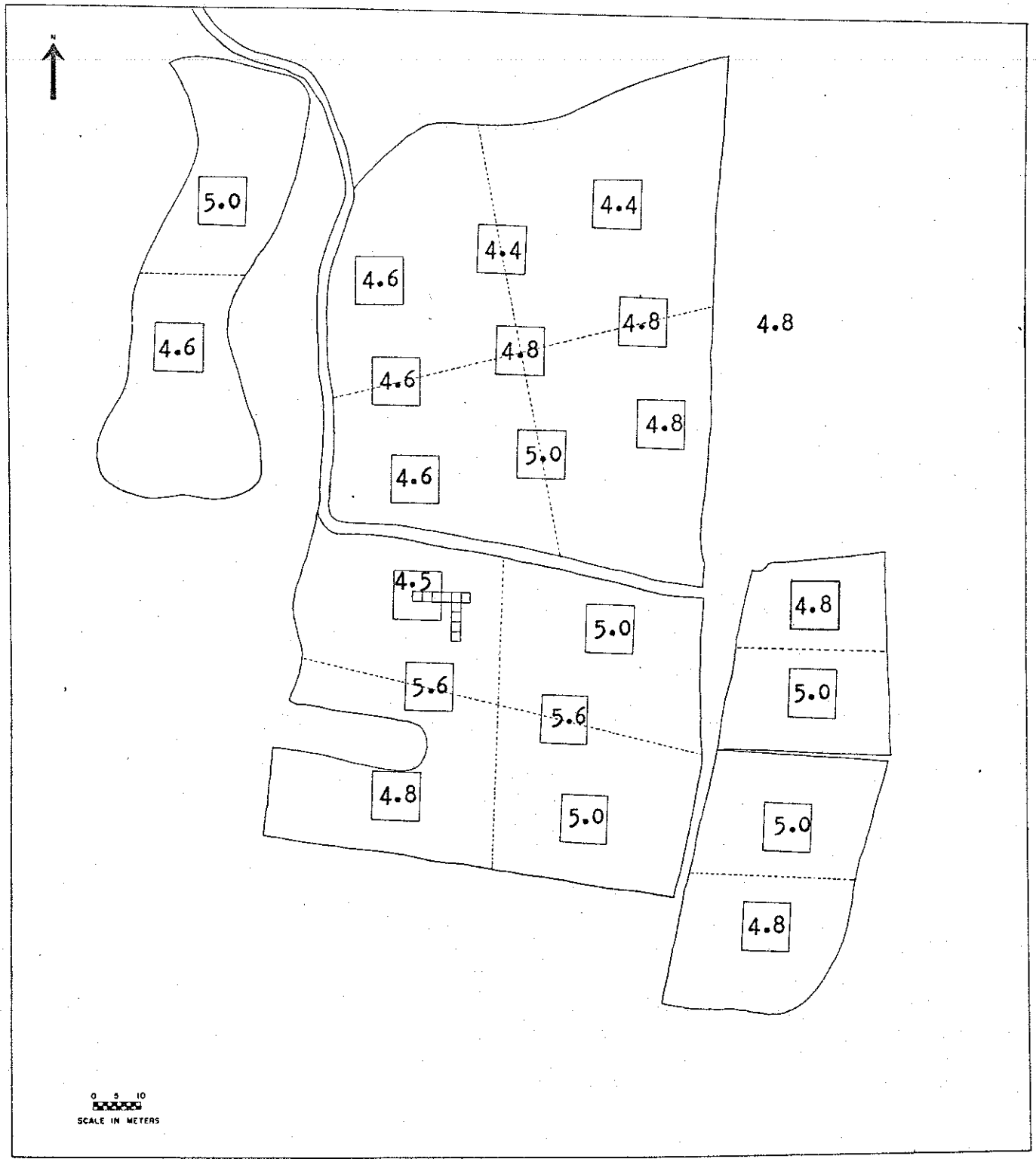


Fig. 16. Soil acidity readings from the surface sampling squares at the GF-104 site. Values range from moderately acid (5.6) to very acid (4.4).

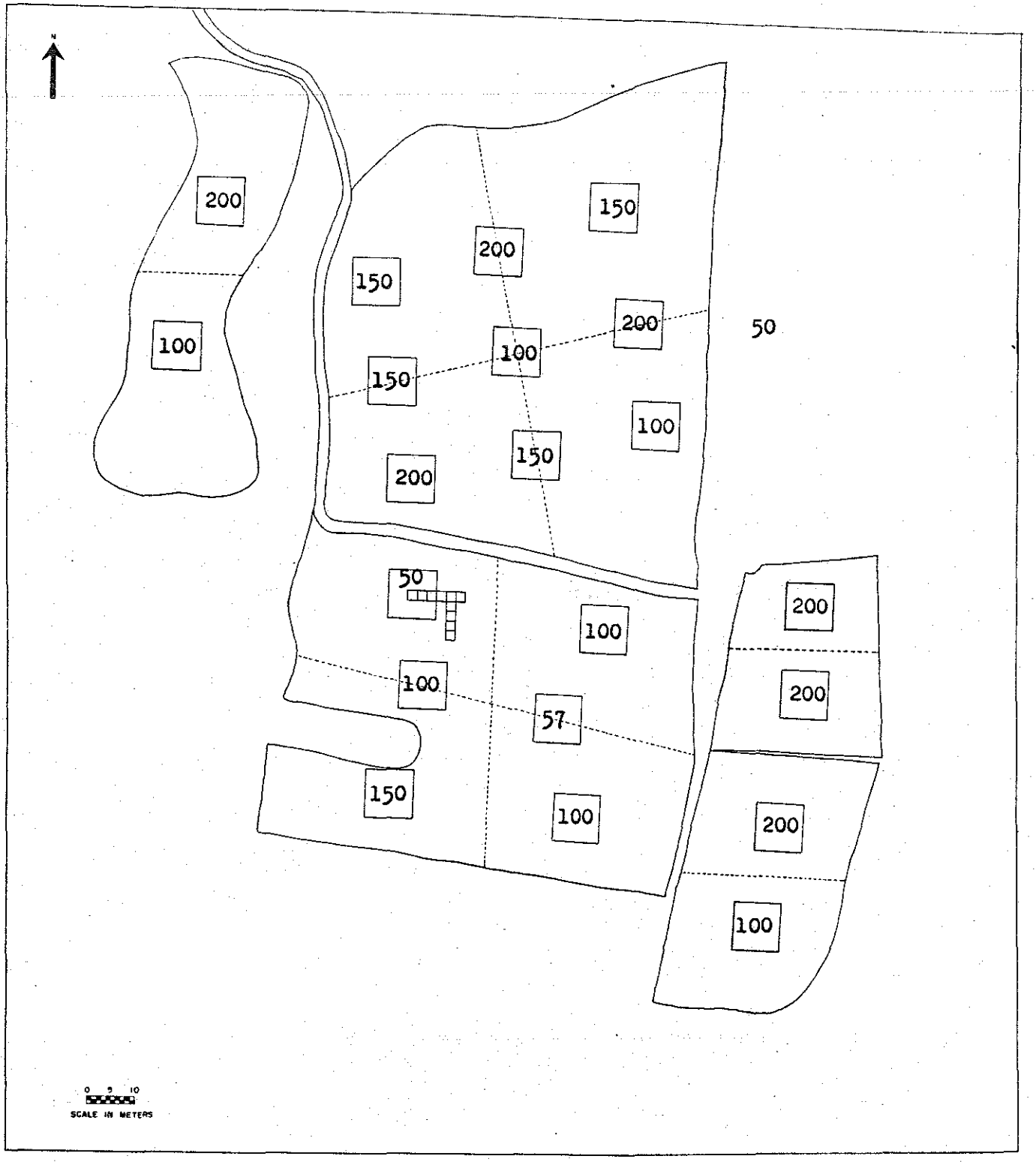


Fig. 17. Phosphorus readings from the surface sampling squares at the GF-104 site. Values indicate pounds per acre, ranging from medium low (50 lbs.) to very high (200 lbs.).

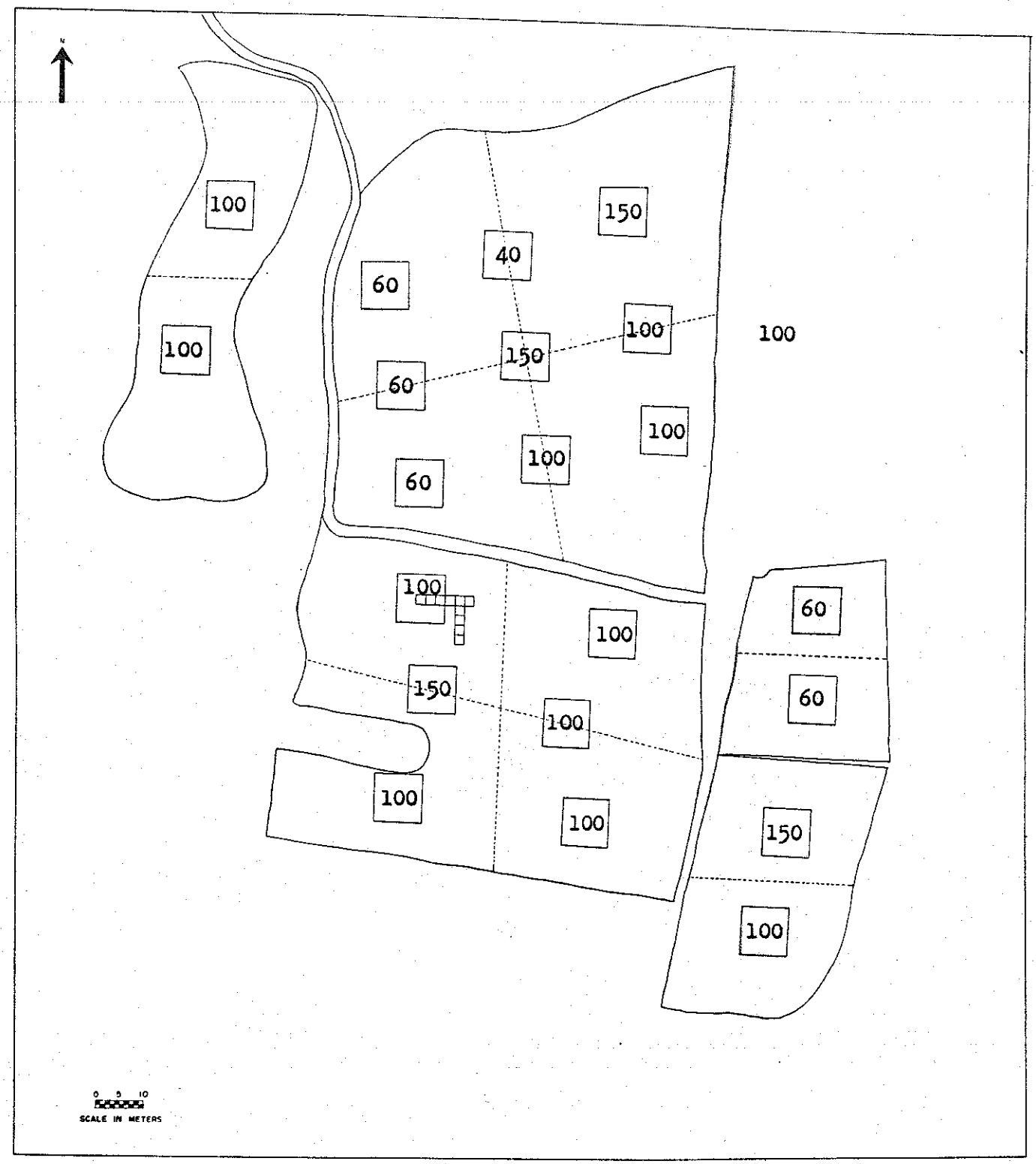


Fig. 18. Nitrate nitrogen readings from the surface sampling squares at the GF-104 site. Values indicate pounds per acre, ranging from medium (60 lbs.) to high (150 lbs.).

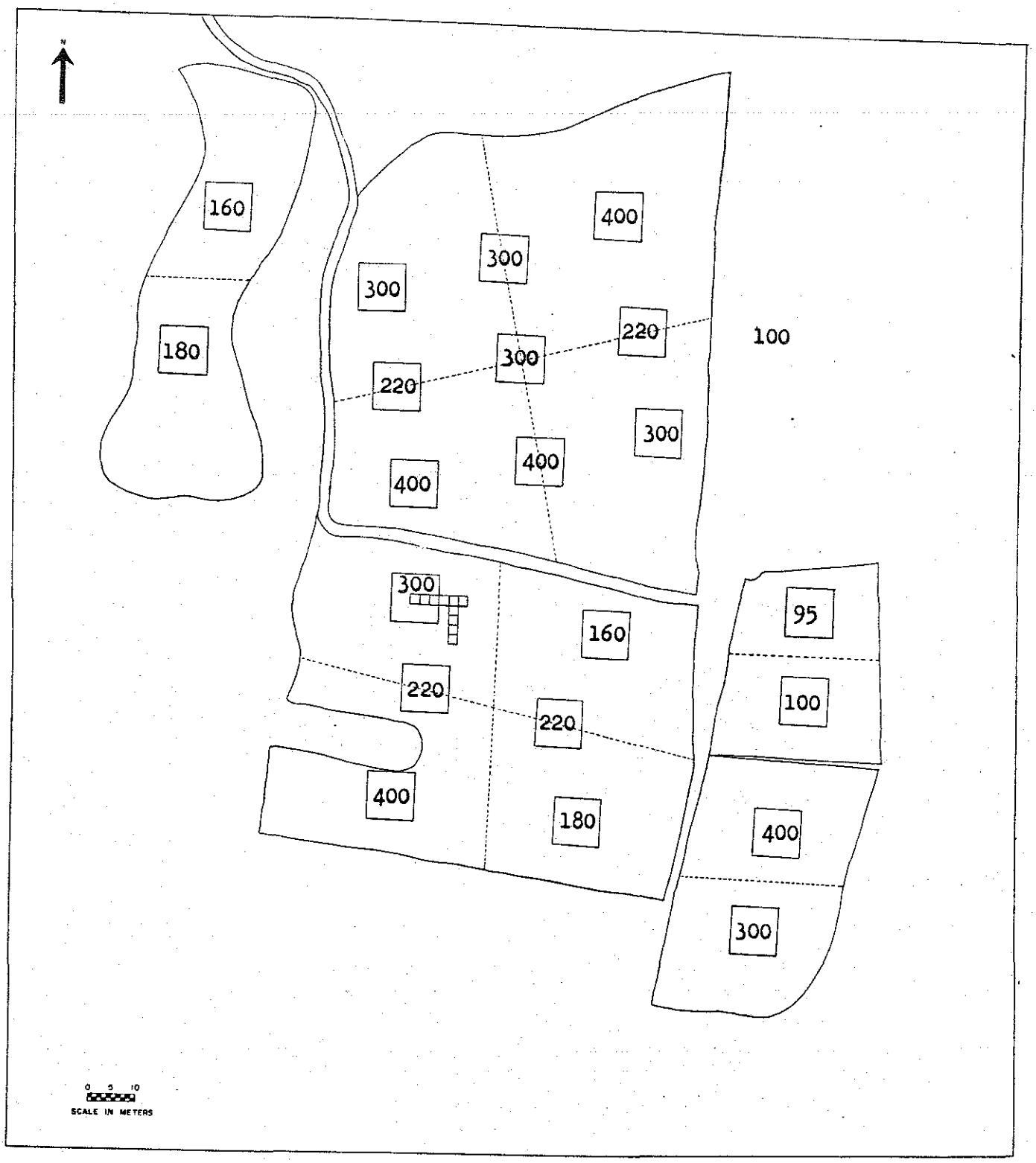
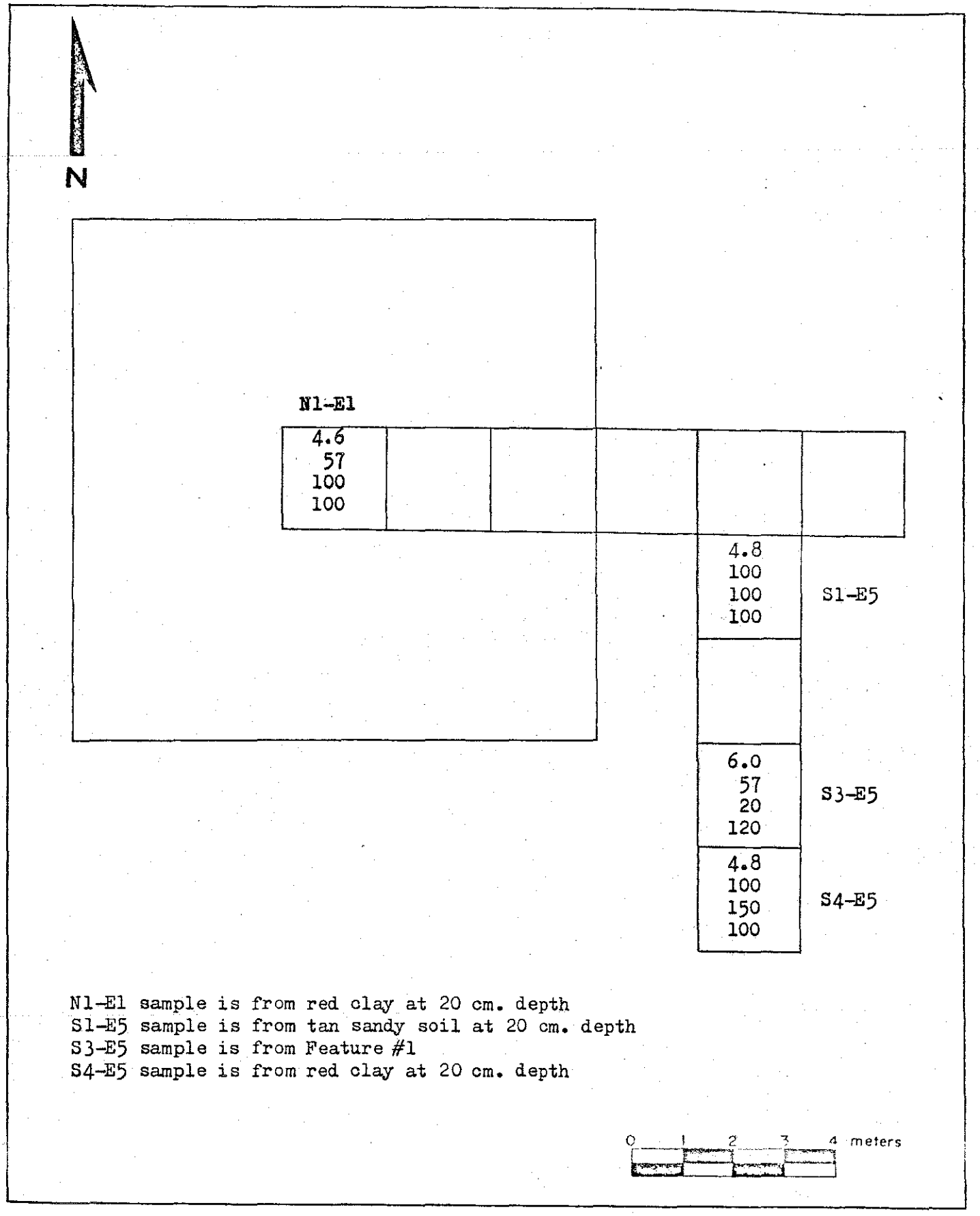


Fig. 19. Potassium readings from the surface sampling squares at the GF-104 site. Values indicate pounds per acre, ranging from low (95 lbs.) to high (400 lbs.).



N1-E1 sample is from red clay at 20 cm. depth
S1-E5 sample is from tan sandy soil at 20 cm. depth
S3-E5 sample is from Feature #1
S4-E5 sample is from red clay at 20 cm. depth

Fig. 20. Soil chemistry readings from the GF-104 excavations. Values from top to bottom are acidity, phosphorus, nitrate nitrogen, and potassium.

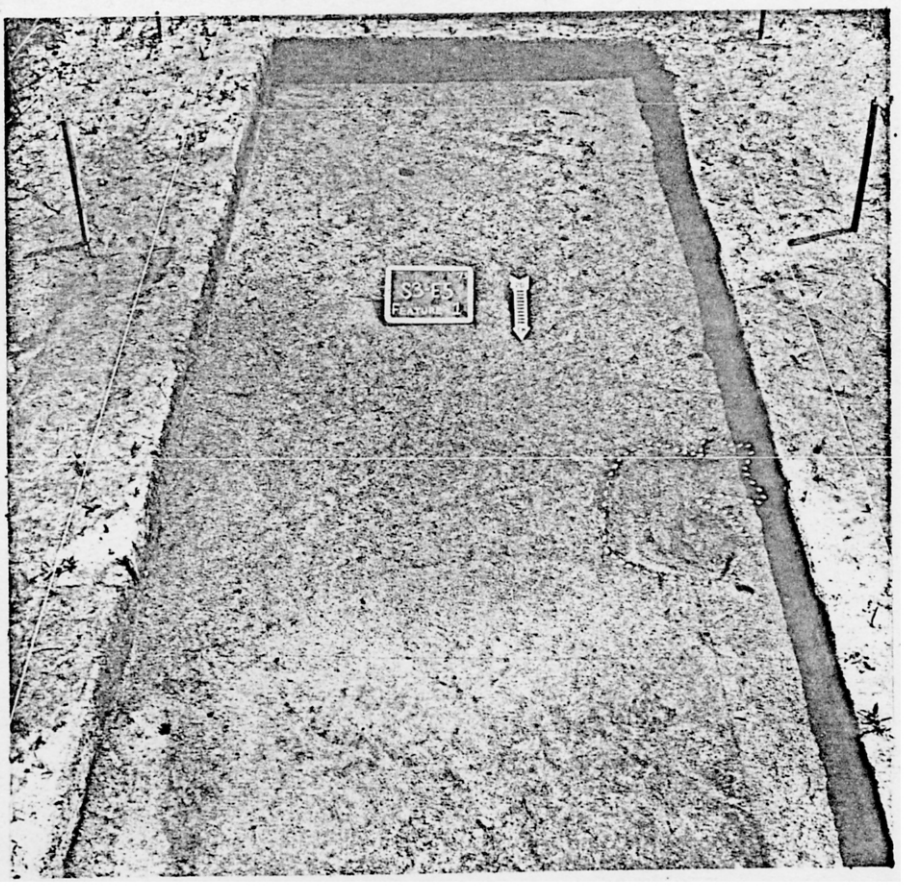


Fig. 21. Feature #1, in square S3-E5 at GF-104.

cultivation and leaching. The pH influences the preservation of phosphates in the soil, especially calcium phosphate—the primary material in bone. Also, phosphorus (Figs. 17, 20), which is often a good indicator of human occupation because it results from the concentration of animal matter, is leached out and drained away when soil acidity is stronger than a pH of 5.6. The soils at GF-104 average below the crucial 5.6 pH value and therefore conditions for the preservation of aboriginal bone are quite poor and phosphorous would not be reliable for locating remnants of burials. It may be significant that lower acidity seems to generally correspond with the area of site concentration, although there are some highly acidic readings from that area, such as IC-10 (Fig. 1). It is notable that the least acid sample from the site came from Feature #1 in square S3-E5 (Fig. 20). This small shallow kidney-shaped feature (Fig. 20) contained only two minute stone flakes. Perhaps it was once a trash pit which contained mussel shells. The low phosphorus reading of a sample taken from the feature makes it unlikely that the pit represents a burial.

In contrast to phosphates, nitrogenous materials break down less easily in acidic conditions. Nitrogen tests which show local concentrations of nitrogenous matter which is not merely due to humus, can sometimes afford evidence of the former presence of a burial. However, nitrogen is often introduced through modern agricultural practices. The areas of high nitrate nitrogen concentration at GF-104 are fields #2, #3, and #5, and IC squares 1, 2, 4, 5, and 7 (Figs. 18, 20). But this could well be due to modern fertilization of the fields. The same is probably true of the differences in the potassium readings (Figs. 19, 20).

Geology and Stone Tool Analysis

Several techniques were attempted in the analysis of the stone artifacts

from the GF-104 site, including classification of artifacts by type of rock, geologic sampling of the site environs, examination of artifacts for wear characteristics, and measurement of projectile points (Fig. 22). Virtually all of the artifacts could be categorized into a limited number of rock types easily distinguishable without the aid of petrologic processing. The categories of slate, flint, basalt, steatite, quartz, quartz crystal, granite, and hornblende were used for sorting the artifacts. Analysis was aided by Professor Carl Dinga, geologist at UNC-Greensboro.

Slates of the Carolina Slate Belt occur about one mile north of Stinking Quarter Creek, and parallel the creek. Many of the slates in this deposit are highly silicified, grayish-white to blue-gray in color, with fine grain and great density. They are derived from volcanic ash, and closely resemble chert. The physical properties of the slates, including conchoidal fracture, make them an excellent raw material for the manufacture of chipped stone artifacts. Many of the GF-104 artifacts were made from this slate. Other artifacts were made from quartz, which occurs in the area as an accessory mineral to the slate and granite deposits. There are also some artifacts of true flint which probably occurs in the form of stream cobbles. Several quartz crystals were found at the site and were recorded in the "other stonework" category.

Some stone bowl fragments of steatite were found at GF-104. Steatite occurs locally in small quantities, although it is not known if the local supply is of the quality or quantity necessary for stone bowl manufacture. Sizeable deposits of steatite occur in talc beds near Deep River, and these deposits may have been the source for the GF-104 steatite vessels.

Many thin stone flakes were recovered in the surface sampling and excavation at the GF-104 site. In fact, the flakes constitute approximately 50% of the total artifacts recovered. These flakes can be divided into two main groups;

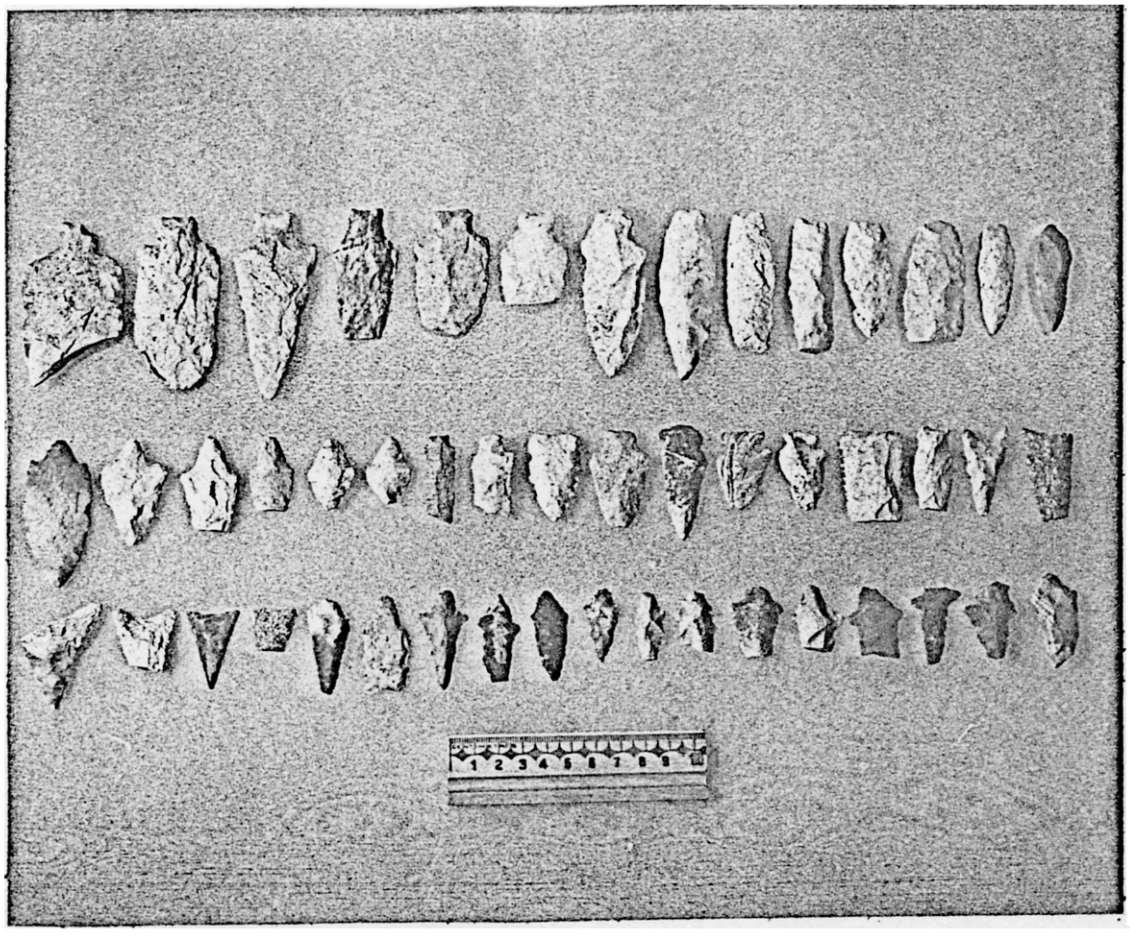


Fig. 22. Selected projectile points from GF-104

large flakes, usually of highly patinated flint or Carolina Slate, and small black flint chips, many of which are percussion flakes. The small flint flakes are particularly interesting in that so many of them exist at the site, while projectile points or other chipped tools of the same material are rare. Almost all examples of projectile points produced from the dark flint are Randolph Stemmed. In the category of used thin flakes, it should be noted that most of these flakes display acute edge angles, and were possibly used as cutting blades in butchering or related activities. Very few utilized thick flakes are present. They have less acute edge angles, which may be associated with the processing of vegetable material or represent woodworking (Wilmsen 1970; Binford 1968).

Pottery Analysis

Study of the pottery sherds from GF-104 (Fig. 23) included their classification, thin section analysis, refiring sherds, and firing briquettes made from clay obtained in the area of the GF-104 site. The classification of the sherds is presented in Tables 2, 4, 6, 8, and 10. Not much progress was made with the thin section analysis because we lacked a petrographic microscope. However, some observations may be of value. There were many large igneous inclusions in the paste of the Yadkin and Vincent sherds, especially amphibole. This might be tempering material which was obtained by crushing old decayed granitic rock which is found in small quantities around the site area.

Results from the refiring of the sherds were somewhat disappointing, but this apparently resulted as much from the sort of kiln used as anything else. It was a top-loading kiln without a window or a peep hole to observe the sherds during refiring. It was necessary to open the lid periodically to inspect the sherds, thus creating severe difficulties with temperature control. There were nine sample sherds used for refiring. They were fired to a temperature of 900°

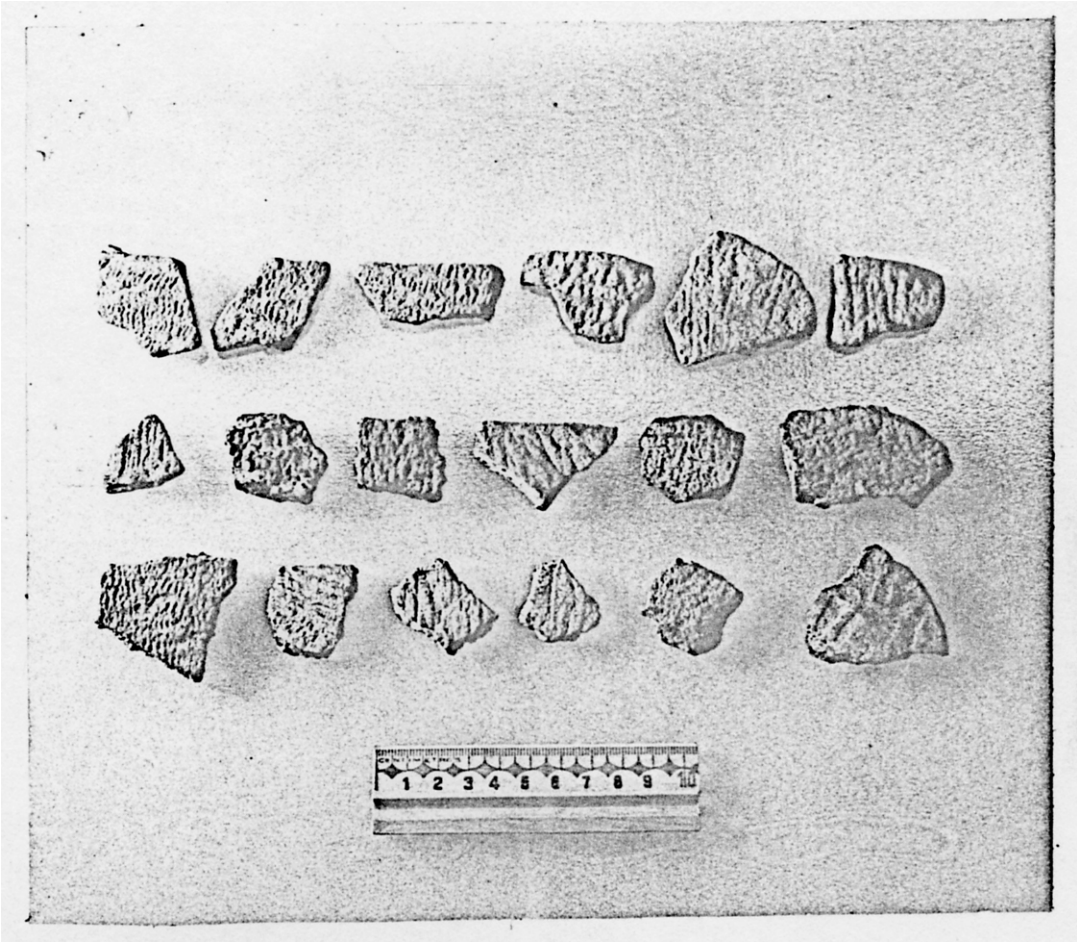


Fig. 23. Selected pottery sherds from GF-104.

centigrade, and some color change was noted in six of them. These were all light tan to medium gray before refiring, and turned pale orange. These six included one Badin Fabric Marked, one Vincent Fabric Marked, two Yadkin Fabric Marked, and two undecorated sherds, one of which was gray and the other brown. Two of the three sherds which did not change color were undecorated but were well made and had smooth surfaces, so were possibly farily late in the cultural sequence. The third was reddish in color and impressed with a relatively fine fabric. It also may have been quite late temporally.

Firing of the clay briquettes produced some notable color changes (Table 11). It is interesting to note that the clay from field #3 and from the creek both fired to an orangey tan color, whereas the two clay samples from field #2 fired brown. It is also worthy of note that tempering the samples with sand did not visibly alter the firing results. Both the creek clay and the yellow clay from field #3 are similar to that used in the early sherds which turned pale orange by 900° centigrade.

Faunal Analysis

From the surface sampling at GF-104, a total of seven bones were recovered. They were soaked with a preservative solution and then taken to Professor H. T. Hendrickson of the UNC-Greensboro Biology Department for identification. He noted that two of them were from some large mammal, probably a cow or a horse.

We also questioned local informants about fauna of the area, and compiled a list of these animals, as well as a list of those animals mentioned by Lawson in his History of North Carolina (1860), and by other authors writing about North Carolina fauna (Barber, Hamnett, and Raver 1959; Hamnett and Thornton 1953; Hamilton 1943). Certainly there would have been a wide variety of game available for the Indian inhabitants of GF-104, including opossums, rabbits, racoons, deer,

TABLE 11
COLOR OF FIRED BRIQUETTES AT
100° INTERVALS

Source	0°C	300°C	400°C	500°C	600°C	700°C
N1-E1	Red	medium orange-brown	medium orange-brown	dark brown	brown	brown
N1-E1 - Sand	Red	medium orange-brown	medium orange-brown	dark brown	brown	brown
S4-E5	Red	light-medium orangey brown	medium orangey brown	reddy brown	brown	brown
S4-E5 + Sand	Red	light-medium orangey brown	medium orangey brown	reddy brown	brown	brown
Field #3	Yellow	orangey grey	light orangey grey	orangey tan	orangey tan	orangey tan
Field #3 + Sand	Yellow	orangey grey	orangey grey	orangey tan	orangey tan	orangey tan
Creek	Grey	dark grey	dark brown-grey	grey-brown	orangey tan	orangey tan
Creek - Sand	Grey	dark grey	dark brown-grey	grey-brown	orangey tan	orangey tan

quail, turkeys, ducks, turtles, frogs, and crayfish. One mussel shell was found in Stinking Quarter Creek near the site, and was identified by Dr. Hendrickson as sp. Unio which is common in North Carolina streams. There may have been more mussels here in the past, but the stream is now rather polluted. However, the channel is quite narrow and the water shallow—not an ideal place to find mussel shell beds or significant populations of sizeable fish.

CONCLUSIONS

We remain unsure of the reason why through some 8,000 years Indians of the Archaic, then Woodland, and finally Historic period, selected the area of GF-104 to inhabit. Not only does this creek, as creeks go, seem rather unattractive from the point of view of any specially available resources, but based on our local site survey, this spot seems the only place along North Prong Stinking Quarter Creek for quite some distance showing a sizeable utilization through time.

We were surprised to find only one small feature in the subsoil of the site which might have resulted from Indian activities on the site. There were no post molds, no trash pits (other than perhaps feature #1), no burials, etc. Perhaps this is due to the area of the site sampled through excavation, conditions of the subsoil, or cultural practices of the aboriginal inhabitants. However, it might lend some support to the idea that the site was used as a temporary camping ground, perhaps by wandering groups not even engaged in a stable seasonal round. This area would have provided them with spring-fed creek water, vegetable and animal foodstuffs, and close access to part of the Carolina Slate Belt. Also of potential importance is the location of the site right along the historically known Trading Path extending northeast to southwest across the North Carolina piedmont from the Roanoke River to the Catawba country southwest of present-day Charlotte, North Carolina. This might help explain the latest occupations on the site, but not the earlier ones, unless the Trading Path has considerable antiquity (see Rights 1971: Plate 29 and pp. 101-102). Whatever the reason, the site, like many others in the piedmont of North Carolina, shows an interesting cultural continuity of traditional utilization from Archaic times through Woodland and into

Historic times.

We began our investigations at GF-104 with the hope of recovering certain sorts of information about the Indian inhabitants of the area, but finding all of the cultural debris jumbled up in the cultivated soil zone forced us to change somewhat our orientation. This has led us to the question of how one deals systematically with such disturbed sites--sites which are usually passed over by archaeologists in the search for undisturbed deposits. This problem would seem particularly important in an areas such as the North Carolina piedmont where so many sites appear to be of this sort. Realizing that all archaeological deposits represent imperfect preservation of data regarding the totality of a past cultural system anyway, this seems best viewed as just an extreme case in the continuum.

So now we are becoming interested in how to best recover the information from such sites through systematic surface sampling and test excavation, as well as looking into how our samples compare to the sampling represented in other collections, such as the collections of the farmers who cultivate the land. Much remains to be done along these lines, and it is in such a direction that work regarding the GF-104 site continues.

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