APPENDIX I

PROJECT PERSONNEL VITAS

Name: **William M. Gardner**
Born: April 8, 1935 U.S. Army Hospital, Panama Canal Zone
Present Address: Route 1, Box 1375, Front Royal, VA 22630

Present Positions:

Professor
Anthropology Department
Catholic University
Washington, D.C.

President
Thunderbird Research Corporation, and Thunderbird Archeological Associates, Inc.
Route 1, Box 1375
Front Royal, VA

Advisor
Thunderbird Regional Preservation Office
Route 1, Box 1375
Front Royal, VA

Director Emeritus
Thunderbird Museum and Archeological Park
Route 1, Box 1375
Front Royal, VA

Educational Background:

BA, Psychology, University of Florida, Gainesville, 1960
PhD, Anthropology, University of Illinois, Urbana, 1969

Areas of expertise:

Environmental archeology
Multi-disciplinary archeological research
Cultural ecology
Cultural resources management
Museum and interpretive design

Geographic expertise:

Middle Atlantic
Southeast
Middle West

Field work projects in:

Virginia, Maryland, Delaware, North Carolina, South Carolina, Georgia, Florida, West Virginia, Illinois, Pennsylvania, New Jersey, Washington, D.C.

Other areas:

South America, U.S.S.R.

Past Positions:

Chairman 1974-1978
Department of Anthropology
Catholic University of America
Washington, D.C.

President 1976-1978
Middle Atlantic Archeological Conference

Research Grants Directed:

Excavations at the Jasper Newman Site, Illinois.
National Science Foundation Doctoral Dissertation Improvement Grant.

Potomac River Archeological Site Survey.
National Science Foundation, two consecutive grants (co-principal investigator with R. L. Humphrey and C. W. McNett).

Excavations at the Thunderbird Paleoindian Site.
National Geographic Society.

The Flint Run Complex: A Study in Paleoindian to Early Archaic Period Adaptation, two consecutive grants.
National Science Foundation.

European Travel Grant.
American Council of Learned Societies.

General:

Created, organized and directed (for three years with R. L. Humphrey and C. W. McNett) The Consortium of Washington, D.C. Universities Potomac River Archeological Survey.

Created and Direct the Northern Shenandoah Valley Archeological and Environmental Research Program.

Created and Direct the Middle Atlantic Archeological and Environmental Research Program: A Broad Transect Study in the Appalachian Plateau, Ridge and Valley, Great Valley, Blue Ridge, Piedmont, and Coastal Plain Physiographic Provinces.

Created, organized and developed the Middle Atlantic Archeological Conference.

Created, co-designed and co-developed with Catholic University graduate students, the Thunderbird Museumand Archeological Park.

Developed and organized the Thunderbird Regional Preservation Office.

Designed and developed the undergraduate anthropology and the archeological training programs at the Catholic University of America.

Contract: (Principal Investigator)

Continuing:

Thunderbird Regional Preservation Office. Matching grant with the Virginia Historic Landmarks Commission and the Virginia Research Center for Archeology.

Flint Run Archeological District Excavation Grant. Matching grant with the Virginia Historic Landmarks Commission.

Hagerstown Valley, Washington County, Maryland, Archeological Site Survey Program. Matching grant with the Maryland Historic Trust.

Open-ended Intensive Archeological Investigations contract with the Maryland Department of Transportation.

Completed:

Shelbyville Reservoir, Illinois, Salvage Archeology. National Park Service.

Salvage Excavations at the Dotray Site, Illinois. Illinois Archeological Survey Highway Salvage Program.

Excavations at Fort Lincoln, Washington, D.C. National Park Survey.

Archeological Excavations at the Stout Site, Great Falls National Park, Virginia. National Park Service.

Archeological Investigations of Matildaville, Great Falls National Park. National Park Service.

Archeological Investigations at the Frederick Douglass Home, Washington, D.C. National Park Service.

Archeological Survey of Piscataway National Park. National Park Service.

Archeological Excavations at Harpers Ferry National Park. National Park Service.

Archeological Survey of a Portion of the Northwest Branch, Prince Georges County, MD. Washington Suburban Sanitary Commission.

Archeological Survey of a Portion of the Skyland and Big Meadows Area, Shenandoah National Park, Virginia. National Park Service.

William P. Barse
Thunderbird Archeological Associates, Inc.
Route 1, Box 1375
Front Royal, VA 23630

Born: 1952

Education:

Montgomery College, Rockville, Maryland, 1969-1971, No Degree
University of Maryland, College Park, Maryland, 1971-1974, B.A. in Anthropology
Catholic University of America, Washington, D.C., 1976-1981, M.A. in Anthropology

Field Experience:

My field experience began in 1968, working with the Archeological Society of Maryland on excavations carried out under the supervision of the State Archeologist. Geographically, my field experience encompasses the Middle-Atlantic Region, the mid-west, and the southeast. My current research interest in the Early to Middle Woodland transition in the Middle Atlantic, and the development of localized exchange networks during the Middle Woodland in the Middle Atlantic and the southeast. Listed below are the major field seasons I have taken part in since 1972:

1972 Ecavation at the West Shore Site, Anne Arundel Co., Md.
1974 Excavation at the Rosehaven Site, Anne Arundel Co., Md.
1975 Excavation at the Heidenreich Site, Noblesville, Indiana
1976 Excavation at the Van Naita Site, Bahle Ground, Indiana
1977 Excavation at the Corral Site, Front Royal, Virginia
1979 Archeological Survey of the Proposed Corridor H Route and Charles Town Bypass, West Virginia
1979 Archeological Test Excavations in the Richard B. Russell Reservoir, South Carolina and Georgia
1980 Survey of Private Collection in the Richard B. Russell Reservoir Region
1981 Excavations at the Cabin Run Site, Front Royal, Virginia

I was the field supervisor on all but the 1974 and 1981 sites listed above. In addition, I have worked on many smaller contracts in the Middle Atlantic region.

Papers/Publications/Reports:

1973 "Riggins Pottery from Southern Maryland". Maryland Archeology, Vol. 9, nos. 1-2, by Melburn D. Thurman and William P. Barse.

1974 "Outline - Mockley and Mockley-Like Pottery in the Mid-Atlantic." Paper presented at the 5th Middle Atlantic Conference, Baltimore, Md., by Melburn D. Thurman and William P. Barse.

1977a "Further note on Riggins Ware from Maryland". Paper presented at the 8th Middle Atlantic Conference, Trenton, New Jersey, by William P. Barse.

1977b "The Purlett Site: An Exploration." Maryland Archeology, Vol. 13, no. 1, by William P. Barse, Wayne E. Clark, and Gerald Braley.

1978 "Preliminary Notes on the West Shore Sie, 18AN219". Newsletter-of the Archeological Society of Maryland, Vol. IV, #1, January. By William P. Barse.

1979 "A Preliminary Archeological Assessment of the Proposed Corridor H Routes, West Virginia, from Elkins, to the Virginia State Line." Report submitted to the West Virginia Department of Highways by Kevin Cunningham and William P. Barse.

1979 "A Preliminary Archeological Reconnaissance of the Charles Town Bypass." Report submitted to the West Virginia Department of Highways by William P. Barse and Kevin Cunningham.

1980 "Results of the Testing of Nineteen Archeological Sites in the Richard B. Russell Reservoir Region, South Carolina and Georgia." Report submitted to IAS in Atlanta by William M. Gardner and William P. Barse.

1980 "The Distribution of Paleo and Early Archaic Projectile Points in the Richard B. Russell Reservoir Region". Report on file, Thunderbird Research Corporation, prepared for submission to Inter-Agency Archeological Services, Atlanta, by William P. Barse.

1981 Archeology of the Savannah River in the Georgia-South Carolina Piedmont: Test Excavations in the Richard B. Russell Reservoir Project Area. M.A. Thesis, Department of Anthropology, Catholic University of America, Washington, D.C., by William P. Barse.

Professional Affiliations/Memberships

Staff Archeologist, Thunderbird Research Corporation
Research Associates, Old Missouri Research Institute
Society for American Archeology
American Anthropological Association
Archeological Society of Maryland

APPENDIX II

RESEARCH PROPOSAL

PHASE I & II

AND

PHASE III

ARCHEOLOGY, CULTURAL RESOURCE MANAGEMENT

THUNDERBIRD ARCHEOLOGICAL ASSOCIATES, INCORPORATED

ROUTE ONE, BOX 1375
FRONT ROYAL, VIRGINIA 22630

(703) 635-3860

Proposal for Phase I and II Archeological Investigations for Improvements to Route 141, New Castle County, Delaware

This proposal was prepared by Thunderbird Archeological Associates for the conduct of archeological investigations for the planning study for proposed improvements to Route 141 in New Castle County, Delaware. It was prepared in response to a request for the Location and Environmental Studies Office of the Delaware Department of Transportation. The Delaware Bureau of Archaeology and Historic Preservation has identified two historic sites, the Hollingswood property and the Cleremont estate, and several sensitive areas for prehistoric archeological resources that may be affected by the proposed construction. Upon acceptance of this proposal, Thunderbird Archeological Associates will complete five tasks, outlined in the letter request: 1) conduct archival work, field investigations, artifact analysis and processing; 2) determine the integrity, significance of any resources identified, and make recommendations concerning their eligibility for nomination to the National Register of Historic Places; 3) evaluate such resources within the context of Delaware's prehistory and history; 4) prepare a standard archeological report documenting the investigations and their results; and 5) if necessary, recommend a plan of mitigation of impact, including National Register forms, budget and research design.

This proposal is presented in two parts. First, a brief description of the prehistoric and historical context for the proposed research is given, including research questions that will be addressed by the investigations. Second, a technical proposal is given describing the research methods and outlining the schedule and budget for the proposed work.

Research Context

A general discussion of the prehistoric research context for Delaware has been provided by Jay F. Custer, University of Delaware, for the Bureau of Archaeology and Historic Preservation. Custer analyzes site distributions in the various physiographic regions of the state for the various cultural-historical periods of prehistoric occupation. His evaluations of the probabilities for particular types of sites in the Piedmont Uplands Study Unit can form the basis for predictive statements about resources that may be located in the Route 141 study corridor. He states that, for the Paleoindian/Early Archaic period, site probabilities are low for quarry sites, quarry

reduction sites and quarry related base camps. The probabilities for non-quarry related base camps and base camp maintenance stations are medium, and those for hunting sites are high. Elsewhere (Custer and Wallace 1982:151), he observes that the latter three categories of sites are likely to be located near sinkholes or floodplain swamps within the region, and since the project area does not contain such features, the likelihood of locating the remains of Paleoindian occupations appears to be fairly low.

For the Middle Archaic period, Custer lists three types of sites. In the Piedmont Uplands, there is a low probability for macro-band base camps, a medium probability for micro-band base camps and a high probability for procurements sites. Only one of the two topographic settings for the latter type of sites occurs in the study corridor; upland slopes above ephemeral streams and springheads. These settings were indicated as high probability areas by the Delaware Bureau of Archaeology and Historic Preservation. In the Woodland I period (including Late Archaic through Middle Woodland manifestations), the number of site types expands, but the predicted distribution for the study corridor portion of the Piedmont Uplands remains identical to those of the preceding period. The same may be said for the Woodland II (Late Woodland) occupations. In summary, Paleoindian sites are not predicted in the study corridor and only short-term procurement sites would be expected from the remaining span of prehistoric time. These sites would be relatively small and contain a limited range of functional artifact types.

The survey activities proposed here can serve to confirm (or disconfirm) settlement models proposed by previous reserach on site distributions in the Piedmont Uplands from various prehistoric periods, and possibly add data for the refinement of these models. Custer's research suggests that the quality of data for the Piedmont Uplands ranges from fair to good, and that the use of this landform was largely restricted to short-term procurement activites. Sites there represent only a portion of the subsistence round, with more intensive utilization of other environmental settings. The increase in the number of data points which may be generated by this study may ultimately allow a more refined analysis of such phenomena as "distance decay" relationships between these short-term occupations and the more intensively used site-settings for each time period. This, in turn, may allow a more refined characterization, in processual terms, of the differences between the procurement patterns practiced at various times in the prehistoric past.

The research proposed here will add only incrementally to the data base necessary to achieve these research goals, and the research and analysis for this project will concentrate on the evaluation of resources discovered by the survey within the existing research context. No major elaboration of that context would be expected at this phase of assessment.

An examination of the proposed construction plan, and maps and documents supplied by the Delaware Bureau of Archaeology and Historic Preservation suggests that there are three possible historic period sites that may be affected by the construction. The first two of these were identified from maps dating to the last quarter of the nineteenth century. One, the Armstrong Site, is identified on the Baist (1893) map as containing three brick or stone structures, and the other, the Hollingswood site, is indicated as a frame structure on the same map. Nothing else is known of these sites at the present, but background and archival research, proposed for this study, should develop additional information on these sites. The third historic period site that may be affected by the proposed construction is the Cleremont (N-478) site. Formerly, a residence with outbuildings was located at this site, but these have recently been destroyed. Significant archeological remains associated with the 1846 (and possibly earlier) structure may still be present at the site, however.

These three sites represent rural occupations whose remains may be compared to those obtained from the Hawthorn Homestead site, currently under investigation by the Delaware Department of Transportation. Of particular research interest will be the comparison of economic status among these sites and between them and the sites investigated at the Stanton Intersection, a companion project to this one (proposal submitted separately). The differential effects of processes of urbanization and industrialization on rural contexts can be examined at these and nearby sites.

As in the case of the prehistoric resources the data developed at the site identification and testing stage cannot be expected to result in a major elaboration of the existing research models, and the work proposed here will concentrate on the evaluation of any resources identified.

Technical Proposal and Budget Justification

To evaluate the archeological resources that may be affected by the proposed highway improvements, and to address the research problems described above four general activities are proposed. These are shown in the attached budget, and the justifications for them are given below.

I. Background and Archival Research - The Delaware Bureau of Archaeology and Historic Preservation maintains excellent records on the prehistoric resources of the state, and these will be consulted to provide a more detailed understanding of the resources that may be affected by the project. In addition, experts knowledgeable in the prehistory of the region and the state will be consulted to provide data and interpretations not otherwise available in the records. For the historic period resources, maps, primary and secondary resources will be researched at the Bureau of Archaeology and Historic Preservation, the Delaware Archives, the University of Delaware

Library, the Historical Society of Delaware, the National Archives, and the New Castle County Courthouse. The objectives of this research will be identify the occupants of the sites and develop data on their economic conditions.

The background research is necessary to identify and evaluate the prehistoric and historic resources in the study corridor within the larger state and regional contexts. In this way, the study will contribute to broader research and resource management goals. The work will be completed by the field supervisor, and will take fifteen days.

II. Field Investigations - To identify and evaluate the physical integrity and significance of any archeological remains that may be present in the impact zone, a program of field investigations will be completed. Some of the high probability zones for prehistoric resources are presently cultivated and these will be subject to pedestrian survey by the survey team walking at intervals of no more than fifteen feet. This spacing should be sufficient to identify sites whose predicted diameter is approximately fifty feet. In locations where there is no surface exposure five-foot by five-foot test pits will be excavated. Intact soil horizons bearing cultural material will be screened through 1/4 inch mesh screens to collect representative samples of artifacts. Natural and cultural stratigraphy will be recorded in profile drawings for each unit, and episodes of fill or disturbance will be noted. The spacing of the test units will be adjusted to local conditions. For the suspected locations or prehistoric sites, test units will be distributed to sample topographic variation within the sensitive area, with emphasis on downslope locations where intact remains may have been protected by slopewash. At historic sites, test pits will be distributed on the basis of surface indications and any pertinent data developed during the background study.

The field investigations are necessary to identify and evaluate the integrity of any resources that may be present to determine if additional research is necessary to mitigate the impact of the proposed construction. The fieldwork will be completed by four experienced crew persons under the direction of the field supervisor. The time allocated for fieldwork is fifteen days.

III. Lab Processing and Analysis - following the completion of the fieldwork, all artifacts and other cultural material (i.e. faunal remains) will be returned to the lab for processing and analysis. All artifacts will be cleaned and marked, and any conservation problems addressed. The prehistoric artifacts will be analyzed with reference to previously established types and implied function, in orer to evaluate the temporal provenience and function of each site. The analysis of the historic period artifacts will be accomplished using a system of attribute analysis developed in our lab. This allows for the delineation of a number of different economic and functional patterns, and the system is compatible with automatic data processing

techniques. The analysis procedure is necessary to fully evaluate the content and significance of archeological remains identified during the fieldwork. The analysis and processing will be completed by the field supervisor and two crew persons and will take ten days.

IV. Report Preparation - all of the activities described above will be reported in a standard archeological report. The report will also contain recommendations on the significance of any resources identified with respect to the criteria for eligibility for nomination to the National Register of Historic Places. If additional work in the form of data recovery is justified, a research design and budget for that work will be included in the report. The report is necessary for the planning of the construction and any additional cultural resources mitigation that may be necessary. The report will be completed by the field supervisor and the editor, under the supervision of the principal investigator. It will require twenty days to prepare. A draft copy, including illustrations, will be submitted to the Delaware Department of Transportation who, after review and approval, will be responsible for the mechanical aspects of report production, according to the Scope of Work.

Per diem costs for the background and archival work and the field investigations have been budgeted since these portions of the work will necessitate residence away from our principal place of business in Front Royal, Virginia. Per Diam is allocated for the following travel schedule: Travel will begin in Front Royal, Virginia, on Sunday afternoon (travel time to the project area is approximately four hours and forty-five minutes) and accommodations will be needed for Sunday night. At five o'clock on Friday afternoon, during each working week, return travel to Front Royal will commence. Thus, five full days of Per Diem will be required to cover travel expenses for each week of work in the project area (including background research). Overhead, including all indirect cost and benefits has been budgeted at our standard rate of forty five percent against wages and salaries. Mileage has been charged at twenty cents a mile for 3,500 miles, based on previous experience with work in Delaware. It includes travel to and from Front Royal and daily travel for one vehicle for the background and archival work and two vehicles for the field investigations. Photocopying costs have been budgeted for the copying of maps and documents from the various sources mentioned in the description of the background and archival study. Thunderbird Archeological Associates is a profit making corporation, and a standard profit charge of eight percent has been calculated against the total wages and overhead.

All the work described in this proposal will be closely coordinated with the Delaware Department of Transportation, and consultation with the Delaware Bureau of Archaeology and Historic Preservation, representing the Delaware State Historic Preservation Officer, will be maintained.

THUNDERBIRD ARCHEOLOGICAL
ASSOCIATES, INCORPORATED

ARCHEOLOGY, CULTURAL RESOURCE MANAGEMENT

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(703) 635-3860

Proposal for Conducting Data Recovery Investigations at the Field Four Site in New Castle County, Delaware

June 1984

Introduction

This transmittal presents a proposal for conducting data recovery investigations at the Field Four site in New Castle County, Delaware. Significant archeological remains will be affected by proposed construction connected with improvements to Delaware Route 141. This proposal was prepared in response to a request for proposal from the Delaware Department of Transportation.

Background and Research Questions

In response to changing economic conditions in the beginning of the nineteenth century, land tenure became consolidated into the hands of fewer individuals in northern Delaware. Landowners often had business interests connected with industrialization or commerce in urban centers and frequently lived in the city. To maintain agricultural production, a system of tenancy was employed. Tenants were probably drawn from groups of lower economic status in both urban and rural populations, but very little historical research has been devoted to these individuals and little is known of their economic or cultural background. Likewise, little remains of their material culture, including their housing, have survived. It appears that the Field Four site represents a tenant occupation for reasons presented in the report.

The testing program at this site revealed the remains of a structure and other sub-plowzone features, as well as a large quantity of artifact remains within the plowzone. The data recovery program proposed here has been designed to retrieve a sample of data to address several research questions. We would like to learn more about the spatial arrangement and relationships of the dwelling and other service buildings such as storage sheds, animal pens, privies, etc., to show how these compare to the larger complexes of the owners, many of which are still extant. We also expect that discarded material possessions in the plowzone and features will allow a more precise characterization of the social and economic status of the tenant occupants of the site. Patterning in the distribution of economically significant attributes in the artifacts can be compared with data collected in future research to see if there are broad patterns reflecting the economic conditions of tenants as a group.

Both the spatial and artifact patterns identified at this site can serve as a baseline for comparison with data developed in future research into this little known class of archeological occupations. Future research questions might include the examination of the effects of proximity to a major market center

(Wilmington) in comparison with situations more removed from such centers.

Research Methods

The research methodology has been designed to address these and other research questions. The site area has been divided into four zones, each requiring somewhat different treatment. Zone A is the area surrounding the structure foundation, a portion of which was located during the testing program. The exact size of the structure was not determined during the testing program, but dimensions of 20 feet by 30 feet have been arbitrarily assumed. Complete hand excavation of this zone will be carried out to completely reveal the foundation, and any associated features. In eighteenth century house sites, door and window locations are sometimes revealed by concentrations of artifacts, and if this holds true for this early nineteenth century site, valuable architectural information may be revealed about a little known dwelling form.

Zone B is the area to the rear of the structure in which features and the remains of dependencies are likely to occur. It's lateral margins (on the west and east) have been determined by the points at which artifact counts from the test pits in the testing program fell to near zero. To the rear (north), an arbitrary boundary which is seventy feet from the house has been drawn. At this point, the ground begins to drop off toward the spring drainage. Although some trash features, and possibly waste disposal features, might occur in this zone, the general expectation is that the scope of the archeological remains will be smaller.

A series of five foot by five foot excavation units, to amount to 10% of the total area of Zone B (2055 sq. ft.) is planned. The purpose of these units is two-fold: first, the plowzone in these units will be screened through ¼" mesh to obtain distributional data on the artifacts at the site. Soil samples will be collected in each unit to detect any differences in soil chemistry that might reveal different functional uses of this area. The second purpose of the five foot by five foot excavation units is to locate any features that survive below the plowzone.

The search for feature remains will be augmented by the use of a backhoe to strip the plowzone in a series of diagonal lines (to avoid the systematic exclusion of linear features such as fence rows) across Zone B. The machine stripping will expose 35% of the area of the zone (7193 sq. ft.).

Zone C lies between Zone B and the spring drainage, behind (north of) the structure location. The general approach here

will be similar to that taken in Zone B, except that the proportion of area opened in 5' by 5's will be 5% (688 sq. ft.), and that exposed by machine will amount to 25%, commensurate with the lower expectation for archeological remains.

Zone D lies in front of the structure according to the hypothesized foundation size). The expectation for archeological remains, both within the plowzone and below it, is smallest in this area, and a 5% sample of the area (270 sq. ft.) will be exposed in 5' by 5's, and the plowzone screened, primarily to supplement and complete the artifact distribution data gained from the other zones. The front (southern) boundary of this zone is defined by the construction margins of (existing) Lancaster Pike. Although some additional remains may lie beneath this roadway, they are likely to be sparse and not significant enough to justify removing a portion of the roadway. During the completion of the hand and machine excavations, sub-plowzone features will mapped and excavated.

After the completion of the fieldwork, all artifacts will be returned to the laboratory, washed, marked and subjected to any needed conservation measures. To address research questions about economic status and intra-site functional patterning, the artifacts from all proveniences will be subject to a comprehensive analysis procedure which records formal, decorative and functional attributes for all materials (to the degree possible). The analysis procedure will consist of numerically coding the attribute variates for each variable, and entering these codings into the computer for further statistical manipulation.

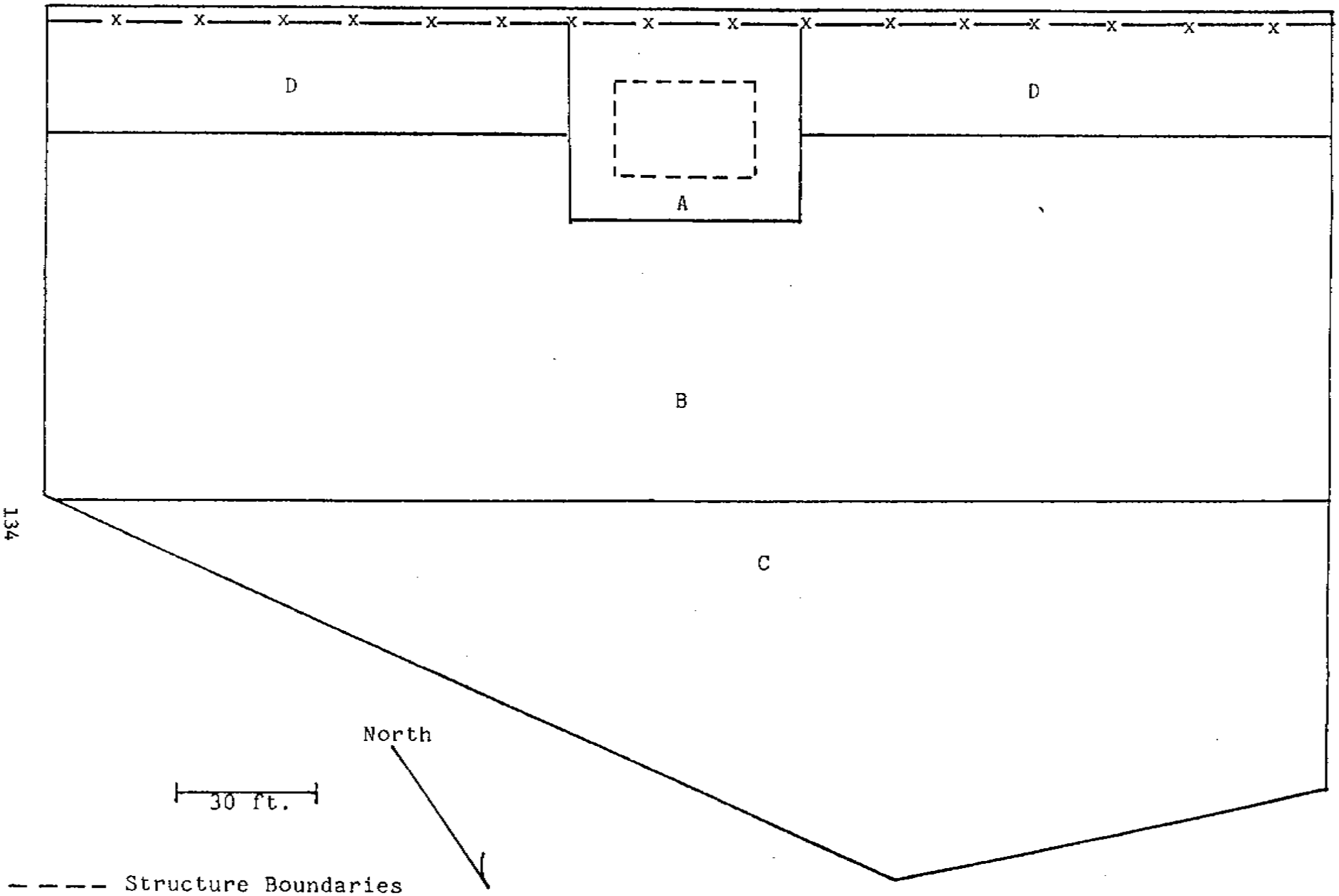
Soil samples will be analyzed for chemical composition, and floral and faunal samples analyzed for information on diet. Matrix samples from features will be water-screened for micro-floral and micro-faunal data.

In order to calculate the budget for the proposed work, the surface area sampling fractions for the various coverage areas were divided by the number of person hours necessary to excavate a fraction of those areas. The rate used was 400 person hours per thousand square feet. This is the equivalent of 10 person hours to excavate a five-foot by five-foot excavation unit, or, five hours for a two person team, and includes excavation, screening, mapping, feature excavation (if necessary) and backfilling. This rate is based on extensive experience working on sites that are primarily plowzone sites, and is somewhat lower than would be used on a site with more complex stratigraphy. The number of person hours for each fraction of each coverage area was then divided by eight, to obtain person days, and again by six, the number of crew proposed, to yield the number of work days for each portion of the area using a six person crew. These calculations are summed in the attached table to yield a total of 43 days (rounded) to complete the hand excavation portions of the fieldwork. Two days were added for rain and other contingencies.

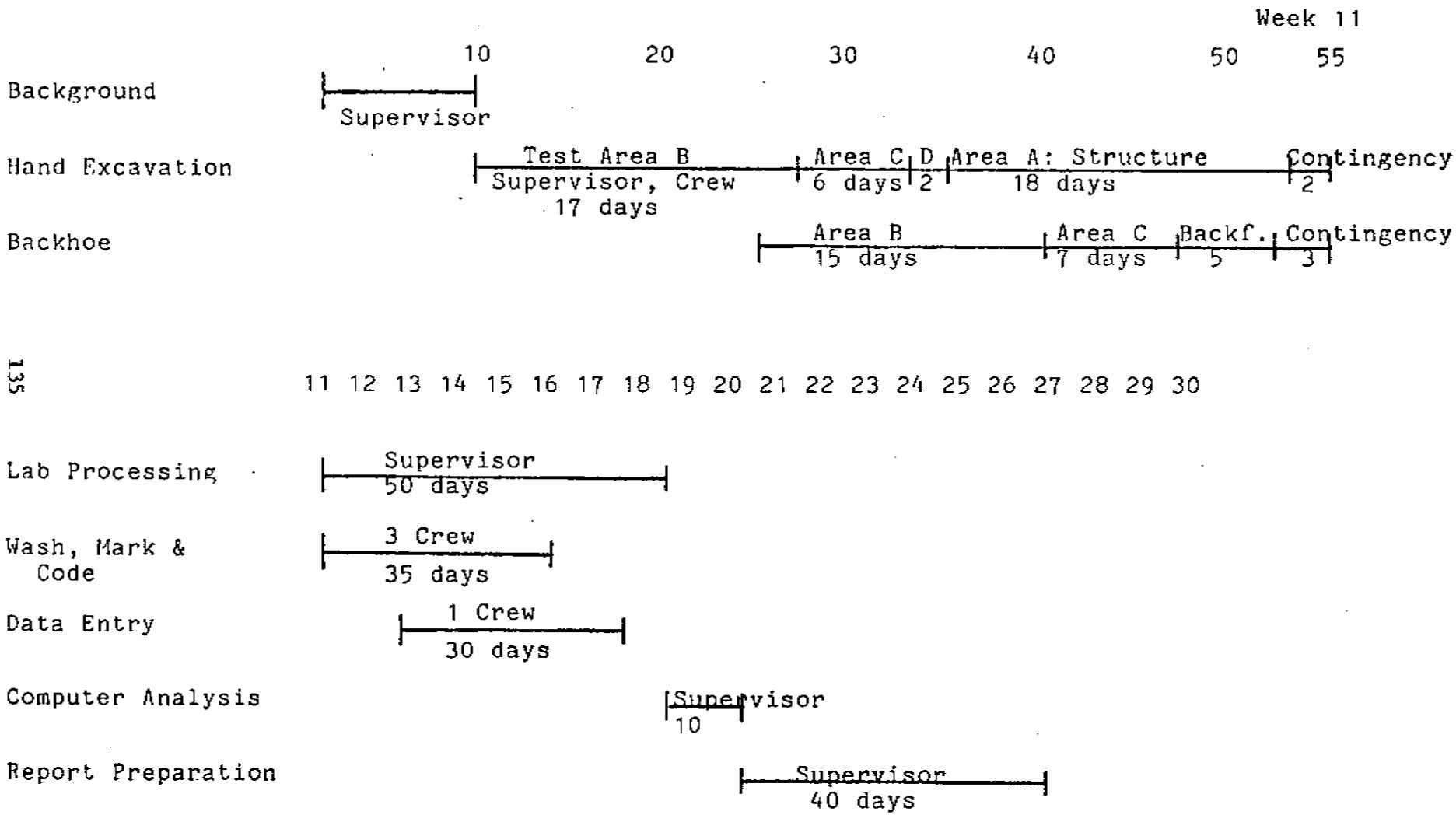
The backhoe portion of the work was calculated, estimating a rate of 500 square feet per day, to clear off the plowzone, under the supervision of the supervisor. This work will be carried out concurrently with the hand excavations. Twenty-two days will be necessary to expose the sampling fraction area, five days is allocated for backfilling, and three days is allowed for contingencies such as rain and mechanical failure. This leads to thirty days for the backhoe work.

The personnel hours for the lab processing, data coding, and analysis hours are based on extensive experience with similar procedures on other projects, as are the report preparation hours.

Costs, shown in the attached budget, are therefore based directly on work activity, and adjustments in the budget can by made by altering the sampling fractions, and therefore the work produced. The sampling fractions are regarded as minimum to effectively realize the research design, however.



Site Boundary and Coverage Areas


Week 11
10
20
30
40
50
55
Background
Supervisor
Hand Excavation
Test Area B
Supervisor, Crew
17 days
Area C
6 days
D
2
Area A: Structure
18 days
Contingency
2
Backhoe
Area B
15 days
Area C
7 days
Backf.
5
Contingency
3
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Lab Processing
Supervisor
50 days
Wash, Mark & Code
3 Crew
35 days
Data Entry
1 Crew
30 days
Computer Analysis
Supervisor
10
Report Preparation
Supervisor
40 days

Work Rate Calculations

Hand Excavations

Coverage Area	Total Area Sq. Ft.	Sampling Fraction 100%	10%	5%	No. 5'x5' Units	Person Hrs.	Person Days	Crew of 6	Work Days
A	2100	2100			84	840	105	17.5	18
B	20,550		2055		82.2	822	102.75	17.125	17
C	13,750			687.25	27.5	275	34.375	5.729	6
D	5400			270	10.8	108	13.5	2.25	2
Total	41,800	2100	2055	957.5	204.5	2045	255.625	42.60	43
			5112.5					+ contingency	2
								Total Days	45

Backhoe Excavation

Coverage Area	Total Area Sq. Ft.	Sampling Fraction 35%	25%	at 500 Sq. Ft. per day	Work Days
B	20,550	7192.5		14.37	15
C	13,750		3437.5	6.88	7
Backfill					5
				+ contingency	3
				Total Backhoe Days	30

APPENDIX III

ARTIFACT PROVENIENCE AND FINAL INVENTORY, FIELD 1, FERRIS SCHOOL PROPERTY

Field 1 - Ferris School Property

Provenience and Accession List

Surface Collection Acc. No. 83/127/1

Sheet 1 of 1

GENERAL ARTIFACT INVENTORY

Site No. _____ Site Name Ferris School Property - Field #1

These are keyed to provenience numbers list

			Accession No. 83/1071														
Ceramics	Redwr	Glzd															(1)
		Ungl															(2)
	White	Deco															(3)
		Undc	1														(4)
	Stone	Deco															(5)
		Undc															(6)
	Prcln	Deco															(7)
		Undc	1														(8)
	Creamware																(9)
	Yelloware																(10)
	Prlwr	Deco															(11)
		Undc															(12)
	Ironstone																(13)
	Total		2														(14)
Glass	Bottle	Green															(15)
		Blue															(16)
		Brown	1														(17)
		Clear															(18)
	Tableware																(19)
	Storage		1														(20)
	Milk Glass																(21)
	Misc.		4														(22)
	Total		6														(23)
	Lamp Chimney																(24)
	Window		1														(25)
Nails	Staple																(26)
	Wrgt																(27)
	Cut																(28)
	Wire																(29)
	Roofing																(30)
Metal Other	Architecture																(31)
	Furniture																(32)
	Household		1														(33)
	Misc.																(34)
	Tool																(35)
	Arms																(36)
	Screws																(37)
	Wire																(38)
	Sheet																(39)
	Unid Metal Fr																(40)
	Nail Frags																(41)
	Total		1														(42)
Button/Bead																	(43)
Other			4														(44)
Plastic																	(45)
Pipes																	(46)
Brick			3														(47)
Oyster/Clam			8														(48)
Aboriginal			2														(49)
Total			27														(50)

APPENDIX IV

ARTIFACT PROVENIENCE AND FINAL INVENTORY - FIELD 2

Field 2
Provenience and Accession List

	Shovel Tests		2'by2' Units	Acc. No.
	#1	Ap	(no artifacts)	83/128/1
	#2	Last Fill Above Subsoil		83/128/2
	#3	Ap		83/128/3
	#4		(no artifacts)	83/128/4
	#5	Ap		83/128/5
#15	#19	Ao		83/128/6
	#19	Ap	(no artifacts)	83/128/7
	#20	A1		83/128/8
	#21	A2		83/128/9
Surface Collection			South Field	
	General Surface			83/128/10
	Pass 1			83/128/10
	Pass 2			83/128/10
	Pass 3			83/128/10
	Pass 4			83/128/10
	Pass 5			83/128/10
Surface Collection			North Field	
	Pass 1			83/128/11
	Pass 2			83/128/11
	Pass 3		(no artifacts)	83/128/11
	Pass 4			83/128/11

Field 2 - Artifact Summary

	Totals		General Artifact Inventory
	9	(1)	redware, glazed
	4	(2)	redware, unglazed
	16	(3)	whiteware, decorated
	19	(4)	whiteware, undecorated
	0	(5)	stoneware, decorated
	1	(6)	stoneware, undecorated
	1	(7)	porcelain, undecorated
	3	(8)	porcelain, undecorated
	0	(9)	creamware
	0	(10)	yelloware
	7	(11)	pearlware, decorated
	6	(12)	pearlware, undecorated
	2	(13)	ironstone
Ceramic Total	68	(14)	
	0	(15)	green bottle glass
	3	(16)	blue bottle glass
	6	(17)	brown bottle glass
	3	(18)	clear bottle glass
	0	(19)	tableware
	16	(20)	storage
	3	(21)	milk glass
	6	(22)	misc. glass
Glass (Subsistence Function) Total	37	(23)	
	4	(24)	lamp chimney
	4	(25)	window glass
	0	(26)	nail, staple
	0	(27)	nail, wrought
	0	(28)	nail, cut
	0	(29)	nail, wire
	0	(30)	nail, roofing
	0	(31)	metal, architecture
	0	(32)	metal, furniture
	1	(33)	metal, household
	0	(34)	metal, misc.
	0	(35)	metal, tool
	0	(36)	metal, arms
	0	(37)	metal, screws
	0	(38)	metal, wire
	0	(39)	metal, sheet
	0	(40)	unidentified metal fragments
	0	(41)	nail fragments
Metal Total	1	(42)	
	2	(43)	button/bead
	10	(44)	other
	1	(45)	plastic
	0	(46)	pipes
	10	(47)	brick
	24	(48)	oyster/clam
	9	(49)	aboriginal
Total Artifacts	170	(50)	

Sheet 1 of 1

GENERAL ARTIFACT INVENTORY

Site No. _____ Site Name Field #2

These are keyed to provenience numbers list

			Accession No.	83/128/2	83/128/3	83/128/5	83/128/6	83/128/8	83/128/9	83/128/10	83/128/11							
Ceramics	Redwr	Glzd		1						8								(1)
		Ungl								3	1							(2)
	White	Deco				1				13	2							(3)
		Undc								10	9							(4)
	Stone	Deco																(5)
		Undc								1								(6)
	Prcln	Deco									1							(7)
		Undc								3								(8)
	Creamware																	(9)
	Yelloware																	(10)
	Prlwr	Deco			1					6								(11)
		Undc								6								(12)
	Ironstone										2							(13)
	Total			1	1	1	—	—	—	50	15							(14)
Glass	Bottle	Green																(15)
		Blue									3							(16)
		Brown									6							(17)
		Clear								1	2							(18)
	Tableware																	(19)
	Storage									1	15							(20)
	Milk Glass										3							(21)
	Misc.					1				2	3							(22)
	Total			—	—	—	1	—	—	4	32							(23)
	Lamp Chimney						4											(24)
	Window			1					1	2								(25)
Metal	Nails	Staple																(26)
		Wrgt																(27)
		Cut																(28)
		Wire																(29)
		Roofing																(30)
	Other	Architecture																(31)
		Furniture																(32)
		Household					1											(33)
		Misc.																(34)
		Tool																(35)
		Arms																(36)
		Screws																(37)
		Wire																(38)
		Sheet																(39)
		Unid Metal Fr																(40)
		Nail Frags																(41)
		Total		—	—	—	1	—	—	—	—							(42)
Button/Bead				1				1										(43)
Other										7	3							(44)
Plastic											1							(45)
Pipes																		(46)
Brick				2						8								(47)
Oyster/Clam										19	5							(48)
Aboriginal					2			1	1	1	4							(49)
Total				5	3	1	6	2	2	91	60							(50)

APPENDIX V

ARTIFACT PROVENIENCE, FINAL INVENTORY AND ARTIFACT TABULATIONS, FIELD 3

Field 3

Provenience and Accession List

Shovel Tests		Upper and Lower Fields 2'by2' Units	Acc. No.
#1	Ap	Lower Field	83/129/1
#1	Zone 2	"	83/129/2
#2	Ap	Lower Field	83/129/3
#4	Ap	Upper Field	83/129/4
#5	Ap	Upper Field	83/129/5
#6	Ap	Upper Field	83/129/6
#7	Ap	Upper Field	83/129/7
#9	Ap	Upper Field	83/129/8
#10	Ap	Upper Field	83/129/9
#8	Ap	Upper Field	83/129/10
#11	Ap	Upper Field	83/129/11
#12	Ap	Lower Field	83/129/12
#16	Ap	Lower Field	83/129/13
Prehistoric Surface Collection		Upper Field	83/129/14
Prehistoric Surface Collection		Lower Field	83/129/15
Historic Surface Collection		Upper Field	83/129/16

Field 3 - Artifact Summary

	Totals		General Artifact Inventory
	17	(1)	redware, glazed
	10	(2)	redware, unglazed
	11	(3)	whiteware, decorated
	16	(4)	whiteware, undecorated
	4	(5)	stoneware, decorated
	2	(6)	stoneware, undecorated
	2	(7)	porcelain, decorated
	4	(8)	porcelain, undecorated
	2	(9)	creamware
	1	(10)	yelloware
	11	(11)	pearlware, decorated
	13	(12)	pearlware, undecorated
	0	(13)	ironstone
Ceramic Total	93	(14)	
	1	(15)	green bottle glass
	0	(16)	blue bottle glass
	7	(17)	brown bottle glass
	1	(18)	clear bottle glass
	0	(19)	glass, tableware
	0	(20)	glass, storage
	0	(21)	glass, milk
	7	(22)	glass, misc.
Glass (Subsistence Function) Total	16	(23)	
	0	(24)	lamp chimney
	8	(25)	window glass
	0	(26)	nail, staple
	0	(27)	nail, wrought
	0	(28)	nail, cut
	0	(29)	nail, wire
	0	(30)	nail, roofing
	0	(31)	metal, architecture
	0	(32)	metal, furniture
	0	(33)	metal, household
	0	(34)	metal, misc.
	0	(35)	metal, tool
	0	(36)	metal, arm
	0	(37)	metal, screws
	0	(38)	metal, wire
	0	(39)	metal, sheet
	0	(40)	unidentified metal fragments
	1	(41)	nail fragments
Metal Total	1	(42)	
	0	(43)	button/bead
	12	(44)	other
	0	(45)	plastic
	1	(46)	pipes
	9	(47)	brick
	1	(48)	(oyster/clam)
	22	(49)	aboriginal
Total Artifacts	163	(50)	

GENERAL ARTIFACT INVENTORY

Site No. _____ Site Name Field #3

These are keyed to provenience numbers list

			Accession No.	83/129/1	83/129/2	83/129/3	83/129/4	83/129/5	83/129/6	83/129/7	83/129/8	83/129/9	83/129/10	83/129/11	83/129/13	83/129/14	83/129/15	
Ceramics	Redwr	Glzd		2		1						2						(1)
		Ungl				2			1				1					(2)
	White	Deco		1														(3)
		Undc		3		3		1	3		1		1					(4)
	Stone	Deco																(5)
		Undc																(6)
	Prcln	Deco																(7)
		Undc																(8)
	Creamware				1										1			(9)
	Yelloware								1									(10)
	Prlwr	Deco			1				1	1		1		1				(11)
		Undc							1	2		4		1				(12)
	Ironstone																	(13)
	Total			6	2	6	—	1	7	3	1	7	2	2	1	—		(14)
Glass	Bottle	Green																(15)
		Blue																(16)
		Brown							4									(17)
		Clear																(18)
	Tableware																	(19)
	Storage																	(20)
	Milk Glass																	(21)
	Misc.								1	1			2	2				(22)
	Total			—	—	—	—	—	5	1	—	—	2	2	—	—		(23)
	Lamp Chimney																	(24)
	Window			1	1						3			2				(25)
Metal	Nails	Staple																(26)
		Wrgt																(27)
		Cut																(28)
		Wire																(29)
		Roofing																(30)
	Other	Architecture																(31)
		Furniture																(32)
		Household																(33)
		Misc.																(34)
		Tool																(35)
		Arms																(36)
		Screws																(37)
		Wire																(38)
		Sheet																(39)
		Unid Metal Fr																(40)
		Nail Frags		1														(41)
		Total		1	—	—	—	—	—	—	—	—	—	—	—	—		(42)
Button/Bead																		(43)
Other				2		2			2	4		2						(44)
Plastic																		(45)
Pipes																		(46)
Brick				2			2	1	2			2						(47)
Oyster/Clam													1					(48)
Aboriginal						2				1						9	10	(49)
Total				12	3	10	2	2	16	9	4	11	5	6	1	9	10	(50)

GENERAL ARTIFACT INVENTORY

Site No. _____ Site Name Field #3

These are keyed to provenience numbers list

			Accession No. 53/29/14														
Ceramics	Redwr	Glzd	12														(1)
		Ungl	6														(2)
	White	Deco	10														(3)
		Undc	4														(4)
	Stone	Deco	4														(5)
		Undc	2														(6)
	Prcln	Deco	2														(7)
		Undc	4														(8)
	Creamware																(9)
	Yelloware																(10)
	Prlwr	Deco	6														(11)
		Undc	5														(12)
	Ironstone																(13)
	Total		55														(14)
Glass	Bottle	Green	1														(15)
		Blue															(16)
		Brown	3														(17)
		Clear	1														(18)
	Tableware																(19)
	Storage																(20)
	Milk Glass																(21)
	Misc.		1														(22)
	Total		6														(23)
	Lamp Chimney																(24)
	Window		1														(25)
Metal Nails	Staple																(26)
	Wrgt																(27)
	Cut																(28)
	Wire																(29)
	Roofing																(30)
Metal Other	Architecture																(31)
	Furniture																(32)
	Household																(33)
	Misc.																(34)
	Tool																(35)
	Arms																(36)
	Screws																(37)
	Wire																(38)
	Sheet																(39)
	Unid Metal Fr																(40)
	Nail Frags																(41)
	Total		—														(42)
Button/Bead																	(43)
Other																	(44)
Plastic																	(45)
Pipes			1														(46)
Brick																	(47)
Oyster/Clam																	(48)
Aboriginal																	(49)
Total			63														(50)

TABLE V-1

FIELD 3

Artifact Tabulation by Ware Type
Surface Collection Only

Refined White Earthenware	White-ware	Pearl-ware	Cream-ware		
Transfer Printed	0	0	0	Porcelain	2
Hand Painted	2	0	0	Yellow Ware	0
Minimally Decorated	0	2	0	Coarse Stoneware	4
Undecorated	5	3	0	Coarse Earthenware	15
Totals	7	5	0		

TABLE V-2

FIELD 3

Artifact Tabulation by Ware Type and Strata
Shovel Tests Only

Shovel Test 1, Ap horizon

Refined White Earthenware	Whiteware	Pearlware	Creamware		
Transfer Printed	1	0	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	0	0	Refined Stoneware	0
Undecorated	3	0	0	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	4	0	0	Coarse Earthenware	2

Shovel Test 1, Zone 11

Refined White Earthenware	Whiteware	Pearlware	Creamware		
Transfer Printed	0	0	0	Porcelain	0
Hand Painted	0	1	0	Refined Redware	0
Minimally Decorated	0	0	0	Refined Stoneware	0
Undecorated	0	0	1	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	0	1	1	Coarse Earthenware	0

Shovel Test 2, Ap horizon

Refined White Earthenware	Whiteware	Pearlware	Creamware		
Transfer Printed	0	0	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	0	0	Refined Stoneware	0
Undecorated	3	0	0	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	3	0	0	Coarse Earthenware	2

Shovel Test 4

No ceramics
Two brick fragments

Shovel Test 5

Refined White Earthenware	Whiteware	Pearlware	Creamware		
Transfer Printed	0	0	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	0	0	Refined Stoneware	0
Undecorated	1	0	0	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	1	0	0	Coarse Earthenware	0

Shovel Test 6, Ap horizon

Refined White Earthenware	Whiteware	Pearlware	Creamware		
Transfer Printed	0	0	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	1	0	Refined Stoneware	0
Undecorated	3	1	0	Yellow Ware	1
Decalcomania	0	0	0	Coarse Stoneware	0
Total	3	2	0	Coarse Earthenware	1

Shovel Test 7, Ap horizon

Refined White Earthenware	Whiteware	Pearlware	Creamware		
Transfer Printed	0	0	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	1	0	Refined Stoneware	0
Undecorated	0	2	0	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	0	3	0	Coarse Earthenware	0

Shovel Test 9

Refined White Earthenware	Whiteware	Pearlware	Creamware		
Transfer Printed	0	0	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	0	0	Refined Stoneware	0
Undecorated	1	0	0	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	1	0	0	Coarse Earthenware	0

Shovel Test 10

Refined White Earthenware	Whiteware	Pearlware	Creamware		
Transfer Printed	0	0	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	1	0	Refined Stoneware	0
Undecorated	0	4	0	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	0	5	0	Coarse Earthenware	2

Shovel Test 8, Ap horizon

Refined White Earthenware	Whiteware	Pearlware	Creamware		
Transfer Printed	0	0	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	0	0	Refined Stoneware	0
Undecorated	1	0	0	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	1	0	0	Coarse Earthenware	0

Shovel Test 11, Ap horizon

Refined White Earthenware	White-ware	Pearl-ware	Cream-ware		
Transfer Printed	0	1	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	0	0	Refined Stoneware	0
Undecorated	0	1	0	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	0	2	0	Coarse Earthenware	0

Shovel Test 16, Ap horizon

Refined White Earthenware	White-ware	Pearl-ware	Cream-ware		
Transfer Printed	0	0	0	Porcelain	0
Hand Painted	0	0	0	Refined Redware	0
Minimally Decorated	0	0	0	Refined Stoneware	0
Undecorated	0	1	0	Yellow Ware	0
Decalcomania	0	0	0	Coarse Stoneware	0
Total	0	1	0	Coarse Earthenware	0

APPENDIX VI

ARTIFACT PROVENIENCE, ACCESSION LIST AND FINAL INVENTORY, FIELD 4

Field 4

Provenience and Accession List

Test Squares		5'by5' Units	Acc. No.:
A	Ap		83/130/1
B	Ap		83/130/2
B	Ap	2'by2'Extension	83/130/3
C	Ap		83/130/4
D	Ap		83/130/5
E	Ap		83/130/6
F	Ap		83/130/7
F	Base of Ap	Feature #2	
	Mapped Artifacts #'s 1-6		
	#1		83/130/81
	#2		83/130/82
	#3		83/130/83
	#4		83/130/84
	#5		83/130/85
	#6		83/130/86
G	Ap	10% sample	83/130/9
H	Ap	10% sample	83/130/10
I	Ap	10% sample	83/130/11
Shovel Tests		2'by2' Units	
#1	Ap		83/130/12
#2	Ap		83/130/13
#3	Ap		83/130/14
#4	Ap		83/130/15
#5	Ap		83/130/16
#5	Mottled Zone at Base of Ap		83/130/17
#5	Disturbance in Subsoil		83/130/18
#6	Ap		83/130/19
#7	Ap		83/130/20
#8	Ap		83/130/21
#9	Ap		83/130/22
#10	Ap		83/130/23
#11	Ap		83/130/24

Field 4
Provenience and Accession List for Bone

Test Squares	5'by5'Units	Acc. No.:
A	Ap	83/130/1
E	Ap	83/130/6
F	Ap	83/130/7
F	Base of Ap Feature #2	83/130/86 (Mapped Artifact #6)
G	Ap	83/130/9

Shovel Tests	2'by2'Units	
#4	Ap	83/130/15
#5	Mottled zone at Base of Ap	83/130/17
#5	Disturbance in Subsoil	83/130/18
#8	Ap	83/130/21
#11	Ap	83/130/24

Field 4 - Artifact Summary

	Totals		General Artifact Inventory
	460	(1)	redware
	105	(2)	redware, unglazed
	104	(3)	whiteware, decorated
	237	(4)	whiteware, undecorated
	0	(5)	stoneware, decorated
	3	(6)	stoneware, undecorated
	2	(7)	porcelain, decorated
	4	(8)	porcelain, undecorated
	82	(9)	creamware
	34	(10)	yelloware
	230	(11)	pearlware, decorated
	443	(12)	pearlware, undecorated
	0	(13)	ironstone
Ceramic Total	1,704	(14)	
	18	(15)	green bottle glass
	4	(16)	blue bottle glass
	11	(17)	brown bottle glass
	6	(18)	clear bottle glass
	5	(19)	glass, tableware
	25	(20)	glass, storage
	0	(21)	glass, milk
Glass (Subsistence	64	(22)	glass, misc.
Function) Total	133	(23)	
	0	(24)	lamp chimney
	454	(25)	window
	0	(26)	nail, staple
	14	(27)	nail, wrought
	54	(28)	nail, cut
	2	(29)	nail, wire
	0	(30)	nail, roofing
	0	(31)	metal, architecture
	0	(32)	metal, furniture
	4	(33)	metal, household
	9	(34)	metal, misc.
	0	(35)	metal, tool
	0	(36)	metal, arms
	0	(37)	metal, screws
	0	(38)	metal, wire
	0	(39)	metal, sheet
	1	(40)	unidentified metal fragments
	17	(41)	nail fragments
Metal Total	101	(42)	
	2	(43)	button/bead
	376	(44)	other
	0	(45)	plastic
	44	(46)	pipes
	213	(47)	brick
	20	(48)	oyster/clam
	17	(49)	aboriginal
Artifact Total	3,064	(50)	

GENERAL ARTIFACT INVENTORY

Site No. _____ Site Name Reid #4

These are keyed to provenience numbers list

			Accession No.	83/130/1	83/130/2	83/130/3	83/130/4	83/130/5	83/130/6	83/130/7	83/130/81	83/130/82	83/130/83	83/130/84	83/130/85	83/130/86	83/130/9	
Ceramics	Redwr	Glzd			121	13	24	121	28	11	1	1		1	1		7	(1)
		Ungl			6	1	3	59		4								(2)
	White	Deco		13	22	2	7	18	5	6							2	(3)
		Undc		29	43	7	20	50	19	3							1	(4)
	Stone	Deco																(5)
		Undc			1			1										(6)
	Prcln	Deco																(7)
		Undc			2		1			1								(8)
	Creamware			11	18		7	26										(9)
	Yelloware				6	1	1	10	3	1							1	(10)
	Prlwr	Deco		35	34	5	8	44	16	12							4	(11)
		Undc		74	77	15	36	41	40	24							15	(12)
	Ironstone																	(13)
	Total			162	330	44	107	370	111	62	1	1	—	1	1	—	30	(14)
Glass	Bottle	Green		1	1		1	5		3								(15)
		Blue			1			2		1								(16)
		Brown		5					1								1	(17)
		Clear					1	2										(18)
	Tableware					1		2		1								(19)
	Storage			4	1		3	7	2									(20)
	Milk Glass																	(21)
	Misc.			4	30			6										(22)
	Total			14	33	1	5	24	3	5	—	—	—	—	—	—	1	(23)
	Lamp Chimney																	(24)
	Window			46	130	19	11	120	21	8							4	(25)
Nails	Staple																	(26)
	Wrgt				13				1									(27)
	Cut				7			14	6	1							2	(28)
	Wire							2										(29)
	Roofing																	(30)
Metal Other	Architecture																	(31)
	Furniture																	(32)
	Household							3										(33)
	Misc.				1			3										(34)
	Tool																	(35)
	Arms																	(36)
	Screws																	(37)
	Wire																	(38)
	Sheet																	(39)
	Unid Metal Fr																	(40)
	Nail Frags				15													(41)
	Total			—	36	—	—	22	7	1	—	—	—	—	—	—	2	(42)
Button/Bead										2								(43)
Other				20	76	5	9	61	31	17						4	8	(44)
Plastic																		(45)
Pipes				3	8	1		6	2	5								(46)
Brick				37	41	4	19	28	19				1				3	(47)
Oyster/Clam				2					3								1	(48)
Aboriginal				5	2				3	1								(49)
Total				289	656	74	151	631	200	101	1	1	1	1	1	4	49	(50)

GENERAL ARTIFACT INVENTORY

Site No. _____ Site Name Field #4

These are keyed to provenience numbers list

Accession No.			83/30/10	83/30/11	83/30/12	83/30/13	83/30/14	83/30/15	83/30/16	83/30/17	83/30/18	83/30/19	83/30/20	83/30/21	83/30/22	83/30/23	
Ceramics	Redwr	Glzd	9	5		2	10	28	25	9		2	4	10	12	4	(1)
		Ungl	3			1	3	5		2		5			6	4	(2)
	White	Deco		4				12	4					3	2	1	(3)
		Undc	8	4			3	18	3					5	7	3	(4)
	Stone	Deco															(5)
		Undc	1														(6)
	Prcln	Deco	1						1								(7)
		Undc															(8)
	Creamware		2	2			1	8	4					2		1	(9)
	Yelloware						7	2									(10)
	Prlwr	Deco	19	3		1	6	12	12	5		3	1	3	2		(11)
		Undc	10			1	9	19	25	14		2	3	1	21	4	(12)
	Ironstone																(13)
	Total		53	18	—	5	39	104	74	30	—	12	8	24	50	17	(14)
Glass	Bottle	Green						2	2				1		2		(15)
		Blue															(16)
		Brown					2	1	1								(17)
		Clear						3									(18)
	Tableware									1							(19)
	Storage												1		2	2	(20)
	Milk Glass																(21)
	Misc.		1			1	1	9		1				9			(22)
	Total		1		—	1	3	15	3	2	—	—	2	9	4	2	(23)
	Lamp Chimney																(24)
	Window		1	1	1		9	47	15	1		2	1	5	2	1	(25)
Nails	Staple																(26)
	Wrgt																(27)
	Cut		2	1			3	3	5			1		3		1	(28)
	Wire																(29)
	Roofing																(30)
Metal	Architecture																(31)
	Furniture																(32)
	Household							1									(33)
	Misc.		4					1									(34)
	Tool																(35)
	Arms																(36)
	Screws																(37)
	Wire																(38)
	Sheet																(39)
	Unid Metal Fr			1													(40)
	Nail Frags		1											1			(41)
	Total		7	2	—	—	3	5	5	—	—	1	—	4	—	1	(42)
Button/Bead																	(43)
Other			2				5	37	42		1		6	17	8	4	(44)
Plastic																	(45)
Pipes			7	3			3	1	2			1					(46)
Brick			2	2				28	8	6			1	3	5		(47)
Oyster/Clam							3		2					8			(48)
Aboriginal						1		3						2			(49)
Total			73	26	1	7	65	240	151	39	1	16	18	72	69	25	(50)

GENERAL ARTIFACT INVENTORY

Site No. _____ Site Name Field #4

These are keyed to provenience numbers list

			Accession No. 83/130/44														
Ceramics	Redwr	Glzd	11														(1)
		Ungl	3														(2)
	White	Deco	3														(3)
		Undc	14														(4)
	Stone	Deco															(5)
		Undc															(6)
	Prcln	Deco															(7)
		Undc															(8)
	Creamware																(9)
	Yelloware		2														(10)
	Prlwr	Deco	5														(11)
		Undc	12														(12)
	Ironstone																(13)
	Total		50														(14)
Glass	Bottle	Green															(15)
		Blue															(16)
		Brown															(17)
		Clear															(18)
	Tableware																(19)
	Storage		3														(20)
	Milk Glass																(21)
	Misc.		2														(22)
	Total		5														(23)
	Lamp Chimney																(24)
	Window		9														(25)
Metal: Nails	Staple																(26)
	Wrgt																(27)
	Cut		5														(28)
	Wire																(29)
	Roofing																(30)
Metal: Other	Architecture																(31)
	Furniture																(32)
	Household																(33)
	Misc.																(34)
	Tool																(35)
	Arms																(36)
	Screws																(37)
	Wire																(38)
	Sheet																(39)
	Unid Metal Fr																(40)
	Nail Frags																(41)
	Total		5														(42)
Button/Bead																	(43)
Other			23														(44)
Plastic																	(45)
Pipes			2														(46)
Brick			6														(47)
Oyster/Clam			1														(48)
Aboriginal																	(49)
Total			101														(50)

TABLE VI-1

FIELD 4

Prehistoric Artifact Tabulation by Excavation Unit

Shovel Test #2 - 1 quartz flake

Shovel Test #4 - 2 quartz flakes, 1 quartz chunk

Shovel Test #8 - 2 quartz flakes

Test Square A - 3 quartz flakes, 1 chalcedony flake, 1 quartz shatter fragment

Tets Square B - 1 quartz primary decortication flake, proximal fragment, 1 jasper secondary decortication flake, thermally altered

Test Square E - 2 quartz flakes, 1 quartz shatter fragment

Test Square F - 1 quartz flake

TABLE VI-2

FIELD 4

Distribution of Whiteware, Pearlware and Creamware by Excavation Unit

	Total
Shovel Test 1	
Whiteware - 0, Pearlware - 0, Creamware - 0	0
Shovel Test 2	
Whiteware - 0, Pearlware - 3, Creamware - 0	3
Shovel Test 3	
Whiteware - 7, Pearlware - 14, Creamware - 1	22
Shovel Test 4	
Whiteware - 30, Pearlware - 31, Creamware - 8	69
Shovel Test 5	
Whiteware - 7, Pearlware - 57, Creamware - 4	68
Shovel Test 6	
Whiteware - 0, Pearlware - 5, Creamware - 0	5
Shovel Test 7	
Whiteware - 0, Pearlware - 3, Creamware - 0	3
Shovel Test 8	
Whiteware - 8, Pearlware - 4, Creamware - 2	44
Shovel Test 9	
Whiteware - 9, Pearlware - 22, Creamware - 0	31
Shovel Test 10	
Whiteware - 6, Pearlware - 4, Creamware - 1	11
Shovel Test 11	
Whiteware - 19, Pearlware - 16, Creamware - 0	35

TABLE VI-3

FIELD 4

Distribution of Coarse Red Earthenware by Excavation Unit

Shovel Test 1 - 0

Shovel Test 2 - 3 sherds

Shovel Test 3 - 13 sherds

Shovel Test 4 - 33 sherds and 32 fragments

Shovel Test 5 - 36 sherds and 33 fragments

Shovel Test 6 - 7 sherds

Shovel Test 7 - 4 sherds

Shovel Test 8 - 10 sherds and 11 fragments

Shovel Test 9 - 18 sherds and 6 fragments

Shovel Test 10 - 8 sherds and 2 fragments

Shovel Test 11 - 14 sherds and 7 fragments

TABLE VI-4

FIELD 4

Pipe Bowls and Stem Fragments by Excavation Unit

Shovel Tests	Bowl Fragments	Stems
1	0	0
2	0	0
3	1 undecorated 1 decorated bowl and stem fragment	1, embossed, motif indeterminate
4	1 bowl and stem, fluted embossing	0
5	1 undecorated 1 decorated, fluted embossing	0
6	0	1
7	0	0
8	0	0
9	0	0
10	0	0
11	2 undecorated	0
Totals	4 undecorated 3 decorated	1 decorated 1 undecorated

Test Squares	Bowl Fragments	Stems
A	2 undecorated	1
B	2 fluted and incised 3 undecorated	4 (includes 2'by2' extension)
C	0	0
D	2 fluted embossing 3 undecorated	1
E	1 undecorated	1
F	1 undecorated 3 fluted embossing	1 embossed, motif indeterminate
G	0	0
H	1 undecorated	6
I	2 undecorated	1
Totals	13 undecorated 7 decorated	14 undecorated 1 decorated

TABLE VI-5

FIELD 4

Distribution of Nails and Nail Fragments by Excavation Unit

Test Squares	Shovel Tests
A - 2 complete cut nails	1 - 0
2 cut nail fragments	2 - 2 cut nails
B - 4 cut nails	3 - 3 cut nail fragments
18 cut nail fragments	4 - 3 cut nails fragments
1 wrought nail	5 - 5 cut nail fragments
2 wrought nail fragments	6 - 1 cut nail fragment
C - 9 cut nail fragments	7 - 0
D - 2 cut nails	8 - 3 cut nail fragments
12 cut nail fragments	1 unidentified nail fragment
E - 1 wrought nail	9 - 0
6 cut nail fragments	10 - 1 cut nail fragment
F - 1 cut nail fragment	11 - 5 cut nail fragments
G - 2 cut nail fragments	
H - 2 cut nails	
2 unidentified nail fragments	
I - 1 cut nail	

TABLE VI-6

FIELD 4

Distribution of Brick and Brick Fragments by Excavation Unit

Test Squares	Shovel Tests
A - 36 red brick fragments	1 - 0
1 red brick fragment, salt glazed	2 - 0
B - 6 large fragments	3 - 0
35 brick fragments	4 - 28 brick fragments
C - 19 brick fragments	6 - 0
D - 27 brick fragments	7 - 1 brick fragment
1 glazed brick fragment	8 - 0
E - 19 brick fragments	9 - 5 brick fragments
F - 1 brick fragment (Artifact #4)	10 - 0
G - 3 brick fragments	11 - 5 brick fragments
H - 2 brick fragments	1 glazed brick fragment
I - 2 brick fragments	

APPENDIX VII

ARTIFACT PROVENIENCE AND

FINAL INVENTORY, HOLLINGSWORTH PROPERTY

Hollingsworth Property
Provenience and Accession List

North Side

Shovel Tests	2'by2' Units	Acc No.:
#1	A Horizon, Level 1	83/131/1
#4	A Horizon, Level 1	83/131/2
#9	Ab Horizon	83/131/3
#10	A Horizon, Level 1	83/131/4

South Side

#4	Fill/0-1' Below Surface	83/131/5
#1	Fill/0-1' Below Surface	83/131/6

Hollingsworth Property - Artifact Summary

	Total		General Artifact Inventory
	0	(1)	redware, glazed
	0	(2)	redware, unglazed
	0	(3)	whiteware, decorated
	3	(4)	whiteware, undecorated
	0	(5)	stoneware, decorated
	0	(6)	stoneware, undecorated
	0	(7)	porcelain, decorated
	0	(8)	porcelain, undecorated
	0	(9)	creamware
	0	(10)	yelloware
	0	(11)	pearlware, decorated
	0	(12)	pearlware, undecorated
	0	(13)	ironstone
Ceramic Total	3	(14)	
	0	(15)	green bottle glass
	0	(16)	blue bottle glass
	1	(17)	brown bottle glass
	0	(18)	clear bottle glass
	0	(19)	glass, tableware
	1	(20)	glass, storage
	0	(21)	glass, milk
	10	(22)	glass, misc.
Glass (Subsistence Function) Total	12	(23)	
	0	(24)	lamp chimney
	1	(25)	window glass
	0	(26)	nail, staple
	0	(27)	nail, wrought
	0	(28)	nail, cut
	1	(29)	nail, wire
	0	(30)	nail, roofing
	0	(31)	metal, architecture
	0	(32)	metal, furniture
	0	(33)	metal, household
	0	(34)	metal, misc.
	0	(35)	metal, tool
	0	(36)	metal, arms
	0	(37)	metal, screws
	0	(38)	metal, wire
	0	(39)	metal sheet
	0	(40)	unidentified metal fragments
	0	(41)	nail fragments
Metal Total	1	(42)	
	0	(43)	button/bead
	0	(44)	other
	0	(45)	plastic
	0	(46)	pipes
	1	(47)	brick
	1	(48)	oyster/clam
	1	(49)	aboriginal
Artifact Total	20	(50)	

Sheet 1 of 1

GENERAL ARTIFACT INVENTORY

Site No. _____ Site Name Hollingsworth Property

These are keyed to provenience numbers list

			Accession No.	83/131/1	83/131/2	83/131/3	83/131/4	83/131/5	83/131/6									
Ceramics	Redwr	Glzd																(1)
		Ungl																(2)
	White	Deco																(3)
		Undc					1	2										(4)
	Stone	Deco																(5)
		Undc																(6)
	Prcln	Deco																(7)
		Undc																(8)
	Creamware																	(9)
	Yelloware																	(10)
	Prlwr	Deco																(11)
		Undc																(12)
	Ironstone																	(13)
	Total			—	—	—	—	1	2									(14)
Glass	Bottle	Green																(15)
		Blue																(16)
		Brown						1										(17)
		Clear																(18)
	Tableware																	(19)
	Storage							1										(20)
	Milk Glass																	(21)
	Misc.			3			3	3	1									(22)
	Total			3	—	—	3	5	1									(23)
	Lamp Chimney																	(24)
	Window					1												(25)
Metal	Nails	Staple																(26)
		Wrgt																(27)
		Cut																(28)
		Wire							1									(29)
		Roofing																(30)
	Other	Architecture																(31)
		Furniture																(32)
		Household																(33)
		Misc.																(34)
		Tool																(35)
		Arms																(36)
		Screws																(37)
		Wire																(38)
		Sheet																(39)
		Unid Metal Fr																(40)
		Nail Frags																(41)
		Total		—	—	—	—	—	1									(42)
Button/Bead																		(43)
Other																		(44)
Plastic																		(45)
Pipes																		(46)
Brick									1									(47)
Oyster/Clam								1										(48)
Aboriginal					1													(49)
Total				3	1	1	3	7	5									(50)

APPENDIX VIII

NATIONAL REGISTER OF HISTORIC PLACES

INVENTORY-NOMINATION FORM FOR FIELD 4, TENANCY SITE

AND STATE CRS FORMS

NPS Form 10-900
(3-82)

OMB No. 1024-0018
Exp. 10-31-84

United States Department of the Interior
National Park Service

For NPS use only

received

date entered

National Register of Historic Places Inventory—Nomination Form

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic Tenancy Site, H. Grant Property (7NC-B-6)

and/or common Aletta Laird Downs Property

2. Location

street & number Located in NW quadrant of intersection of Rte. 48 Lancaster Pike, and Rt. 141, Centre Road — X not for publication

city, town Wilmington — X vicinity of

state Delaware code 10 county New Castle code 003

3. Classification

Category	Ownership	Status	Present Use	
___ district	___ public	___ occupied	X agriculture	___ museum
___ building(s)	X private	___ unoccupied	___ commercial	___ park
___ structure	___ both	___ work in progress	___ educational	___ private residence
X site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	X in process	X yes: restricted	___ government	___ scientific
	___ being considered	___ yes: unrestricted	___ industrial	___ transportation
		___ no	___ military	___ other:

4. Owner of Property

name Mrs. Aletta Laird Downs

street & number Rte. 48 Lancaster Pike & 141 Centre Road

city, town Wilmington — X vicinity of — state Delaware

5. Location of Legal Description

courthouse, registry of deeds, etc. Register of Deeds New Castle County Courthouse

street & number City-County Building

city, town Wilmington — state Delaware

6. Representation in Existing Surveys

title William P. Barse 1984 Phase I & II Archeological Investigations of the Rt. 141 Corridor, New Castle County, DE. Delaware Department of Transportation Archeology Series 33. Dover, DE. — has this property been determined eligible? ___ yes X no

date ~~March 1983~~ — ___ federal X state ___ county ___ local

depository for survey records Del. Department of Transportation

city, town Dover — state DE

7. Description

Condition		Check one	Check one
___ excellent	___ deteriorated	X unaltered	X original site
X good	___ ruins	___ altered	___ moved date ca. 1843
___ fair	X unexposed		

Describe the present and original (if known) physical appearance

The H. Grant tenancy site was identified as the result of a reconnaissance survey, and additional data was gathered during an intensive survey of this location. This assessment was carried out for the Delaware Department of Transportation to fulfill their obligations under Section 106 of the National Historic Preservation Act to evaluate the effects of the proposed improvements to Delaware Route 141 on significant or potentially significant cultural resources, as defined by the National Register of Historic Places (36 CFR 1202). The site is located just to the north of the Lancaster Pike (Delaware Route 48) on the east side of Little Mill Creek and west of Route 141.

The significant component of the site is a nineteenth century occupation which appears to be a tenancy associated with the larger plantation complex identified on maps and in deed research as belonging to W. Tatnall, Henry Grant, John Peoples, and others. A prehistoric component, consisting of a chipping scatter is also present, but is not regarded as significant.

The site is located adjacent to an intermittent spring run which forms the northern boundary of the site, at the edge of the rather steep-sided valley of Little Mill Creek. The boundaries of the site were determined by the limits of artifact scatter observed in the test units on the east and west, and by the limits of construction disturbance for the present alignment of Lancaster Pike on the south.

It is not entirely clear where the exact position of the 19th century alignment of the Lancaster Pike is, but it is presumed to be beneath the present paved alignment (or destroyed by the construction of the present alignment). Other than highway improvements, the land use of the surrounding area is in substantially the same condition as during the site occupation: agriculture. The site is presently in pasture, and the thickness of the root mat suggests that it has been so for some time. However, a plow zone is present throughout the site, suggesting that the site area was cultivated after it ceased to function as a domestic residence.

Eleven 50 cm. shovel tests were distributed across the site area during reconnaissance survey to identify the limits of the artifact scatter and to evaluate the likelihood for sub-plow-zone features. Some of the latter, including a segment of structure foundation, (Square F) were identified in the placement of five foot by five foot test squares during the site testing program. A number of post-molds were identified suggesting the presence of support features and spatial distribution data. The variety of functional classes included in the artifact inventory support the attribution of this site as a residential site, and the integrity of the sub-plow-zone features suggests that significant data are present. The fact that the site has been plowed represents only a minor limitation in the data base, since the ability of plowed historic sites to retain spatial patterning of artifact distributions is clearly established by field research.

8. Significance

Period	Areas of Significance—Check and justify below			
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science
___ 1500–1599	___ agriculture	___ economics	___ literature	___ sculpture
___ 1600–1699	___ architecture	___ education	___ military	___ social/ humanitarian
___ 1700–1799	___ art	___ engineering	___ music	___ theater
X 1800–1899	___ commerce	___ exploration/settlement	___ philosophy	___ transportation
X 1900–	___ communications	___ industry	___ politics/government	___ other (specify)
		___ invention		

Specific dates **Builder/Architect**

Statement of Significance (in one paragraph)

The H. Grant Tenancy Site (7NC-B-6) is significant because it is likely to contribute data important in the understanding of the history of this area and the surrounding region. Test excavations revealed that artifact distribution data are present in the plow zone, and that remains of structures and other facilities are present undisturbed below the plow zone. This will allow the characterization of spatial patterning for this common but uninvestigated site type. The following discussion provides a context within which to evaluate the research values of the site.

Delaware was settled by the Dutch in 1630, with the establishment of a whaling station near Lewes. This was soon destroyed by the Indians. The Swedes settled in the vicinity of Wilmington with the establishment of Fort Christina in 1638. This was captured by the Dutch in 1651. Settlement was characterized by scattered farmsteads along the major drainages, the Delaware River, White Clay Creek and Christina Creek (Weslager 1961).

The English obtained control of Delaware in 1664, which was followed by the granting or proprietary rights to Willian Penn in 1682. This placed Delaware under control of Philadelphia, both economically and politically. Although subsistence farming continued, commercial centers were beginning to be established to channel goods to Philadelphia. Such centers were Christina, Stanton and Ogletown. Throughout the 18th century, the increasing population stimulated the development of new towns and the development of more effective communication networks. This was especially apparent after the development of the towns of Baltimore and Annapolis.

The 19th century saw the development of canals and railroads to accommodate the commercial trade between these towns. The Philadelphia, Wilmington, and Baltimore Railroad was begun in 1839. However, the road system of Delaware lagged considerably behind the railroads as a means of transportation. Settlement in the 19th century was characterized by the large plantations and associated small tenant farms, as well as with the urban areas associated with the commercial towns.

A gradual change in the role of the farm occurred from the 18th through to the 19th centuries. During the 18th century, farming was primarily oriented to the production of goods for subsistence, a pattern that changed gradually to one involving production of goods for consumption on the growing national market. This change ties in with the growing industrial and urban centers in the Philadelphia-Wilmington-Baltimore corridor that was under way in the early 19th century noted above. While this scenario is known on a large scale, how the changing economic framework of the area affected the local household in terms of the organization of material culture is unknown, and accessible only archeologically. One would expect to witness a changing access to goods and the development of differing patterns of consumption based on economic status, as well as a growing diversity in patterns of land usage. Questions concerning what percentage of the population remained on a subsustence level as opposed to those engaged in production for market consumption are unknown, and would be most accessible through archeological investigations.

Deed research revealed that this location was consistently part of a sizeable plantation, and map research indicates that the principal residence of the owners is in the

location presently occupied by the owner, facing Centre Road (Rt. 141). A structure does appear at the tenancy site on one of the several maps that cover the area and show dwellings, the Eckel Map of 1860. The variety and distribution of the artifacts, as well as the subsurface features, suggest that this site was a domestic site, and since the principal residence on the property is already accounted for, a tenancy is implied.

A number of specific research questions can be addressed using the data present at 7NC-B-6:

1. Does the spatial organization of the structures and other facilities conform to a "typical" plan, as identified by other research (Heite 1984).

2. Does the realized plan resemble that common to owner-occupant sites, which can be documented to some degree from extant structures at such sites, or does it reflect a plan peculiar to the tenant situation, and retrievable largely from archaeological data? (The plan at this site can be identified as conforming or variant; comparison to other research at other tenant sites will be needed to confirm a specific pattern, i.e. Thomas 1983).

3. To what degree does the artifact assemblage express the lower economic status of a tenant, in comparison to owner-occupied sites? Are those patterns in the artifact assemblages, specifically in the distribution of cost-sensitive decorative attributes on whiteware, peculiar to tenants and distinguishable from other socio-economic groups?

Data developed at the H. Grant tenancy can establish base-line evaluations of patterns for this type of site to be compared with future research at other tenant houses and owner occupied site. Current research by DelDOT in downtown Wilmington can be used for comparisons between rural tenants and urban dwellers. In summary, testing has demonstrated that data are present in usable contexts at the H. Grant Tenancy Site to address a number of pertinent research questions current in historical archaeology.

9. Major Bibliographical References

Heite, Louise B. 1984 Archaeological Investigations at the Mudstone Branch Site, Saulsbury Road, Dover, Kent County, Delaware. Delaware Department of Transportation, Division of Highways, Location and Environmental Studies Office, Dover.

South, Stanley 1977 Method and Theory in Historical Archaeology. Academic Press, New York.

Thomas, Ronald A. 1983 Archaeological Data Recovery at an Eighteenth Century Farmstead in Lewes, Sussex County, Delaware. Mid-Atlantic Archaeological Research, Inc., Newark, Delaware

Weslager, C.A. 1961 Dutch Explorers, Traders and Settlers in the Delaware Valley. Philadelphi

Eckel, Henry 1860 Map of Wilmington and Brandywine RR

10. Geographical Data

Acreage of nominated property approximately 1/3 acre

Quadrangle name Wilmington North, Del.-PA **Quadrangle scale** 1:24,000

UTM References

	Zone	Easting	Northing
A	18	480400	4401020
B			
C			
D			
E			
F			
G			
H			

Verbal boundary description and justification The boundaries and corners of the site are shown on the attached drawing. The UTM position of corner A was measured from the center of the highway bridge across Little Mill Creek on the Wilmington North Quadrangle Sheet (see attached map) and is accurate to plus or minus twenty meters. The UTM coordinates for the remaining corners were then measured on the DelDOT plan at a scale of one inch (~~continued~~ on attachment)

List all states and counties for properties overlapping state or county boundaries

state code county code

state code county code

11. Form Prepared By

name/title William P. Barse

organization Thunderbird Archeological Associates date 2/23/84

street & number Rte. 1, Box 1375 telephone 703-635-3860

city or town Front Royal state VA 22630

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

___ national ___ state ___ local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature

title date

For NPS use only

I hereby certify that this property is included in the National Register

date

Keeper of the National Register

Attest: date

Chief of Registration

GPO 894-788

equals twenty-five feet, but are really only as accurate as corner A. The attached drawing also shows grid points for the Delaware State Plane Coordinate System, from the DelDOT plan. The southern boundary ("A" to "E") of the site follows the northern right-of-way margin of the present alignment of the Lancaster Pike. It is expected that there would be road construction disturbance to the south of that line. The eastern boundary of the site ("E" to "D") marks the position where artifacts had fallen to near zero in the test pits. From corner "D", through "C", to "B", the northern boundary of the site follows the lowest points in the drainage swale, which forms a logical natural boundary. It is possible that some remains associated with the site might be located north of this boundary, but artifacts were falling off in this direction, and anything north of the swale would be outside the impact zone, as presently defined. The western boundary of the site ("B" to "A") is at a break point in the slope. From this line to the west, the ground slopes rather steeply toward the channel of Little Mill Creek, and it is projected that this area would not have been occupied.