

NATIONAL BUREAU OF STANDARDS
MICROCOPY RESOLUTION TEST CHART

AD-A157 706

**CULTURAL RESOURCES
LITERATURE SEARCH AND
RECORDS REVIEW OF THE CAMP
RIPLEY, GENERAL E. A. WALSH
TRAINING CENTER, MORRISON
COUNTY, MINNESOTA**

**BY
ROBERT P. FAY
PRINCIPAL INVESTIGATOR**

July 12, 1985

**DTIC
ELECTE**
AUG 6 1985
S
1

DTIC FILE COPY



**OLD NORTHWEST RESEARCH
MADISON, WISCONSIN**

REPORT NO. 7

This document has been approved
for public release and sale
distribution is unlimited.

85 - 7 30 05 6

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
	AD-A157706	
4. TITLE (and Subtitle) CULTURAL RESOURCES LITERATURE SEARCH AND RECORDS REVIEW OF THE CAMP RIPLEY, GENERAL E.A. WALSH TRAINING CENTER, MORRISON COUNTY, MINNESOTA.		5. TYPE OF REPORT & PERIOD COVERED Final, 9/84-1/85
		6. PERFORMING ORG. REPORT NUMBER Report no. 7
7. AUTHOR(s) Robert P. Fay, Principal investigator.		8. CONTRACT OR GRANT NUMBER(s) DACW37-84-M-1964
9. PERFORMING ORGANIZATION NAME AND ADDRESS Old Northwest Research 2310 Rowley Avenue Madison, WI 53705		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Engineer District, St. Paul Environmental Resources Branch, Planning Division 1135 USPO & Custom House, St Paul, MN 55101-1479		12. REPORT DATE July 12, 1985
		13. NUMBER OF PAGES 115
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) ARCHAEOLOGY, MINNESOTA		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The purpose of this report was to locate and evaluate existing information on known prehistoric and historical/architectural sites located within the boundaries of the Camp Ripley Military Reservation, and to assess the potential impact of planned mobilization development. Site specific information on 64 prehistoric archaeological and historical/architectural sites was compiled and all site locations were plotted on base maps of the study area. <i>Key sites included:</i>		

DD FORM 1473

1 JAN 73

EDITION OF 1 NOV 65 IS OBSOLETE

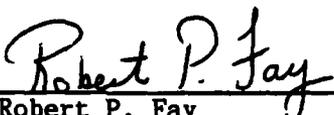
UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

CULTURAL RESOURCES LITERATURE SEARCH AND RECORDS REVIEW
OF THE CAMP RIPLEY, GENERAL E. A. WALSH TRAINING CENTER,
MORRISON COUNTY, MINNESOTA

(FINAL REPORT)

Prepared for: Department of the Army
St. Paul District, Corps of Engineers
Environmental Resources Branch
Planning Division
1135 U. S. Post Office and Custom House
St. Paul, Minnesota 55101

Prepared by:


Robert P. Fay
Principal Investigator

In compliance with: Contract No. DACW37-84-M-1964

OLD NORTHWEST RESEARCH
2310 Rowley Avenue
Madison, Wisconsin 53705

Report No. 7

July 12, 1985

ABSTRACT

During September of 1984 - January of 1985, a cultural resources literature search and records review of the Camp Ripley Military Reservation in Morrison County, Minnesota was conducted by the author.

The purpose of the records and literature search was to locate and evaluate existing information on known prehistoric and historical/architectural sites located within the boundaries of the camp and to assess the potential impact of planned mobilization development on the cultural resources data base. From the site information compiled during the study, a phased program for future cultural resources studies at Camp Ripley as well as recommendations to enhance the management and interpretation of the cultural resources data base were developed.

Site specific information on 64 prehistoric archaeological and historical/architectural sites located at Camp Ripley was compiled during the course of the records and literature search. In addition, all site locations were plotted on base maps of the study area.

Authorization for this cultural resources investigation and report (Contract No. DACW37-84-M-1964) represents partial fulfillment of the obligations of the St. Paul District, U.S. Army Corps of Engineers regarding the management and protection of cultural resources mandated by federal legislation.



A-1

ADMINISTRATIVE SUMMARY

This literature search and records review for cultural resources at the Camp Ripley Military Reservation in Morrison County, Minnesota was authorized by the St. Paul District, U.S. Army Corps of Engineers as part of its master plan for full mobilization development of this installation. The objectives of the investigation were to: (1) conduct a comprehensive review of existing records as well as published and unpublished literature; (2) provide an evaluation of reported cultural resources located within the study area; (3) assess the known and predicted impacts of full mobilization development on cultural resources; (4) develop a phased program for future cultural resources studies at Camp Ripley; (5) identify the interpretive potential of any significant cultural resources located within the boundaries of the camp; and (6) prepare a detailed technical report.

As the cultural resources baseline data was compiled, additional tasks included the establishment of narrative frameworks of the culture history and environmental setting of the region and consultations with various individuals familiar with the project and the cultural resources of the region.

In all 59 historical/architectural sites were identified and inventoried during the literature search and records review. Only 5 prehistoric archaeological sites were identified from existing records, regional literature, and other sources.

From the recorded site information, recommendations for future cultural resources studies at Camp Ripley were developed. These recommendations include steps to survey several areas of proposed mobilization and future development, randomly-selected sample survey units, as well as targeted areas with a high potential for yielding prehistoric and historic materials. Consideration of methods for enhancing public understanding and appreciation of cultural resources at Camp Ripley were also prepared.

ACKNOWLEDGEMENTS

Thanks are here expressed to several individuals who provided technical assistance, support, and advice during the course of the research and preparation of this report.

Dave Berwick and Bruce Heide of the U.S. Army Corps of Engineers, St. Paul District and John Ebert of the Minnesota Department of Military Affairs, Office of the Architect and Engineer, Camp Ripley, were extremely helpful in providing details and maps of the project area and establishing research strategies during the initial phase of the study.

Special thanks are also expressed to Susan Roth, Patricia Murphy, and Ted Lostrom of the State Historic Preservation Office, Minnesota Historical Society, Fort Snelling History Center, for meeting with the author to discuss the project and providing access to site inventory and report files in their possession. Patricia Murphy was particularly helpful in sharing the results of a recent intensive architectural survey conducted at Camp Ripley and answering numerous questions that the author had concerning specific buildings located in the cantonment area.

I would also like to acknowledge the assistance and information provided by Jan Warner, Morrison County Historical Society, Weyerhaeuser Museum, Little Falls; Bruce Mellor, Little Falls; Joseph Minshaw, Little Falls; Anne Rebischke and Cheryl Seelen, Carnegie Library, Little Falls; Darwin Carlson, Charlene Starin, and Veryl E. Kalahar, Camp Ripley; Thomas W. Houghtaling, Minnesota Power, Duluth; Norene Roberts and Tom Jenkinson, Historical Research, Inc., Minneapolis; Richard B. Lane, St. Cloud State University; Douglas A. Birk, Institute for Minnesota Archaeology, Minneapolis; and Clifford Carlson, Minnesota Department of Natural Resources, Brainerd.

Finally, I wish to thank Jeanne Gomoll, Madison, for her assistance in preparing the maps in the report; Mary Jo Fay, Madison, for proofreading the site inventory forms and bibliography; and Carolyn Matney, Madison, for typing the report.

TABLE OF CONTENTS

ABSTRACT..... i

ADMINISTRATIVE SUMMARY..... ii

ACKNOWLEDGEMENTS..... iii

LIST OF FIGURES..... vi

LIST OF TABLES..... vii

SECTION 1 INTRODUCTION..... 1

 Study Objectives..... 1

 Project Area..... 2

 Outline of Present Report..... 7

SECTION 2 THE NATURAL ENVIRONMENT..... 9

 Topography and Geology..... 9

 Soils..... 10

 Vegetation..... 11

 Water Resources..... 11

 Wildlife..... 11

 Climate..... 14

SECTION 3 SUMMARY OF REGIONAL PREHISTORY AND HISTORY..... 15

 Prehistoric Cultural Development..... 15

 Historic Cultural Development..... 18

 Epilogue..... 25

SECTION 4 METHODOLOGY..... 26

 Research Design..... 26

 Reference Materials..... 27

 Archaeological Sources..... 28

 Historical/Architectural Sources..... 29

 Curation..... 30

SECTION 5 SUMMARY OF RESULTS..... 31

 Project Data..... 31

 Data Organization..... 33

 Biases and Gaps..... 33

SECTION 6 KNOWN AND PREDICTED IMPACTS OF DEVELOPMENT ON CULTURAL
RESOURCES AT CAMP RIPLEY..... 39

 Past Development..... 39

 Mobilization Projects..... 39

TABLE OF CONTENTS (continued)

SECTION 7 RECOMMENDATIONS FOR MANAGEMENT OF THE CULTURAL RESOURCES	
DATA BASE.....	45
Identification.....	45
Evaluation.....	53
Interpretation.....	53
BIBLIOGRAPHY.....	55
APPENDICES.....	90
Appendix A - Scope of Work.....	90
Appendix B - Vita of Principal Investigator.....	98
Appendix C - Draft Report Review Comments and Responses.....	106

LIST OF FIGURES

1.	Project Location in Minnesota.....	3
2.	Camp Ripley and Vicinity.....	4
3.	Camp Ripley Boundaries.....	5
4.	Camp Ripley Cantonment Area.....	6
5.	Mobilization and Future Development Projects in the Cantonment Area Requiring Archaeological Surveys.....	48
6.	Proposed Archaeological Sampling Survey of Camp Ripley, Minnesota.....	52
7.	Key to Site Distribution Maps of the Camp Ripley Study Area.....	S-85
8.	Motley SE Quadrangle.....	S-86
9.	Pillager Quadrangle.....	S-87
10.	Baxter Quadrangle.....	S-88
11.	Cushing Quadrangle.....	S-89
12.	Belle Prairie NW Quadrangle.....	S-90
13.	Fort Ripley Quadrangle.....	S-91
14.	Randall East Quadrangle.....	S-92
15.	Belle Prairie Quadrangle.....	S-93

LIST OF TABLES

1.	USGS Quadrangles.....	2
2.	Named Lakes, Ponds, and Wetlands Located Within The Boundaries of Camp Ripley, Minnesota.....	12
3.	Chronology of Township Organization Within the Boundaries of Camp Ripley, Morrison County, Minnesota.....	21
4.	Prehistoric and Historical/Architectural Sites Located at Camp Ripley, Minnesota.....	32
5.	Morrison County District Schools Formerly Located Within the Boundaries of Camp Ripley, Minnesota.....	35
6.	Morrison County Named Farms Formerly Located Within the Boundaries of Camp Ripley, Minnesota.....	36
7.	Group I Full Mobilization Projects, Camp Ripley, Minnesota.....	40
8.	Group II Full Mobilization Projects, Camp Ripley, Minnesota.....	42
9.	Group III Full Mobilization Projects, Camp Ripley, Minnesota....	43
10.	Cost Estimates for Future Phased Cultural Resources Studies at Camp Ripley, Minnesota.....	46
11.	Full Mobilization Projects at Camp Ripley Requiring Archaeological Surveys.....	47

SECTION 1

INTRODUCTION

Study Objectives

This report is the summation of an extensive cultural resources literature search and records review of the Camp Ripley, Major General Ellard A. Walsh Training Center in Morrison County, Minnesota. The research was conducted between September 26, 1984 and January 15, 1985 by the author.

The literature and records search was undertaken as a part of the U.S. Army Corps of Engineers, St. Paul District's efforts to prepare a Mobilization Master Plan (MMP) for the installation. The plan outlines what steps are necessary in order to bring the Minnesota National Guard camp and training program to full mobilization capability in the event of a declaration of war or some other national emergency (U.S. Army Corps of Engineers, St. Paul District 1984). Several projects are planned which would enlarge the training program and bring the installation to full mobilization capability. These projects have been placed into three groups based upon construction priority during peacetime and range from the construction of new camp facilities to the winterization of existing buildings. Additional information on these projects is presented in Tables 6-1 through 6-3 in the 1984 Camp Ripley Installation Support Book.

More specifically, the purpose of the literature search and records review was to: (1) locate existing information on known prehistoric and historical/architectural sites located within the boundaries of Camp Ripley; (2) evaluate the significance of reported cultural resources located in the study area; (3) assess the known and predicted impacts of proposed full mobilization development on cultural resources at Camp Ripley; (4) develop a phased program for future cultural resources studies at Camp Ripley; and (5) identify the interpretive potential for any significant cultural resources located at the camp.

The literature search and records review and report represents partial fulfillment of the St. Paul District's legislative and regulatory obligations toward the management, protection, and preservation of cultural resources as required by Sections 106 and 110 of the National Historic Preservation Act of 1966, as amended (Public Law 89-665), the National Environmental Policy Act of 1969 (Public Law 91-90), the Protection and Enhancement of the Cultural Environment (Executive Order 11593), the Advisory Council's Procedures for the Protection of Historic and Cultural Properties (36 CFR Part 800), and the Preservation of Historic and Archaeological Data 1974 (Public Law 93-291).

Notification of the contract award for this project and report (Contract No. DACW37-84-M-1964) was received on September 28, 1984 from Mr. R. C. Lindberg of the U.S. Army Corps of Engineers, St. Paul District.

Project Area

Camp Ripley is located in the central portion of the state of Minnesota in Morrison County, approximately 125 miles northwest of Minneapolis/St. Paul (Figures 1 and 2). The nearest communities to Camp Ripley include Little Falls, the county seat and largest town in Morrison County located about 7 miles to the south; Randall, about 8 miles to the west; and the small hamlet of Fort Ripley, located opposite the camp on the east side of the Mississippi River about 7 miles to the northeast. Brainerd, the county seat and largest town in Crow Wing County, is located about 22 miles to the north.

The camp covers 53,000 acres in six adjacent townships including Clough, Darling, Green Prairie, Motley, Rail Prairie, and Rosing. The military reservation is approximately 18 miles north to south and from 2-7 miles east to west. The camp is bordered on the east by the Mississippi River, on the north by the Crow Wing River, and on the south and west by a rural mixture of farmland, marshes, lakes, and woodlands, and, in part, by portions of County Highway 1 and State Highway 115.

More specific camp boundaries are shown in Figure 3 and on various topographic maps of the region. Table 1 presents the various United States Geological Survey topographic quadrangles that cover the study area.

TABLE 1

USGS QUADRANGLES

1:24,000 (7.5 Minute Series)

Baxter	Fort Ripley
Belle Prairie	Motley SE
Belle Prairie NW	Pillager
Cushing	Randall East

1:50,000 Series

Camp Ripley & Vicinity

1:250,000 Series

Brainerd

Cantonment Area: The cantonment area is located in the southeastern corner of Camp Ripley (Figure 4). The cantonment area covers about 1,955 acres and is laid out in a rectangular-shaped grid that is oriented north and south. The main gate enters on Walsh Drive at its junction with State Highway 115. The main entrance to Camp Ripley is ornamented with a stone wall and castellated turrets made of black granite secured from stone quarries located six miles east of the camp grounds and near Freedhem in Morrison County (Kasperek 1943:2).

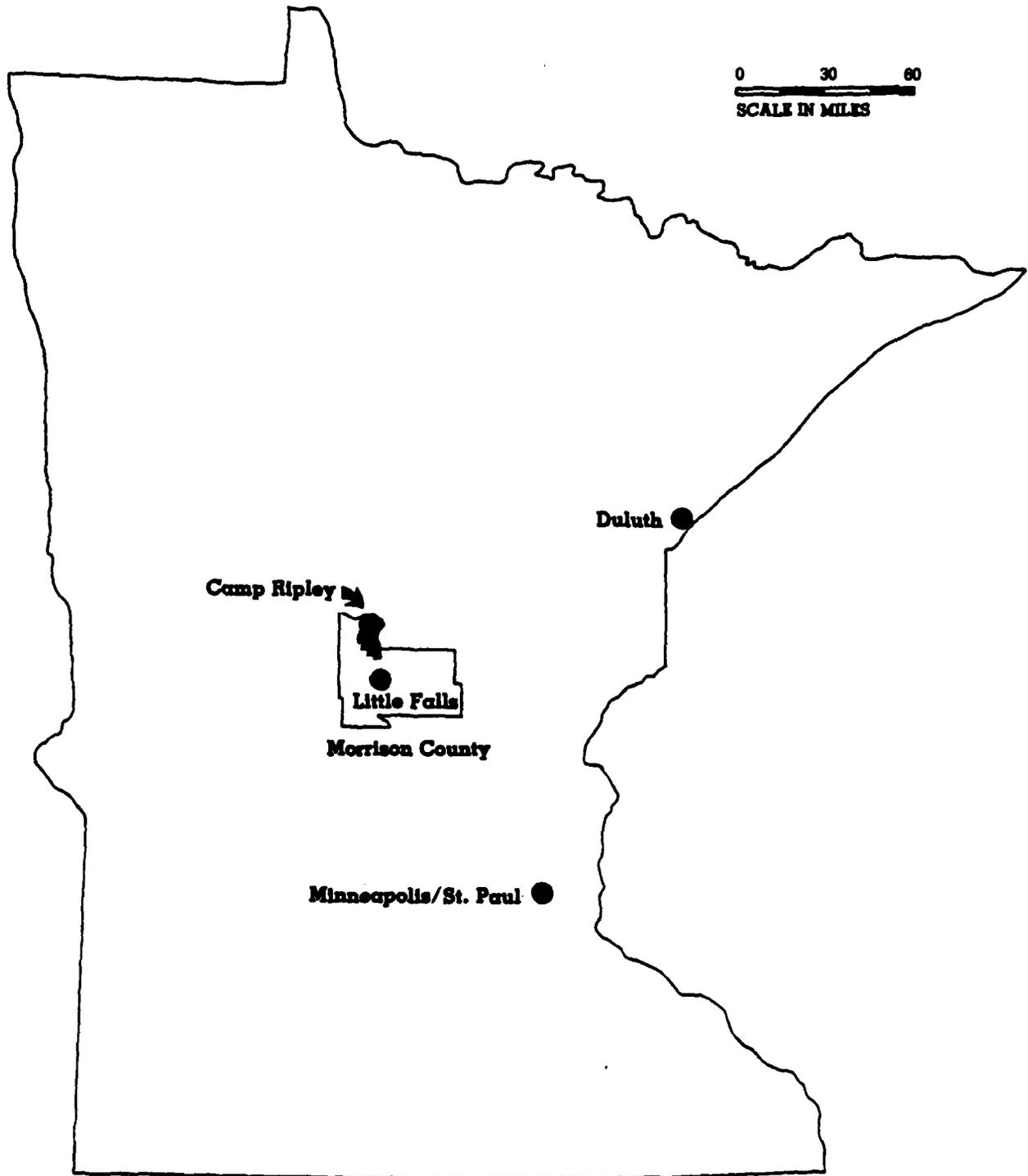


Figure 1
Project Location in Minnesota

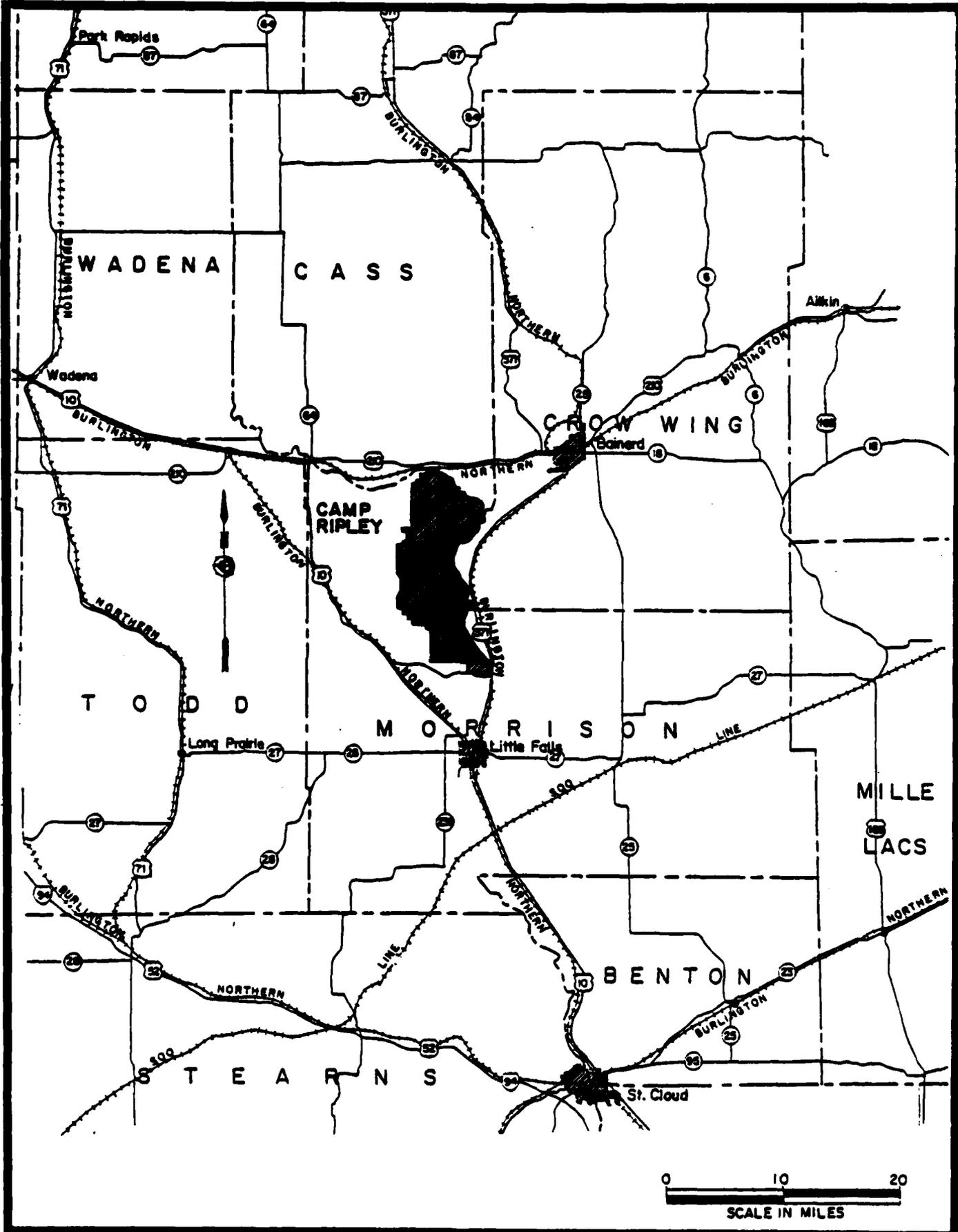


Figure 2
Camp Ripley and Vicinity

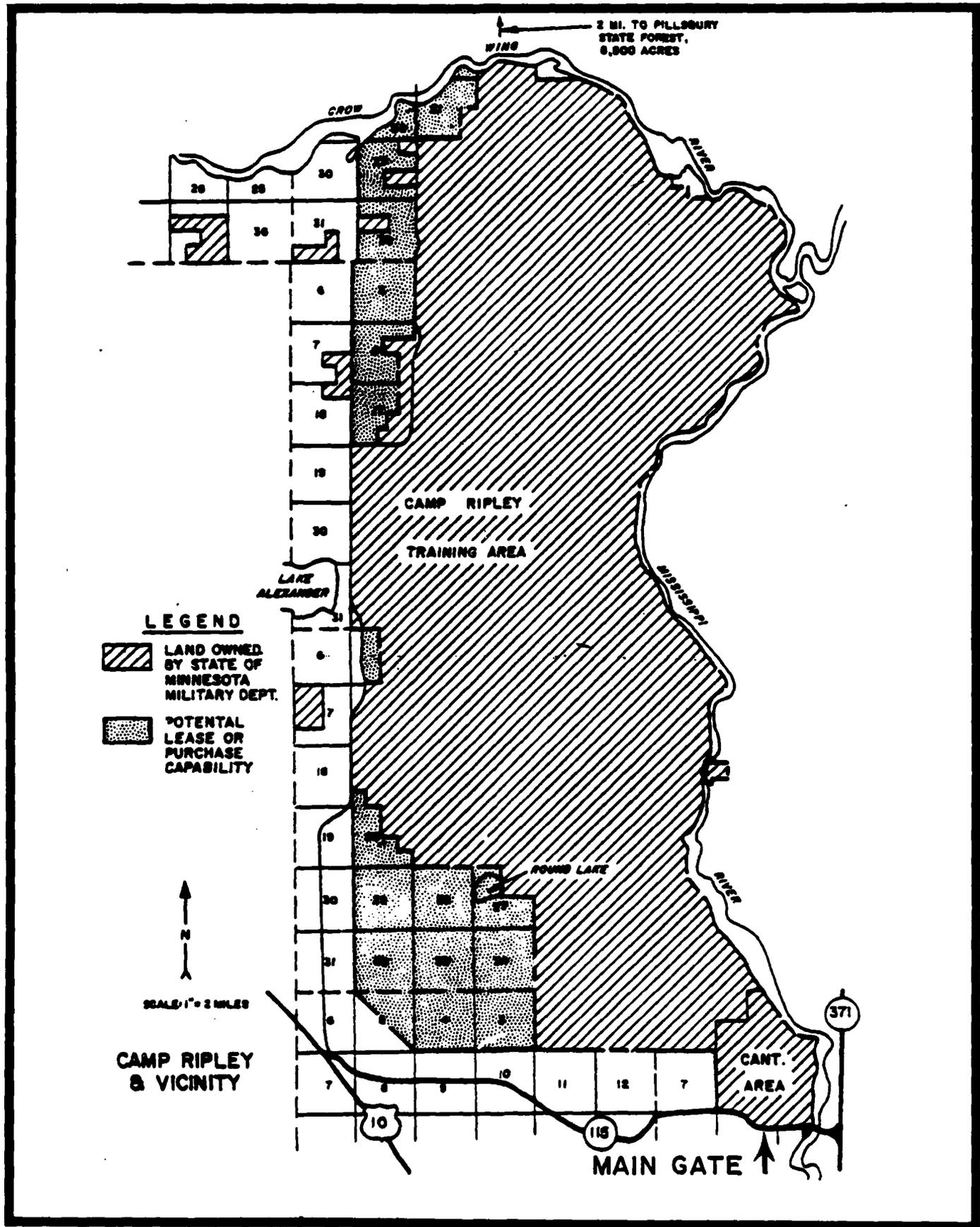


Figure 3
Camp Ripley Boundaries

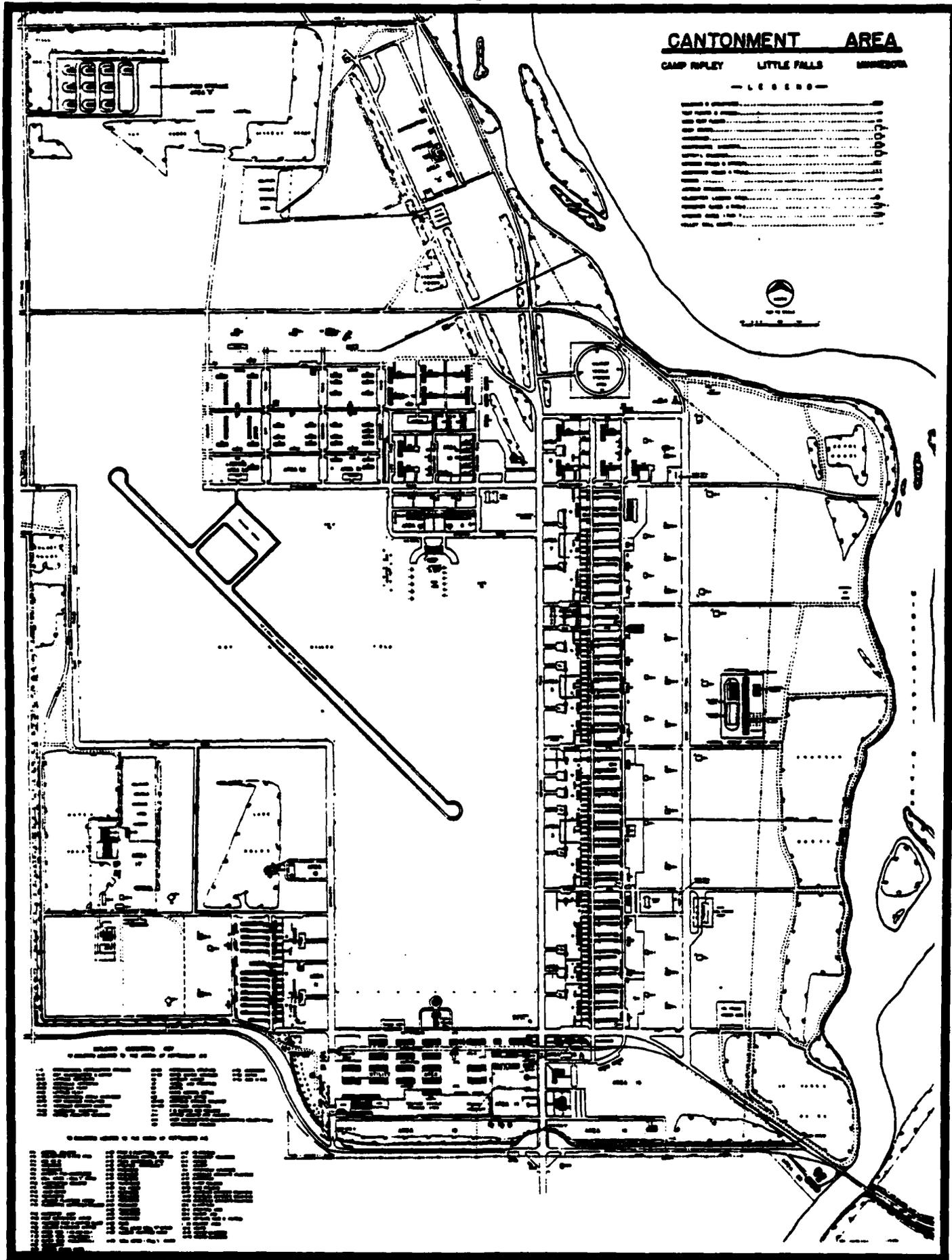


Figure 4
Camp Ripley Cantonment Area

Most of the buildings in the cantonment area are constructed in a very uniform fashion off the roads, which run north and south or east and west. There are a large number of unheated metal buildings (hutments) on the east and west sides of the cantonment which are used as temporary barracks during the summer months. The remaining permanent buildings are primarily cement block or masonry construction with cement floors and tile or asphalt shingle roofing. A few World War II-type, two-story wood frame barracks are also located in the area.

Airfield: The relatively level terrain of the cantonment area has made it ideal for building purposes and for Camp Ripley's airfield which measures 5,000 x 75 feet, with 25-foot shoulders. Associated with the airfield are hangers, a control tower, and parking apron. A fire and rescue station is currently under construction.

Training and Maneuver Areas: The areas north and west of the cantonment area are used for various types of training. This includes range firing, tactical maneuver exercises, as well as winter and engineer training. Existing on-post maneuver acres total 47,035, while off-post maneuver acres total 1,672. Approximately 40 acres of land used for bridge crossing exercises are located on the west side of the Mississippi River in Crow Wing County, immediately north of and adjacent to the Morrison County line. Additional scattered parcels of military reservation land are located from 1-4 miles along the west camp boundary line in the townships of Clough, Motley, and Rail Prairie. Approximately 8,600 acres of leaseable property suitable for military purposes are available west of and adjacent to the reservation boundary. Several islands in the Mississippi River, although not located within the camp boundary, are also available for training.

Recreation Areas: Several designated recreation areas used for picnicking, swimming, fishing, and other day use activities are located by lakes and along the Mississippi River at Camp Ripley. The camp also has several softball diamonds, basketball, volleyball, and tennis courts, a physical combat proficiency course, ski-hills, and an olympic quality biathlon course. During the winter and fall deer archery season, many bow hunters are allowed on the reservation.

Outline of Present Report

The following report is composed of seven parts. Section 1, of which this is a part, presents general background data on the mobilization project. Information on the natural environment and culture history of the region is summarized in Sections 2 and 3, respectively. The methods employed during the course of the research and a brief outline of available reference materials are presented in Section 4. In Section 5, the results of the study are discussed. Section 6 describes the known and predicted impacts of past and future development at the camp. Recommendations for managing and interpreting the cultural resources data base as well as implementing a phased program for future cultural resources studies at Camp Ripley is presented in Section 7.

A bibliography as well as the scope of work (Appendix A), vita of the principal investigator (Appendix B), and draft report review comments and responses (Appendix C) are presented at the end of the report.

Individual data sheets and the distribution maps for all reported cultural resources are presented in a supplemental volume.

SECTION 2
THE NATURAL ENVIRONMENT

Topography and Geology

Camp Ripley is located in the north central part of Morrison County in the Central Lowland-Western Lake physiographic region (Schwartz and Thiel 1954:13). The area is characterized by numerous lakes, marshlands, and steep wooded hillsides which are the result of glaciation that occurred ca. 60,000-12,000 years ago.

Geologically, Camp Ripley and vicinity is underlain by granite, schist, and other Pre-Cambrian igneous and metamorphic rocks (Borchert and Gustafson 1980:11). As a consequence of glaciation, bedrock in the region is overlain by unsorted debris laid down by the glaciers and by outwash, that is, sorted sands, silts, clays, and gravel deposited by melt waters. The glacial outwash at Camp Ripley extends from about 50 feet to over 200 feet in thickness (Allison 1932:130; Jones, Akin, and Schneider 1963:A10).

The terrain of Camp Ripley is dominated by the rugged St. Croix moraine which rises approximately 100-400 feet above the surrounding outwash plains and marks the western terminus of the Superior and Rainy lobes of the Patrician ice sheet which advanced south from Canada into north-eastern and central Minnesota during the Cary substage of the Wisconsin glaciation about 20,500 years ago (Schneider 1961:7-8; Wright 1972b:570). The moraine extends from its junction with the Itasca Moraine near Walker in Cass County south to St. Cloud where it is interrupted by more recent glacial drift. The St. Croix moraine ranges from 3-8 miles wide and is broken by the Pillager Gap, an erosional valley which carried meltwater and outwash west into the Mississippi River as the glacial ice retreated from the region. The southern end of this prominent feature lies within the northernmost part of Camp Ripley. The Crow Wing River flows through this gap today.

Most of the remaining camp area is characterized as a pitted outwash plain. Both the nature of the underlying rock and the land modifying effects of the glaciers produced a level to gently rolling topography in the areas bordering the Crow Wing and Mississippi Rivers and in the vicinity of Round Lake located in the southwestern part of the reservation. The outwash contains numerous lakes and large, level swampy areas which formed when buried ice blocks melted following glacial recession (Zumberge 1952).

Various ice-contact features composed of unsorted deposits of sand and gravel are located at Camp Ripley and in the region. Glaciofluvial features located on the reservation include kames (N 1/2, SE 1/4, NW 1/4, Section 6, T. 130 N., R. 29 W.), eskers (NE 1/4, NE 1/4, NE 1/4, Section 31, T. 131 N., R. 29 W.), and steep-walled kettles (NW 1/4, NW 1/4, NW 1/4, Section 14, T. 131 N., R. 30 W.).

The effects of continental glaciation are apparent in the surrounding region as well. Large, fan-shaped drumlin fields are located on the east side of the Mississippi River near Pierz, about 15 miles southeast of Camp Ripley; south of Randall; and in the Brainerd and Wadena areas to the north (Schneider 1961:7; Wright 1972b:569). The outwash plain on the east side of the Mississippi River, opposite the camp, is interrupted by the Nokasippi River which occupies a sharp erosional tunnel valley carved by the rush of glacial meltwater through subglacial streams (Birk 1979:13). Several raised sediment deposits that mark the course of subglacial streams through stagnant ice are also present in the region. One of the most dramatic and meandering of these glacial features is the famous Ripley esker located about 3 miles northwest of Camp Ripley Junction (Sansome 1983:168-169).

Maximum relief at Camp Ripley is approximately 415 feet, with a maximum elevation of about 1,535 feet above sea level at the site of a former fire lookout tower located west of Bass Lake within the St. Croix Moraine and a minimum elevation of about 1,120 feet along the outwash plain bordering the Mississippi River, east of the cantonment area.

For additional information concerning the Pleistocene geology of central Minnesota and the complex sequence of glacial events in the region, the reader is directed to the comprehensive works by Winchell (1878), Winchell and Upham (1888), Hall (1903), Harder and Johnston (1918), Allison (1932), Leverett (1932), Stauffer and Thiel (1933), Cooper (1935), Zumberge (1952), Schwartz and Thiel (1954), Wright (1955), Schneider (1961), Bray (1962), Jones, Akin, and Schneider (1963), and Wright (1972a, 1972b, 1974).

Soils

Soils at Camp Ripley are classified as Milaca-Brainerd-Hibbing and Menahga sand (Schneider 1961:17-18). These sandy soils were deposited during the advance and retreat of the last ice sheet which covered the region. The Milaca-Brainerd-Hibbing series is a gray-brown podzolic soil which developed under deciduous or mixed hardwood and pine forests and is associated with the St. Croix morainic system in the region. According to Schneider (1961:18), the main distinction among these series is that of different parent materials: the Milaca soils are derived from red sandy till of Cary age, those of the Brainerd series from brown sandy till of Cary age, and those of the Hibbing series from red clayey Valders till. These soils are predominantly sandy, and stony, although some portions contain deposits of clay.

In contrast, the Menahga series is a brown podzolic soil which developed on deep pebbly sands under the influence of Jack and red pine. This soil series is associated with the excessively drained glacial outwash plains adjacent to the Crow Wing and Mississippi Rivers in the northern and eastern parts of the reservation.

Soils in the region are fairly rich and adapted to grazing and grain crops. Most of the farms that operate in the county today are concerned with dairying and livestock raising (Borchert and Gustafson 1980:98).

Vegetation

Prior to the period of initial white settlement, the vegetative cover of the study area, like most of central Minnesota, consisted principally of northern hardwood (maple, birch, aspen, elm, oak, basswood), white, red, and jack pine forests, and scattered prairies (Marshner 1930, 1974; Trygg 1964, 1967, 1969). The presence of immense prairies, particularly along the Crow Wing and Mississippi River corridors, are mentioned in the accounts of early travelers in the region (e.g. Trowbridge, as cited in Brown 1942:336) and recalled by place names such as Green Prairie, Long Prairie, and Belle Prairie. Green Prairie, which bordered the Mississippi River and includes the cantonment area, was originally about three miles long and nearly a mile wide (Upham 1969:352).

The vegetative cover of Camp Ripley and vicinity has changed dramatically over the last 150 years. From the 1840s through the 1920s, large-scale logging operations depleted the vast timber resources of the region, several wetlands in the area were drained, and many areas were cleared for farms. The construction of dams, roads, bridges, churches, and schools in the area, occasional fires, as well as the development of Camp Ripley beginning in the 1930s has further altered the natural landscape.

Plant communities at Camp Ripley today include large open grassy fields (abandoned farmland), brush, sedge marshes, and mixed hardwood, fir, and pine forests.

Water Resources

Camp Ripley lies within the Mississippi River watershed and is drained by a number of small streams which flow eastward to the Mississippi River or northward to the Crow Wing River. The confluence of these two major waterways is located along the northeastern boundary of the reservation. The southwestern part of the reservation is drained by Hay Creek, a tributary of the Little Elk River which empties into the Mississippi River about 2 miles above Little Falls.

Other surface water features at Camp Ripley include numerous small lakes, ponds and wetlands (Table 2). Lakes are particularly abundant in the western and northern parts of the reservation within the St. Croix Moraine. Wetlands are located throughout the reservation, but tend to be concentrated in the outwash plains bordering the Mississippi and Crow Wing Rivers. The largest wetland at Camp Ripley is Hole-in-the-Day Marsh located between East Boundary Road and Bennet Road on the Green Prairie outwash plain, about 3 miles north of the cantonment area.

Wildlife

The environment of Morrison County supported and still supports a wide variety of wildlife. The riverine and woodland resources of the region provide excellent habitat for white-tailed deer, beaver, muskrat, rabbit, fox, squirrel, and other small species of mammals as well as a variety of year-round nesting birds and migrating waterfowl. The lakes and

Table 2 Named Lakes, Ponds, and Wetlands Located Within the Boundaries of Camp Ripley, Minnesota

Name	Civil Township	Township	Range	Section
Mud Lake	Rosing	133N	30W	36 SW 1/4
	Rail Prairie	132N	30W	1 NW 1/4
Tamarack Lake	Rail Prairie	132N	30W	11 SW 1/4
Frog Lake	Rail Prairie	132N	30W	14 SE 1/4
				23 NE 1/4
Bass Lake	Rail Prairie	132N	30W	22 SW 1/4
Fosdick Lake	Rail Prairie	132N	30W	22 NE 1/4
				23 NW 1/4
Coon Stump Lake	Rail Prairie	132N	30W	23 SW 1/4
Cockburn Lake	Rail Prairie	132N	30W	26 NW 1/4
Long Lake	Rail Prairie	132N	30W	27 NE & SE 1/4
Lake Ericson	Rail Prairie	132N	30W	27 NW 1/4
Deer Lake	Rail Prairie	132N	30W	27 SW 1/4
				28 SE 1/4
Still Lake	Rail Prairie	132N	30W	27 SW 1/4
				28 SE 1/4
Quick Lake	Rail Prairie	132N	30W	33 NE 1/4
				34 NW 1/4
Lake Alott	Rail Prairie	132N	30W	33 SE 1/4
				34 NW & SW 1/4
Mud Lake	Rail Prairie	132N	30W	34 SW 1/4
Sheep Lake	Clough	131N	30W	2 SW 1/4
				10 NE 1/4
				11 NW 1/4
Muskrat Lake	Clough	131N	30W	3 NW 1/4
				4 NE 1/4
Johnson Lake	Clough	131N	30W	7 SW 1/4
Mallard Lake	Clough	131N	30W	9 NE 1/4

Table 2 (continued)

Name	Civil Township	Township	Range	Section
Miller Lake	Clough	131N	30W	22 NE 1/4 23 NW 1/4
Holden Lake	Clough	131N	30W	22 NE 1/4 23 NW 1/4
Prentice Pond	Clough	131N	30W	24 NW 1/4
Goose Lake	Clough	131N	30W	26 SW 1/4 35 NW 1/4
Round Lake	Clough	131N	30W	27 NW 1/4
Ferrell Lake (formerly Clough Lake)	Clough	131N	30W	35 NE & SE 1/4
Hagen Pond	Clough	131N	29W	19 SW 1/4 & 30 NW 1/4
Hole in the Day Marsh	Clough	131N	29W 30W	18, 19, 30 12, 13, 24, 25

Source: Foote, Plat Book of Morrison County, Minnesota (Minneapolis, 1892);
U.S. Geological Survey Topographic Quadrangles (Baxter and Pillager
1954; Belle Prairie, Belle Prairie NW, Fort Ripley, and Randall 1956).

streams of the area are also rich in aquatic life, including several important species of fish.

Climate

The continental climate of Morrison County is marked by wide extremes of temperature, both within and between seasons. At Camp Ripley, the annual mean temperature is 44°F, but may range from 46°F below zero to 108°F above zero. The coldest month is January which has a mean daily maximum temperature between 16 and 20°F and a mean daily minimum of -1°F. The hottest month is July, with a mean daily maximum temperature between 82 and 86°F and a mean daily minimum of about 59°F.

The average annual rainfall is about 25 inches a year, while annual snowfalls average about 45 inches. Approximately 60% of the precipitation in the county falls from May through September. The annual growing season is relatively short, ranging between 120 and 140 frost-free days (Borchert and Gustafson 1980:42).

SECTION 3

SUMMARY OF REGIONAL PREHISTORY AND HISTORY

Prehistoric Cultural Development

The prehistoric cultural sequence of Minnesota, like that of North America, has been divided by archaeologists into four major temporal-cultural periods or traditions: Paleo-Indian, Archaic, Woodland, and Historic. The periods, for the most part, represent an uninterrupted sequence of culture history dating back some 10,000 to 12,000 years.

The Paleo-Indian period is the earliest tradition for which there is irrefutable evidence of man's presence in the region. This period was the time of big game hunters whose subsistence derived from hunting and trapping large animals such as the woolly mammoth, the mastodon, and a large form of bison, now all extinct, that traversed the area possibly 10,000 years or so ago. Hunters during this period lived in small nomadic bands which roamed the region in search of the big game animals. The big game hunters made distinctive, expertly chipped projectile points, many of which were fluted for hafting on spear shafts. The earliest projectile points from this period are termed Clovis and Folsom.

Surface finds of projectile points from this period have been found in plowed fields and along gullies and riverbanks throughout the state (Johnson 1969; Caine 1974; Steinbring 1974). Fragments of human skeletons associated with Paleo-Indian lithic materials in Minnesota have been uncovered in gravel pits at Browns Valley and West Union, and in a road cut near Pelican Rapids in the western part of the state (Johnson 1962: 158-159, 1969:6-8). The Browns Valley Man Site is the only excavated Paleo-Indian site in the state (Streiff 1972:35).

Although Paleo-Indian materials would be expected to occur within the study area, none have been reported thus far. Evidence of Paleo-Indian occupation, however, is known from private collections in nearby Crow Wing County, although no diagnostic materials have been observed in the Nokasippi Valley (Birk 1979:100).

During the next oldest tradition - the Archaic period (6000 to 1000 B.C.) - hunting, gathering, and fishing replaced big game hunting as the basic subsistence activity in response to increasingly warmer climatic conditions following the retreat of the glaciers. These changes in subsistence strategies accompanied the replacement of the boreal forest with more temperate deciduous species and the subsequent disappearance of the megafauna from the natural landscape. The period witnessed the development of new human adaptations with seasonally scheduled and regulated movement within distinct territories (Caldwell 1958). The Archaic period is characterized by the appearance of fluted point styles, a dramatic increase in tool diversity, the presence of scrapers, stemmed and notched forms of projectile points and ground and polished woodworking tools such as axes and gouges, and a strong reliance on gathering wild plant foods.

A unique cultural manifestation of the Late Archaic period is the Old Copper Culture (3000 to 1000 B.C.). Indians during this time made tools, weapons, and ornaments from copper imported from the copper fields near Lake Superior. No native copper artifacts are reported from the study area or recently surveyed areas located nearby (e.g. Birk 1971, 1979; Lane 1975; Brew and Yourd 1979).

The Archaic period in central Minnesota is represented by a number of small seasonal base camps and worksites. Some local examples include the much publicized "ancient" quartz workshop of "primitive man" at Little Falls (Winchell 1878, 1911; Lewis 1887; Brower 1902; Holmes 1919; Swanson 1931) and several habitation areas in the Nokasippi Valley in Crow Wing County (Birk 1979).

While surface finds dating to the Archaic period are common throughout the state (Johnson 1969), only a few Archaic sites in northern Minnesota have been excavated (Streiff 1972). Two notable examples include Petaga Point located along the Rum River in Mille Lacs-Kathio State Park in Mille Lacs County (Bleed 1969) and the Itasca Bison Kill Site on Nicollet Creek in Itasca State Park in Clearwater County (Shay 1971). Petaga Point was the first Old Copper habitation site in Minnesota to be excavated (Johnson 1969:11). The Itasca Bison Kill Site is a particularly important site since it has yielded bison bones in direct association with Archaic artifacts and produced the skeleton of a dog - the earliest documented remains of its kind in the state (Johnson 1969:12).

The Woodland tradition (1000 B.C. to 1600 A.D.) is generally considered to begin with the introduction of pottery and the bow and arrow in the Eastern United States. The period saw the beginning of earthen burial mound construction and the adaptation of a semi-sedentary hunting-fishing and gathering mode of existence at seasonally occupied villages located along rivers and lakeshores. According to Johnson (1969:13), Woodland populations in Minnesota remained sparse until the adoption of wild rice which provided them with a more abundant food supply. This dietary staple was supplemented with meat obtained from bison, moose, deer, raccoon, rabbit, beaver, and muskrat.

Numerous surface finds and burial mounds dating to the Woodland Cultural Tradition are known in central Minnesota and throughout the state (Lothson 1967). The earliest known Woodland occupation in Minnesota is from a small conical mound at the Morrison Mound Group located at the outlet of Ottertail Lake, about 65 miles west of the study area (Johnson 1969:18; Wilford, et. al. 1969:21-22).

There are several burial mounds located in the central and northern areas of Minnesota. Morrison County, for example, originally contained a total of 111 individual mounds located at 13 different locations (Anfinson 1983). Approximately 63% of the reported mounds in the county, however, are no longer present, having been destroyed by plowing and land development.

Many Woodland burial mounds and habitation sites have been excavated in Minnesota (Wilford, et. al. 1969; Streiff 1972:35-36). The nearest excavated site in the area is the Gull Lake Dam site located at the outlet of Gull Lake in Cass County, about 7 miles north of Camp Ripley. Portions of 5 conical and 2 linear mounds were excavated here by the University of Minnesota in 1968 and 1969 (Johnson 1971).

Two primary types of ceramic wares are associated with Woodland sites in central Minnesota: Malmo phase ceramics (800 B.C. to 200 A.D.) (Middle Woodland) and Kathio/Blackduck phase ceramics (800 to 1400 A.D.) (Late Woodland). The Malmo phase ceramics appear closest in manufacturing technique and decoration to Middle Woodland Havana ceramics in Illinois (Anfinson 1984:21). The use of Havanoid ceramics dates from about 200 B.C. to 300 A.D. A number of transitional Woodland ceramic series such as Brainerd (net-impressed) and St. Croix/Onamia (stamped/stick impressed) are also reported from burial and habitation sites in the region (Anfinson 1979). Several Woodland ceramics present in the state are noticeably absent from the region. Laurel ceramics, for example, are restricted to the northern third of Minnesota (Stoltman 1973; Anfinson 1984:Figure 9). Other ceramic sequences exist, but will not be described here due to their limited distribution.

It is uncertain whether an Early Woodland occupation exists in the region since diagnostic materials such as La Moille ceramics have yet to be found. This period is generally considered to share many similarities with the preceding Late Archaic and, in all likelihood, probably developed out of it with only limited outside influence. Early Woodland ceramics are known from only a few habitation sites in southeastern Minnesota (Anfinson 1984:19).

During the historic and protohistoric times, the area was occupied by a number of Indian tribes including the Dakota and Chippewa. During the eighteenth century, the Chippewa, an eastern tribe had moved into the region from both north and south of Lake Superior, eventually dominating the northern areas of the region. These tribes fought repeatedly for possession of the valuable rice lakes and natural resources of the region - a war which lasted well into the nineteenth century. A fierce battle between the Dakota and Chippewa took place at the confluence of the Mississippi and Crow Wing Rivers in the year 1768 (Warren 1895:227-232). The rifle pits which the Chippewa used to surprise a Dakota war party are located on a high bank along the Mississippi River in Crow Wing State Park across from Camp Ripley.

Further research by historians and anthropologists regarding the archaeological identification of ethnographically named Indian groups residing in a given area at specified times is needed in Minnesota and throughout the Upper Mississippi River basin. Some initial progress has already been made in this area. A review of Le Sueur's trading contacts among the Historic Dakota Sioux in southern Minnesota (Wedel 1974) and a study of Woodland mounds with intrusive Historic Dakota burials in the state (Anfinson 1984) are two notable examples. Much remains to be done, however. Further comparative studies of recovered artifact assemblages,

particularly ceramic materials and trade items, as well as efforts focused on identifying additional known Historic Indian site locations are needed. It is only by scholarly research, accompanied by archaeological excavations, that the ethnic identities as well as technological and subsistence changes of historic and protohistoric peoples can be properly reconstructed and understood.

Historic Cultural Development

The period of European contact in the Upper Mississippi region begins around 1650 when Sieurs Grosselliers and Radisson pushed their way into the unknown country designated the Great Northwest. The first white man to travel above the Falls of St. Anthony, however, was probably the missionary Louis Hennepin who in 1680 was taken captive by a party of Sioux warriors as he traveled in the region. Hennepin was taken as far north as Mille Lacs Lake but was subsequently freed but only through the intervention of Du Luth (Cross 1938). During the 1700s and 1800s, numerous French-Canadian, British, and, later, American fur traders moved into the region in search of beaver pelts. Missionaries, explorers, and soldiers soon followed, traveling extensively throughout the land.

The area at the strategic junction of the Mississippi and Crow Wing ("Raven's Plume" or "River du Corbeau") Rivers witnessed much of this activity as Indians and trappers used these important waterways as access points and transportation routes for the profitable fur trade. The trader James McGill, for example, is known to have wintered there as early as 1771 (Nute 1930:372). Other fur trading posts were established on Crow Wing Island and along the east bank of the Mississippi, opposite the camp grounds, as late as 1848 (Nute 1930:355, 372-373).

During the 1820s a considerable overland trade developed between St. Paul and the Red River country of the north (Penman 1859; Nute 1925). Hundreds of large wooden ox-carts would head south carrying the year's supply of furs and pelts, then return with fresh supplies of salt pork, flour, and other goods. By 1857 over 500 carts were making the annual trip (Baker 1901:20-21).

During the years several branches of Red River Trails were blazed through the forests and prairies of the region. The Woods Trail extended northward from St. Cloud along the east side of the Mississippi and crossed the river at the mouth of the Crow Wing (Coleman et al. 1967). Sections of the ox-cart trail are preserved today in Crow Wing State Park.

The area also witnessed the passage of several government and private expeditions to the region. In 1805, Lieutenant Zebulon M. Pike, accompanied by twenty men, was ordered north from St. Louis to explore the newly acquired territory in the Louisiana Purchase, negotiate treaties with the Indians, secure conformity with the laws of the United States by fur traders in the region, and select potential sites for American forts (Pike 1811; Coues 1895; Jackson 1966). Although Pike failed in getting British traders to comply with government policies regarding the fur trade, he successfully negotiated a treaty with the Dakota for a large tract of land immediately west of the Falls of

St. Anthony and at the strategic confluence of the Mississippi and St. Peter's (Minnesota) Rivers for the establishment of military outposts. During the upriver journey, Pike and his men ran into cold and rough water and built a log fort on the west side of the Mississippi River at the mouth of the Swan River about six miles below present-day Little Falls, using it as a base camp until leaving the country in the spring of 1806. Pike and a small contingent of his men passed through the area (Coues 1895:316-318) enroute to Leech Lake, which they mistakenly concluded was the source of the Mississippi River. The remains of Pike's fort were uncovered and excavated during the summer of 1984 when river water levels were lowered for repair of the Blanchard Dam (Doug Birk, personal communication, January 11, 1985).

Several expeditions organized to discover the source of the Mississippi River passed through the area, including those led by Lewis Cass in 1820, Giacomo Beltrami in 1823, and Henry Schoolcraft in 1832. During the latter trip, Schoolcraft, who had earlier accompanied Cass on his expedition, successfully located the true source of the Mississippi at Lake Itasca.

During the 1830s and 1840s extensive scientific and geological surveys were conducted in the Upper Mississippi Valley. The earliest geological survey in the region was conducted by the geographer Joseph N. Nicollet, who traveled extensively throughout the region between 1836 and 1839 while preparing an illustrative map of the hydrographical basin of the Upper Mississippi region. Important surveys were also performed by the geologist David Dale Owen who conducted a three-year survey of the mineral deposits of Wisconsin, Iowa, and Minnesota, beginning in 1848, and by Captain John Pope who explored the territory of Minnesota in 1849.

The government survey reports and maps prepared by the early topographers and geologists (Pike 1811; Schoolcraft 1821, 1834, 1855; Beltrami 1828; Nicollet 1843; Norwood 1848, 1852; Owen 1848, 1852; Pope 1850) were widely circulated and consulted by later surveyors, settlers, and travelers. The works of Schoolcraft and Nicollet are particularly significant since they contain some of the first truly scientific ethnographic notes on Native American groups residing in the Upper Mississippi region. Nicollet's 1843 map is also an important document for it shows an established portage route between the west bank of the Mississippi River and Lake Alexander. Part of this route passes through the study area.

The influx of traders, soldiers, and farmers into the Upper Mississippi Valley between the 1820s and 1850s led to the accelerated cession of lands by various Native American groups residing within the region and undoubtedly contributed to the outbreak of Chippewa hostility in 1857 (Pomeroy 1966) and the Sioux uprising in 1862 (Carley 1976).

In 1849, the Territory of Minnesota was organized for civil, political and judicial purposes. Morrison County, named in honor of William and Allen Morrison, was established in 1856 (Upham 1969:350). The first government land surveys within the study area were conducted in 1858 by Oscar Taylor and R. D. Lancaster, and, later, in 1870, by Walker, Allen, and Partmann (United States General Land Office 1858, 1870). In 1859,

Minnesota attained statehood following a decade which saw the population of the region skyrocket by over 2730% (Clark 1914:213). The establishment of individual townships located within the present boundaries of the Camp Ripley study area is presented in Table 3.

By the Treaty of 1847, a large tract of Indian land lying south of the Crow Wing River between the Mississippi and Long Prairie Rivers (Royce Area 268) and extending into what is now Morrison, Todd, Douglas, and Stearns counties, including the study area, was ceded by the Chippewa to the federal government for the purpose of establishing a reservation for Winnebago being removed from northeastern Iowa (Royce 1900:780; Winchell 1911:622). In compliance with a treaty made with the Winnebago the preceding year, the United States government sent General M. Brooke from St. Louis to locate a site for a fort to protect the Winnebago and to keep peace between the Sioux and Chippewa (Jones 1848; Baker 1971:11). The site selected was located on the west bank of the Mississippi opposite the mouth of the Nokasippi River within the study area (Derby 1848a, 1848b; Todd 1850). Construction of the fort in 1848 and 1849 preceded under the supervision of Captain Dana, although most of the actual work was done by Jesse H. Pomroy and other civilian workers (Pomroy MSS; Stearns MSS).

As constructed, the fort consisted of some sixteen frame buildings forming three sides of a square whose opening faced the Mississippi (Ludlow 1880). The barracks occupied the rear and part of the south side of the quadrangle, which also contained officers quarters, a chapel, and a hospital. Officers quarters and a settlers store were located on the north side. Log blockhouses with portholes were built at the northwest and southeast corners of a log stockade which enclosed the other buildings and a parade ground. A blacksmith shop, sawmill, carpenter shop, ice house, granary, mule corral, and horse stables were located outside of the stockade. A military reservation one mile square was maintained about the fort, while across the river a large reservation containing 57,618 acres was established to provide space for gardens, supply forage and wood for the garrison, and keep settlers from moving in too close to the fort (Ludlow 1880).

The fort replaced Fort Snelling as the northernmost post on the Mississippi River and was first garrisoned by Company A of the 6th Infantry Regiment which arrived in April of 1849 under the command of Captain John B. S. Todd (Anonymous 1914; Thomas 1949:179). The fort was originally known as Fort Marcy and later as Fort Gaines. The name of the fort was changed to Fort Ripley on November 4, 1850 in honor of General Eleazer W. Ripley, a Portland, Maine lawyer, who distinguished himself in the War of 1812 and later served in Congress (Baker 1971:29).

To reach the fort a ferry with an 800 foot cable had to be installed (Baker 1971:67). Access to the ferry was made possible by the construction of a military road which extended northward from Point Douglas to Crow Wing along much of the same route as the Red River ox-cart trail (Simpson 1851, 1854, 1855; Larsen 1940; Singely 1974). The ferry remained in service for many years being run by Grant Hand and, after Fort Ripley was abandoned, by D. S. Mooers until a bridge was built here, presumably during the early 1900s. The bridge was swept away by a flood several years ago and never replaced. Ferry service between Morrison and Crow Wing Counties was established for a brief time in the ca. 1950s.

TABLE 3 Chronology of Township Organization Within the Boundaries of Camp Ripley, Morrison County, Minnesota

<u>Township</u>	<u>Year Organized</u>	<u>Named For</u>	<u>Comments</u>
Green Prairie	1868	Charles H. Green, a native of Glenn's Falls, NY who settled in Section 5 in 1855, enlisted in the Third Minnesota Regiment, 1861 and was killed in the battle of Murfreesboro, July 13, 1862.	Originally part of Belle Prairie Township; Motley, Scandia Valley, Darling, Clough, and Parker Townships later organized from it.
Motley	1879	A village founded in 1874 along the Northern Pacific Railroad.	Reduced to its present limits in 1895.
Rail Prairie	1890	Case Rails, a pioneer farmer who settled in Section 18.	Also called Rails Prairie.
Clough	1890	David Marston Clough, lumberman and former governor of Minnesota (1895-1899).	Originally part of Motley Township; contains the ruins of Ft. Ripley in Section 7.
Darling	1891	William L. Darling, of St. Paul, chief engineer of the Northern Pacific Railroad.	Formerly called Randall Township; name changed to Darling in October, 1907.
Rosing	1902	Leonard A. Rosing, the 1902 Democratic candidate for governor of Minnesota.	Originally part of Motley Township; formerly called Crow Wing Township; name changed to Rosing on Sept. 1, 1902.

Sources: Fuller, History of Morrison and Todd Counties, Minnesota (Indianapolis, 1915); Upham, Minnesota Geographic Names, Their Origin and Historic Significance (St. Paul, 1969); Fisher, The Land Called Morrison, a History of Morrison County with Brief Sketches of Benton, Crow Wing and Todd Counties (Little Falls, 1972).

The fort's location on the west bank of the river proved most inconvenient and problems with the transportation of supplies, reluctant mail carriers, and several drownings are reported (Baker 1971:21, 37, 44, 67, 68, 143). The fort, nevertheless, was centrally located. The village of Little Falls was located 16 miles to the south, while the Long Prairie Agency of the Winnebago was some 30 miles to the west. Seven miles to the north was the village of Crow Wing. A mile above dwelt the troublesome Chippewa Chief, Hole-in-the-Day. Three miles up the Crow Wing, where Gull River enters, was the Chippewa Indian Agency. Eleven miles beyond, on the east shore of Gull Lake, was St. Colombo Mission established by James Lloyd Beck.

Fort Ripley became a vanguard of early settlement in the region and fostered a period of much activity (Prucha 1953a:182). The fort furnished a considerable amount of business to farmers and traders in the area. One of the first residents to settle in the area was S. B. Olmstead who raised vegetables, grew oats and hay, and provided meat under government contract to the garrison at the fort. His farm was located opposite the fort on the east bank of the Mississippi River (Baker 1971:21). Other farmers in the area, including Frederick Ayer, missionary and teacher to the Chippewa at Belle Prairie, sold provisions to the fort.

Fort Ripley, like many other frontier outposts, also served as one of the first political and judicial centers in the newly created Minnesota Territory (1849) (Enberg 1940:381; Prucha 1953a:76, 95-96) as well as a post office where, in 1853, regular monthly mail service was begun to Fort Garry at Winnipeg (Anonymous 1917:21; McWilliams 1928:308; Patterson 1966:83). The fort was also used as a polling place during elections (Downs 1945:196) and, for a brief time, was the site for publishing a newspaper (McMurtie 1934:22-23; Hage 1967:139; Baker 1971:45-46). The presence of the military, particularly the officers as well as chaplains and their families, also helped set the social tone of frontier life in the region by promoting education and religion and by hosting and attending social dances and gatherings (Manney MSS; Tanner 1905; Fuller 1915:172; Heilbron 1935:380; Gamble 1959; Baker 1971:39, 85).

In 1855, because of an economic depression and the belief that troops were no longer needed to keep the 20-year peace, Fort Ripley was evacuated but was soon reactivated after the Chippewa pillaged the surrounding area. Following the outbreak of the Civil War, Minnesota Volunteers replaced federal troops at the fort (Doud MSS; Washburn MSS; Whitefield MSS; Board of Commissioners on Publishing of History of Minnesota in Civil and Indian Wars 1890, 1893; Hicks 1918; Newson 1934; Imholte 1963; Hubbs 1965). During the Sioux outbreak in 1862 settlers took refuge in the fort (Fuller MSS). The fort played only a minor role during the uprising, however, being used mainly for housing troops to guard the stage route between St. Cloud and Fort Abercrombie (Babcock 1963:280).

After the Civil War, Fort Ripley was again garrisoned by regular army troops. In 1870 a garrison from the fort was ordered across the river to quell a workers' riot on the Northern Pacific Railroad which was under construction (Baker 1971:153). In 1868, 1870 and again in 1877, a few months before the fort was abandoned, fires destroyed many of the buildings.

The fire of 1868 was particularly catastrophic, since it claimed the lives of Ordnance Sergeant Frantzkey and his four children (Baker 1971:150). The fort was last garrisoned by Company G of the 20th Infantry Regiment which left for Fort Snelling on July 11, 1877. In 1880 the fort and reservation were sold. During the following year 49 bodies from the fort cemetery were shipped to the National Cemetery at Rock Island, Illinois for reburial with those from other abandoned military posts (Gibbs 1881). The ruins of the stone powder magazine and several cellar depressions are the only visible reminders of the fort today.

Land within the original military reservation, for the most part, was purchased for farming and raising livestock. In 1877, the rail line at St. Cloud was extended northward through the eastern part of the reservation to Brainerd where part of the main east-west line of the Northern Pacific Railroad had been constructed six years earlier. The coming of the railroad to the area was an important boost to the local economy as logs, lumber, agricultural products, and other commodities were shipped from Brainerd, Pillager, and Motley to distant market places. While the arrival and expansion of the railroad brought new economic prosperity for some towns, which became centers for shipping grain and lumber and supplying the lumber camps, it spelled economic doom and disaster for others. Crow Wing, for example, which in the 1860s was a thriving town of 600, was abandoned when the railroad bypassed it to the north (Zapffe 1948:10; Wheeler, n.d.:5). By 1880 nearly all of the buildings at Crow Wing had been moved to Brainerd, Little Falls, or adjoining villages and farms (Folsom 1888:479; Coleman et al. 1967:3).

Following the Civil War, economic activity in the region shifted to lumbering as Minnesota's great pinery was cut down to build houses and factories in the Midwest and the Great Plains. The logging industry generated economic opportunity and fostered the settlement of northern Minnesota by "Yankees" from New England along with European immigrants who came to work in the vast stands of white pine. Initially, lakes and streams in the region were used to transport the pine logs to saw mills. In later years, railroads allowed further exploitation of the timber resources, particularly hardwoods, and provided cheap means for hauling logs to mills and lumber to market.

The first logging in the area was conducted in 1847-1848 by Daniel Stanchfield and Caleb D. Dorr who traveled up the Mississippi as far as Crow Wing to cut logs for a boom, dam, and necessary buildings at the Falls of St. Anthony (Loehr 1943:129). Dorr's group is reported to have cut 50 sticks of lumber for which they paid Chief Hole-in-the-Day two hundred dollars. Interestingly, Dorr sold the sawmill that he had purchased in the East to Franklin Steele who later installed it at Fort Ripley where mule power was used to run it while shingles were made for the fort buildings (Loehr 1943:132-133). It appears that an "old saw mill" shown on the west side of the Mississippi River, about four miles below the mouth of the Crow Wing, on the original government land survey of 1858 within the study area refers to an early logging site, possibly the winter camp of Daniel Stanchfield, rather than the sawmill at the fort (Ludlow 1880; Stanchfield 1901:335-338; Trygg 1967, Sheet 12).

The first sawmill in Morrison County was built at Little Falls by James Green in 1849 (Kasperek MSS 1937). During the 1850s, 1860s, 1870s, and 1880s sawmills were erected along many of the streams, lakes, and rivers in the county and at just about every village and town.

The logging era was colorful but short-lived. By the first quarter of the twentieth century most of the virgin timber in the region had been cut. Following the depletion of the timber, attempts were made to farm parts of the cut-over region. Lured by land speculators, many people were attracted to the region in search of new economic opportunities and bountiful harvests.

Farming the cut-over region, however, proved to be an economic disaster because of poor soil, harsh winters, and low farm prices. Despite hard work, most people failed. As tax delinquent land expanded, slash fires spread across the region consuming thousands of acres every year. The creation of county and state forests, as well as fire control and reforestation programs over the last 50 years, have resulted in the present condition of the "North Woods" region. Commercial logging, agriculture, tourism, and recreation are the leading economic industries of the region today.

The land that now includes the cantonment area at Camp Ripley was acquired by the State of Minnesota and by the United States government in 1929 and 1930 from the original homesteaders and land owners in Green Prairie township in order to replace inadequate facilities of the National Guard camp at Lake City, Minnesota (Bettensburg and Miller 1936:129). Subsequent land acquisitions over the years have increased the acreage of the reservation to its present size.

The development of Camp Ripley during the 1930s and 1940s provided hundreds of jobs to unemployed workers during the depression years. Through their efforts, timber was cleared, roads graded, and buildings constructed. Actual construction of the camp was begun in November of 1930, with the first troops occupying the camp in June of 1931 (Bettensburg and Miller 1936:130). In 1941 there were about 600 men employed under various W.P.A. projects at the camp (Kasperek 1943:1).

In 1936 purchase of the site of Fort Ripley was authorized by the State Executive Council for both historical and recreational purposes (Kinder 1937:32). Although a proposed W.P.A. project for the reconstruction of the fort site was approved in 1935, through the efforts of Adjutant General Ellard A. Walsh, and condemnation proceedings for acquisition of the land were filed in 1937, restoration work was never carried out as planned.

Camp Ripley is currently used by the National Guards of Minnesota as well as many states in the region (Kunz 1958:186-187). Thousands of troops undergo field training there each year.

Epilogue

The culture history of Camp Ripley is a microcosm of discovery, exploration, and settlement in the Upper Mississippi Valley under the flags of four nationalities - French, British, Spanish, and American. Beginning in the 1840s and, particularly since the 1930s, the camp grounds have been transformed from a natural landscape in the wilderness into a highly technical modern military installation. The future history of the region will undoubtedly be the future history of the camp. Its destiny no longer belongs to those who shaped its past.

SECTION 4

METHODOLOGY

Research Design

During the first two months of the project, efforts were focused on locating published and unpublished documentary sources directly or indirectly relating to Camp Ripley and its history and compiling background environmental information of the region. The research for this phase of the study began at the State Historical Society of Wisconsin and the University of Wisconsin Geological Library in Madison where numerous sources known to contain pertinent information relating to the archaeology, history, and geology of the area were reviewed. The bulk of these sources included publications of the Minnesota Historical Society (MHS), State Historical Society of Wisconsin (SHSW), and Minnesota Geological Survey (MGS) as well as government documents, county histories, and maps. Several professional archaeological journals, including relevant issues of The Minnesota Archaeologist, were reviewed in their entirety for general background information on cultural resources located in the region.

After all basic data available in Madison was consulted, site records and inventory files housed at the State Historic Preservation Office (SHPO) located at the Fort Snelling History Center in St. Paul were examined and all pertinent site information was recorded. Copies of several reports pertaining directly to archaeological and historical research in Minnesota were also reviewed.

During November of 1984, additional reference materials housed at libraries and museums in St. Paul, St. Cloud, Little Falls, and at Camp Ripley were investigated. Sources of information examined include scholarly books, archaeological, historical, and scientific journals, magazine and newspaper articles, manuscripts, documents, pamphlets/brochures, photographs, and a wide assortment of maps. Particularly useful were the extensive collections of the MHS reference and audio-visual libraries and archives research center and the research files of the Morrison County Historical Society in Little Falls. In all 3 museums, 6 libraries, and 2 archives in Minnesota and Wisconsin were visited.

Government Land Office surveyor's maps and field notes on file in the County Recorder's Office at the Morrison County Courthouse in Little Falls were also examined. Local government documents such as deeds, mortgages, land records, tax rolls, court records and censuses are available, but were not reviewed during the course of the investigations.

Consultations with representatives of the U.S. Army Corps of Engineers, St. Paul District, the Minnesota SHPO, and the Minnesota Department of Military Affairs as well as reference librarians, archaeologists, historians, architectural historians, and others familiar with the cultural resources of the region were conducted during the "field" research. In addition, several letters requesting site specific information were sent

to various individuals and local governmental agencies, including the Morrison and Todd County Clerks as well as representatives of the Mississippi Headwaters Board, Minnesota Power and Light Company, and Minnesota Department of Natural Resources.

A working bibliography was maintained throughout the course of the study in order to provide a basic reference guide to the cultural and natural history of the region. All references listed in the bibliography, unless specified otherwise, were personally examined by the author.

As the cultural resources data was compiled, all pertinent information was recorded on single-page site inventory forms designed specifically for this purpose. Adequate space was allotted for recording geographical and legal descriptions, identified cultural components, and bibliographic and map references. The recorded site information as well as the bibliography represent the majority of effort expended during the course of the investigation. The individual site data sheets compiled during the study are presented in a supplemental volume.

Once the baseline data had been compiled and organized, the final weeks of the project were spent plotting each recorded site's location on USGS topographic base maps of the study area, preparing a technical report describing the results of the investigation, evaluating the recorded site information for biases and gaps, and developing recommendations for the future management and interpretation of cultural resources located at Camp Ripley.

While the compilation of data presented in this report is reasonably complete, it is by no means exhaustive. It would be erroneous to assume that all known cultural resources located on the Camp Ripley Military Reservation have been identified during this study. Time and budget constraints, for example, prevented the author from tracking down and contacting previous land owners for possible artifact collections and reference materials. This and the lack of any previous systematic archaeological recovery work at the camp is unfortunate given the high level of information that usually results from these types of activities (e.g. Fay 1978; Birk 1979; Overstreet et al. 1982).

Reference Materials

There is considerable documentary and published material on the pre-history and history of Camp Ripley and the surrounding region. Approximately 300 bibliographic references (excluding maps) containing pertinent information on the area were identified during the course of the literature search and records review. As one would expect, there is no one source which summarizes the environmental, archaeological, and historical/architectural data of the region. Schneider's overview of the Pleistocene geology of the Randall region in central Minnesota (1961), Fridley's thematic guide to localized history in Minnesota (1966), Birk's report of an archaeological survey of the Nokasippi River Valley (1979), and Murphy's study of the architecture of Minnesota Department of Military Affairs' buildings at Camp Ripley (1984) were perhaps the most comprehensive works that were reviewed.

This section of the report has been prepared to give the reader a better understanding of the diversity of available reference materials that were consulted during the course of study. For sake of brevity, only the major categories and a few examples of the types of available sources of information examined during the study will be outlined.

Archaeological Sources: Several sources of information relating to Minnesota archaeology were consulted during the project. They include:

- (1) Minnesota Archaeological Site Files;
- (2) Minnesota County Archaeological Report Files;
- (3) Morrison County field notes (Wilford 1945b);
- (4) Publications and reports of the Minnesota Historical Society (Johnson 1969; Wilford, Johnson and Vicinus 1969; Streiff 1972; Anfinson 1983);
- (5) Relevant issues of Minnesota History (Wilford 1944a, 1944b, 1945a), The Minnesota Archaeologist (Macgowan 1947, Fiske 1966, Johnson 1971, Gornoe 1980), and other archaeological/scientific journals, including American Antiquarian (Lewis 1887) American Antiquity (Wilford 1941, 1955), and Bulletins of the Bureau of American Ethnology (Holmes 1919); as well as
- (6) Several 19th and early 20th century descriptive works (Richardson 1880; Brower 1898, 1902; Winchell 1883, 1911).

Information on the archaeology of the region is also documented in a number of archaeological survey reports prepared for local and state agencies within recent years. Reports examined include those by Birk (1971, 1979), Lane (1975), and Brew and Yourd (1979).

Few private and local museum artifact collections from prehistoric and historic archaeological sites in Morrison County, particularly the Camp Ripley area, have been photographed or recorded. This is unfortunate, but not surprising given the limited amount of archaeological investigations conducted in the county. Only 44 known archaeological sites have been reported in Morrison County to date (Anfinson 1983). Of this total, 18 are numbered sites, 17 are unnumbered sites (the site of old Fort Ripley is an example), and 9 are unconfirmed sites. No archaeological site materials from Morrison County are in the collections of the Evelyn Payne Hatcher Museum of Anthropology at St. Cloud State University (Dr. Richard B. Lane, personal communication, November 8, 1984) or at the Carnegie Public Library in Little Falls (Ann Rebischke, personal communication, November 8, 1984). The Morrison County Historical Society museum in Little Falls has a limited collection of Indian artifacts, but none of this material is from the study area (Jan Warner, personal communication, November 9, 1984).

Historical/Architectural Sources: Extant sources of information on the history of the region are even more diverse than the archaeological records and published site materials. They include:

- (1) Pre-20th century descriptive works:
 - Exploration and survey (Pike 1811; Beltrami 1828; Nicollet 1843; Owen 1848; Pope 1850; Schoolcraft 1855)
 - General histories (Neill 1858; Minnesota Historical Company 1881; Folsom 1888);
- (2) 20th-century descriptive works:
 - Regional histories (Upham 1920; Folwell 1908; Brown 1948; Blegen 1975)
 - County histories (Ogle 1904; Fuller 1915; Fisher 1972)
 - Local histories (Caswell 1932; Bettenburg and Miller 1936; Kinder 1937; Kasperek 1943; Heilbron 1943; Kraywinkle 1972; Carley 1976);
- (3) 19th century travel accounts (Lanman 1847; Glazier 1891);
- (4) 19th century commercial directories and travelers' guides (LeDuc 1852; Parker 1857; Edwards, Greenough & Deved 1866; McClung 1870);
- (5) Letters of correspondence (Gibbs 1881; Conley 1936);
- (6) Personal reminiscences (Stearns 1872; Andrews 1928; Newson 1934);
- (7) Publications of the Minnesota Historical Society (Collections of the Minnesota Historical Society; Minnesota History; Minnesota History News; Gopher Historian);
- (8) Publications of various state historical societies and research institutions (South Dakota Historical Collections and Reports, Utah Historical Quarterly, Collections of the State Historical Society of Wisconsin, Wisconsin Magazine of History);
- (9) Scholarly books (McWilliams 1928; Prucha 1953a; Kunz 1958; Bray 1970; Baker 1971; Singley 1974; Kane, Holmquist and Gilman 1978; Merritt 1979);
- (10) Federal government documents and reports (U.S. Government Land Office survey records and field notes; Senate and House Executive and Miscellaneous Reports; U.S. Department of the Interior, Bureau of Outdoor Recreation 1977; U.S. Army Corps, of Engineers, St. Paul District 1984; National Register of Historic Places);

- (11) State government documents (Board of Commissioners on Publications of History of Minnesota in Civil and Indian Wars 1890-1893; Minnesota Geological Survey bulletins);
- (12) Local government documents (Morrison Soil and Water Conservation District 1971; Mississippi Headwaters Board 1981);
- (13) Popular tourist guidebooks (Holmquist and Brookins 1972; Olsenius 1982);
- (14) Intensive architectural and historic building survey reports (Murphy 1984; Roberts and Jenkinson, in press);
- (15) Indexes and reference guides (Wheelhouse 1928; Blegen and Heilbron 1931; Nute and Ackermann 1935; Jerabek 1936; Fridley 1966; Pestana 1972; Brook 1974; Treuder 1980; Brook and Rubenstein 1983; Katz 1983);
- (16) Unpublished manuscripts (Rev. Solon W. Manney diary 1851-59; Kasparek 1942; Pomeroy 1966; Rising n.d.; Wheeler n.d.);
- (17) Theses and dissertations (Prucha 1947a);
- (18) Iconographic collections (Camp Ripley Military Reservation, ca. 1931-52, in possession of the Minnesota Historical Society);
- (19) Minnesota newspapers (Bomb Shell; Brainerd Daily Dispatch; Little Falls Daily Transcript; Little Falls Herald; Minneapolis Tribune; Muzzle Blast);
- (20) Pamphlets and brochures (Welcome to Camp Ripley);
- (21) Maps (Mississippi River Commission 1898, 1906; Foote 1892).

Although these reference materials are of uneven quality and reliability, together they comprise a wealth of information which is of particular value to the culture historian interested in reconstructing and understanding life in central Minnesota during the last 350 years.

Curation

All research notes, maps, forms, letters of correspondence, and other documentation resulting from this cultural resources literature and records search will be curated by Old Northwest Research, Madison, Wisconsin.

SECTION 5

SUMMARY OF RESULTS

Project Data

In all, 5 prehistoric and 59 historic/architectural sites were identified and recorded during the literature search and records review for cultural resources at Camp Ripley. Table 4 presents the compiled data arranged by site type and township. Approximately one-sixth of the recorded sites are located within the cantonment area of the camp. The only National Register property within the study area is the site of old Fort Ripley. The ruins of the fort are located on the west bank of the Mississippi River along East Boundary Road in Section 7, T. 131 N., R. 29 W., Town of Clough, about 7 miles north of the main gates at Camp Ripley.

Of the five known prehistoric archaeological sites at Camp Ripley, three are habitation areas, one is a mound group, and one is a cemetery/village. All of the prehistoric sites are located on glacial outwash plains bordering the Crow Wing and Mississippi Rivers in the Towns of Rosing, Rail Prairie, and Clough, outside of the cantonment area. There are no prehistoric resources currently reported adjacent to or near any of the morainic lakes or streams in the west part of the reservation. None of the prehistoric sites have been recently field checked to determine site boundaries, mapped, or assigned a state archaeological site number.

Interestingly, only one of the five prehistoric sites at Camp Ripley (i.e. a Woodland phase habitation component at the site of Fort Ripley) is currently recorded in the site files of the Minnesota Historical Society (Anfinson 1983). The existence of two other habitation areas at the camp, in fact, has yet to be confirmed by actual field checks. The lack of any information on the mound group at Camp Ripley is somewhat surprising, however. The five conical mounds along the Mississippi River are marked by a wooden interpretive sign which reads "Burial Site, Indian Mounds." The marker was erected along East Boundary Road by Camp Ripley personnel several years ago.

The historic resources at Camp Ripley are more numerous and more diverse than the prehistoric archaeological resources identified and recorded during the literature search and records review. The fifty-nine historic sites were grouped into seventeen categories. The historic site inventory includes 12 schoolhouses, 9 farmsteads, 8 cemeteries/graves, 5 ferry crossings, 3 trail crossings or fords, 3 bridges, 2 churches, 2 sawmills, 2 fire look-out towers, 1 military fort, 1 post-office, 1 town hall, 1 portage route, 1 townsite, 3 logging camps, and 1 dam and reservoir. In addition, 4 buildings and/or other features associated with Camp Ripley development during the 1930s and 1940s were identified for their architectural and/or historical significance.

Approximately one-half of the recorded historic resources at Camp Ripley are the former sites or ruins of buildings (farmhouses, barns, schools, churches, town halls) relating to rural settlement in Morrison County during the mid to late nineteenth and early twentieth centuries. The

Table 4 Prehistoric and Historical/Architectural Sites Located at Camp Ripley, Minnesota

Site Type	Township						Total
	Motley	Rosing	Rail Prairie	Clough	Darling	Green Prairie	
<u>Prehistoric</u>							
*Habitation		1		2			3
**Mound group				1			1
Cemetery/Village?			1				1
		(1)	(1)	(3)	—	—	(5)
<u>Historical/Architectural</u>							
Bridge		1		1		1	3
***Camp Ripley buildings						4	4
Cemetery/grave		3	3			2	8
Church			1	1			2
Dam and Reservoir		1					1
Farmstead			5	3		1	9
Ferry crossing		2	1	2			5
Fire lookout tower			1	1			2
Ford		2	1				3
Military fort				1			1
Portage route			1				1
Post office						1	1
****Saw-mill			1	1			2
Schoolhouse		2	3	4	1	2	12
Town Hall			1				1
Townsite		1					1
Logging Camp			2	1			3
		(12)	(20)	(15)	(1)	(11)	(59)
TOTAL		(13)	(21)	(18)	(1)	(11)	(64)

*includes two unconfirmed habitation sites

**includes five conical mounds

***includes four architecturally significant buildings at Camp Ripley: the Main Entrance development (1934), Governor's Lodge (Valhalla) (ca. 1934), Armory (1937), and Nelson Hall (1940, 1949)

****includes the possible winter lumber camp of Daniel Stanchfield, 1847-48

cemeteries, gravesites, and most of the transportation-related resources such as bridges and ferry crossings date to this period as well. The earliest historic resources identified during the study include a portage route (ca. 1843) between Lake Alexander and the Mississippi River, the ruins of old Fort Ripley (1848-77), the site of an old saw-mill along the Mississippi River (ca. 1840's-1850's), and the former site of the District No. 12 schoolhouse (1868).

The Sylvan dam and reservoir constructed in 1913 on the Crow Wing River about 3 1/2 miles upstream from its confluence with the Mississippi River was included in the historic site inventory even though it is located outside of the boundaries of Camp Ripley. The dam has changed the natural course and flow of this waterway and impacted several features of the cultural landscape located within or immediately adjacent to the study area including the sites of former river crossings as well as canoe routes used during prehistoric and historic times.

Data Organization

As mentioned earlier, the prehistoric and historic site data sheets compiled during the literature search and records review as well as site distribution maps of the study area are presented in a supplemental volume. For sake of easy retrieval and later updating purposes, the site inventory is divided into two parts: (1) prehistoric archaeological sites, and (2) architectural/historical sites. The data sheets in each inventory are filed by civil township from north to south and west to east within the boundaries of Camp Ripley (Motley, Rosing, Rail Prairie, Clough, Darling, and Green Prairie), then numerically by township, range, and section number.

For mapping purposes, each recorded site was assigned a two-part number. Each site's number appears in the upper right hand corner on the data sheet. The first digit in the code was determined by sequentially numbering the prehistoric and historic resources according to their order of appearance in the site inventory. As a result, numbers 1-5 were assigned to the prehistoric sites, while numbers 6-58 were assigned to the historic sites. The second digit refers to the base map which shows the site's location. Thus, a recorded site having a number of "1-9" means that the location of site number "1" in the inventory appears on "Figure 9" in the report. Figure 7 provides a key to the base maps covering the study area as they have been arranged in the report. The site distribution maps appear as Figures 8-15. The discrepancy in the total number of inventoried sites (N=64) versus the map code numbers (N=58) is attributable to the fact that three ford and ferry crossings, one ferry crossing and bridge, one church and cemetery, and one church and school were given combined site designations for mapping purposes.

Biases and Gaps

Needless to say, many parts of the Camp Ripley Military Reservation have been investigated very intensely while others have scarcely been studied at all. As a result, several gaps and biases in the cultural resources data base exist.

Prehistoric archaeological resources, in particular, are usually scarce throughout the entire study area. The paucity of recorded prehistoric archaeological sites (a total of five) along the Crow Wing and Missis-

Mississippi Rivers, particularly at the confluence area (only one), and the fact that there are no known prehistoric sites of any kind whatsoever located within the vast morainic lakes region of the reservation reflects the lack of and need for systematic archaeological survey work at Camp Ripley. As a result, the information recorded in the prehistoric site inventory file should not be construed as a valid representation of actual site densities.

The historical and architectural data base at Camp Ripley, probably more so than the prehistoric resources, reflects what one would expect from systematic survey and reporting. Two factors account for this: (1) intensive architectural inventory work where historical research accompanies the identification and documentation of significant properties has been recently conducted in the cantonment at Camp Ripley by the SHPO as part of a statewide survey of Minnesota Department of Military Affairs buildings (Murphy 1984); and (2) numerous published and documentary sources contain information on cultural resources located within the boundaries of Camp Ripley (e.g. Fuller 1915; Foote 1892; Bettenburg and Miller 1936; Trygg 1967). Information on the history of Fort Ripley, in particular, is readily available (e.g. Kinder 1937; Prucha 1947b; Baker 1971).

This is not to say, however, that there are no biases and gaps in the historical/architectural data base. A closer examination of the historic resources shows that several deficiencies, in fact, do exist. While some resource types such as schoolhouses are well represented in the record (Table 5), others such as logging camps and farmsteads are notably scarce. The number of agricultural-related resources (farmhouses, barns, out-buildings) formerly located at Camp Ripley is particularly low given previous farming activities in the area. A cursory review of available land ownership atlases and plat maps of Morrison County indicates that there were about 40 "named" farms in operation within what is now the camp area between 1892 and 1915 (Table 6). Several additional "unnamed" farms were formerly located within the camp boundary as well.

Another important factor contributing to the gaps and biases in our present knowledge of the prehistory and history of the area stems from a general lack of understanding concerning the effects of dam construction on landforms and associated cultural resources located in the Crow Wing and Mississippi River Valleys. Although the problems of streambank erosion and shifting sands on the floodplain have been known for some time, the effect of these natural agents on cultural resources has not been adequately studied or monitored. Geomorphological studies, in conjunction with archaeological investigations, similar to those carried out in Pools 10, 11, and 12 of the Upper Mississippi River Basin, need to be conducted along the northern and eastern boundaries of the study area if archaeologists, historians, and cultural geographers are to properly reconstruct and understand the culture history of the region.

Despite these deficiencies, the present compilation of cultural resources data represents a sizeable, although not exhaustive, inventory of known prehistoric and historic sites located within the boundaries of Camp Ripley. It is hoped that the results of this initial investigation will

Table 5 Morrison County District Schools Formerly Located Within the Boundaries of Camp Ripley, Minnesota

<u>District No.</u>	<u>Year Established</u>	<u>Location</u>	<u>Source</u>
12	1868	Green Prairie Township T130N-R29W-8 NE 1/4	Foote 1892:43 Fuller 1915:99 Randall & Reilly 1919:33
43	1884	Clough Township T131N-R30W-12 NW 1/4	Foote 1892:45 Fuller 1915:99 Randall & Reilly 1919:36
47	1886	Rail Prairie Township T132N-R30W-20 NW 1/4	Fuller 1915:99
69	1892	Clough Township T131N-R30W-22 NW 1/4	Fuller 1915:100 Randall & Reilly 1919:36
82	1896	Rosing Township T133N-R30W-22 SW 1/4	Fuller 1915:100 Randall & Reilly 1919:40
86	1897	Rail Prairie Township T132N-R30W-12 SE 1/4	Fuller 1915:100 Randall & Reilly 1919:38
94	1899	Rail Prairie Township T132N-R30W-26 SW 1/4	Fuller 1915:100 Randall & Reilly 1919:38
102	1900	Darling Township T130N-R30W-1 NE 1/4	Fuller 1915:100 Randall & Reilly 1919:34
114	1903	Rosing Township T133N-R29W-31 NE 1/4	Fuller 1915:100 Randall & Reilly 1919:40
?	?	*Clough Township T131N-R30W-10 SE 1/4	Foote 1892:45
?	?	Clough Township T131N-R30W-26 SE 1/4	Foote 1892:45
?	?	Green Prairie Township T130N-R29W-17 NE 1/4	Schneider 1961

Sources: Foote, Plat Book of Morrison County, Minnesota (Minneapolis, 1892); Fuller, History of Morrison and Todd Counties, Minnesota (Indianapolis, 1915); Randall and Reilly, Atlas of Morrison County, Minnesota (Little Falls, 1919?); Schneider, Pleistocene Geology of the Randall Region, Central Minnesota (Minneapolis, 1961).

*probably a church-affiliated school

Table 6 Morrison County Named Farms Formerly Located Within the Boundaries of Camp Ripley, Minnesota

<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Acres</u>	<u>Farm Name</u>	<u>Landowner</u>	<u>Source</u>
<u>Rosing</u>						
*133N	30W	14 fract. W1/2-SW 1/4; & fract. SE-SW 1/4; & fract. SW-SE 1/4	142	Spring Valley Farm	C. Deaver	Foote 1892:51, 57
*133N	30W	28 NE-NE 1/4; & SE-NW 1/4; & S 1/2-NE 1/4	160	Aspen Grove Farm	Wm. N. Franklin	Foote 1892:51, 57
<u>Rail Prairie (Rails Prairie)</u>						
132N	30W	4 N 1/2, S 1/2	160	Pine Grove Farm	Peter Nyman	Foote 1892:48, 58
132N	30W	4 S 1/2, S 1/2	160	Forest Home Farm	Jas. Raimey	Foote 1892:48, 58
132N	30W	4 ?	?	Spring Valley Dairy	F. L. Swanson	Fuller 1915:92
132N	30W	9 NE-NW 1/4; & & N 1/2, S 1/2	120	Spring Hill Stock	B. P. Swanson	Foote 1892:48
132N	30W	14 N 1/4, NW 1/4; & SE-NE 1/4;	160	Linwood Stock Farm	H. H. Mann	Fuller1915:91
132N	30W	24 W 1/2, W 1/2 & NE-SW 1/4	160	Fernwood Stock Farm	Norman Austin	Foote 1892:48, 58
132N	30W	34 E 1/2, NE 1/4; & NE-SE 1/4	120	Forest Home Farm	Samuel Quick	Foote 1892:48, 58
132N	30W	34 NW-NE 1/4; & S 1/2-SE 1/4; & SE-SW 1/4	160	Hillsdale Farm	Daniel Tough	Foote 1892:48, 58
132N	30W	34 ?	?	Helendale	Albert R. Long-fellow	Fuller 1915:91
<u>Clough</u>						
131N	30W	2 N 1/2-NW 1/4; & NW-NE 1/4	137.55	Valley Stock Farm	Isiah Poston	Foote 1892:45, 55
131N	30W	2 SW-SW 1/4	40	Lake Side Farm	Geo. Helfrich	Foote 1892:55
131N	30W	8 ?	?	Jersey Home Farm	Hugh Pugh	Fuller 1915:91
131N	30W	10 NW 1/4	160	Hazel Hurst Farm	W. S. Hamon	Foote 1892:45, 55
131N	30W	10 N 1/2, S 1/2	160	Greendale Farm	Joseph Quick	Foote 1892:45, 55
131N	30W	10 S 1/2, N 1/2	160	Sunnyside Farm	Frank Johnson	Foote 1892:45, 55

Table 6 (continued)

<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Acres</u>	<u>Farm Name</u>	<u>Landowner</u>	<u>Source</u>
<u>Clough (continued)</u>						
131N	30W	12 N 1/2, NE 1/4; & SE-NE 1/4	120	Pleasant View Farm	W. S. Woolsey	Foote 1892:45, 55
131N	30W	12 SW-NE 1/4; W 1/2-SE 1/4; & SE-SE 1/4	160	Spring Valley Farm	W. S. Mushatt	Foote 1892:45, 55
131N	30W	14 N 1/2-SW 1/4	80	Oak Ridge Farm	Thomas Kinney	Foote 1892:45, 55
131N	30W	14 ?	?	Ferndell	A. B. Nichols	Fuller 1915:91
131N	30W	22 S 1/2-SW 1/4; & SW-SE 1/4	120	Burr Oak Farm and Birchwood Stock Farm	Edward S. Hall	Foote 1892:45, 55
131N	30W	24 W 1/2-SW 1/4; NE-SW 1/4;	120	Fernwood Farm	Thos. J. Rouse	Foote 1892:45, 55
131N	30W	26 NE 1/4	160	Goose Lake Farm	Peter Weutenbach	Foote 1892:45, 55
131N	30W	26 S 1/2-NW 1/4; & N 1/2-SW 1/4	160			
131N	30W	26 SE 1/4	160	Pine Dell Farm	Adelbert Robinson	Foote 1892:45, 55
**131N	29W	18 SE-NW 1/4; NE- SW 1/4; & fract. N 1/2-SE 1/4	126.21	Riverside Home Farm	Grant Hand	Foote 1892:42, 56
**131N	29W	31 ?	?	Red Cedar	Clistie A. Rudolph	Fuller 1915:90
Darling						
***130N	30W	2 E 1/2-NW 1/4; & W 1/2-NE 1/4	160.47	Jack Pine Stock Farm	Andreas Drelock	Foote 1892:40, 58
<u>Green Prairie</u>						
130N	29W	6 SE 1/4	160	Englewood Farm	J. Chadwick & Bros.	Foote 1892:43, 56
130N	29W	8 N 1/2-SE 1/4 9 fract. N 1/2	290.34	River Side Stock Farm	A. K. Hall	Foote 1892:43
130N	29W	8 E 1/2-NW 1/4	80	Oakland Home Farm	Frank S. Hall	Foote 1892:43, 56
130N	29W	8 W 1/2-SW 1/4	80	Meadow Lawn Farm (Hazelwood)	Mary Gammon	Foote 1892:43, 56
130N	29W	8 S 1/2-SE 1/4	80	Oak Ridge Home Farm	L. Hall	Foote 1892:43, 56
130N	29W	17 E 1/2-NW 1/4	80	Pine Grove Farm	F.D. & Elizabeth P. Hall	Foote 1892:43, 56

*formerly part of Motley Township

**formerly part of Green Prairie Township

***formerly Randall Township

Sources:

Foote, Plat Book of Morrison County, Minnesota
(Minneapolis, 1892); Fuller, History of Morrison
and Todd Counties, Minnesota (Indianapolis, 1915).

be used to guide future planning strategies, develop interpretive programs and regional research designs, and, ultimately, to protect and preserve significant prehistoric and historic resources located within the study area.

SECTION 6

KNOWN AND PREDICTED IMPACTS OF DEVELOPMENT ON CULTURAL RESOURCES AT CAMP RIPLEY

Past Development

The development and expansion of the Camp Ripley Military Reservation has directly impacted several prehistoric and historic sites. Road construction and grading activities, for example, have destroyed parts of one prehistoric habitation area near Hole-in-the-Day Marsh and impacted the eastern margins of the site of Fort Ripley. This is unfortunate since it has resulted in the irretrievable loss of important site data in its previously undisturbed context.

Camp development has also adversely impacted several historic resources relating to rural settlement in Morrison County during the mid-late nineteenth and early twentieth centuries. As Camp Ripley expanded, standing structures such as farmhouses, barns, and schools located within the boundaries of the camp, particularly in the training and maneuver areas, were torn down and removed. Needless to say, most of these buildings are no longer available for architectural or comparative study. In some cases, buildings were "saved" for further use by moving them outside of the boundaries of the camp. The District No. 82 schoolhouse (also known as the Franzon School) is perhaps the most notable example. This one-story white clapboard building was constructed in 1896 in Section 22, T. 133 N., R. 30 W., Town of Rosing. It was moved from along Greely Road to Section 29 where it presently serves as the Rosing Town Hall (Maj. Wayne A. Johnson, personal communication, January 7, 1985).

The construction of trails, tank traps, firing and target areas, helicopter pads, bridge crossings, and land development in the cantonment area (roads, buildings, underground utilities and storm drains) has resulted in further alterations of the natural and cultural landscape. The extent of damage to prehistoric as well as historic resources in these areas, however, will not be fully known until intensive site surveys and evaluation studies have been conducted.

The impacts of Euro-American frontier settlement and rural land use prior to camp expansion on prehistoric and historic resources located within the study area are less clearly understood. While it is reasonable to assume that the construction of town roads, farm buildings, schools and churches as well as previous agricultural activities have potentially impacted known as well as unknown cultural resources located within the camp boundaries, the amount and extent of damage to the cultural resource base from past agricultural and rural land use activities has not been adequately studied much less recorded. It will remain so until intensive reconnaissance survey work has been conducted at Camp Ripley.

Mobilization Projects

As currently planned, none of the 43 proposed mobilization projects will have any significant adverse effect upon the known cultural resources at Camp Ripley (Tables 7-9). Most of the projects are located in previously

TABLE 7

Group I Full Mobilization Projects

Camp Ripley, Minnesota

Instl Prj	Proj No	Cat Code	Description	U/M		Current		Mob.	
				Quantity	(\$000)	Working Estimate	Required Occupancy	Latest Start	Project Group
1	IM5701	721 11	Winterize EM barrack	SF	34,000	427	M+0	M-90	I
2	IM5702	722 10	Winterize EM dining facilities	SF	14,336	143	M+0	M-90	I
3	IM5703	723 24	Winterize detached lavatories	SF	5,500	86	M+0	M-90	I
4	IM5706	610 21	Winterize engineer admin. building	SF	2,162	25	M+0	M-60	I
5	IM5705	141 82	Winterize brigade HQ building	SF	5,488	58	M+0	M-60	I
6	IM5708	723 30	Winterize administrative and supply	SF	49,250	539	M+0	M-60	I
7	IM5710	442 70	Winterize battalion general storehouse	SF	25,987	311	M+0	M-90	I
8	IM5711	721 90	Enlisted barrack with dining and latrine	SF	266,500	13,000	M+0	M-90	I
9	IM5729	812 40	Electrical distribution system	LF	281,556	3,742	M+0	M-90	I
10	IM5712	724 10	Unaccompanied housing-officers quarters	SF	21,000	1,050	M+0	M-90	I

TABLE 7
(continued)

11	IM5714	423 10	Cold storage warehouse and meat cutting	SF	16,000	2,263	M+0	M-120	I
12	IM5715	214 10	Vehicle maintenance shop, organizational	SF	23,250	995	M+0	M-90	I
13	IM5716	214 52	Grease rack, covered	EA	6	200	M+0	M-60	I
14	IM5717	214 70	Oil storage house	SF	720	111	M+0	M-30	I
15	IM5718	214 59	Outdoor cleaning and lubrication facility	EA	6	120	M+0	M-60	I
16	IM5719	872 35	Dispatch office	SF	1,152	188	M+0	M-60	I
17	IM5721	123 10	Land vehicle fuel dispensing points	EA	6	334	M+0	M-60	I
18	IM5723	141 11	Airfield fire and rescue station	SF	3,000	443	M+0	M-90	I
19	IM5724	540 10	Troop dental office	SF	8,058	1,565	M+0	M-120	I
20	IM5725	411 80	Liquid fuel storage - bulk (#2)	GA	55,000	400	M+0	M-90	I
21	IM5726	411 20	Aviation gas fuel storage facility (JP-4)	GA	155,000	458	M+0	M-90	I
22	IM5727	411 40	Motor gasoline storage facility	GA	140,000	361	M+0	M-90	I
23	IM5728	411 30	Diesel oil storage facility	GA	170,000	437	M+0	M-90	I
24	IM5730	442 62	Winterize vehicle storage buildings	SF	12,000	78	M+0	M-60	I
25	IM5736	171 70	Gas chamber	SF	1,000	74	M+0	M-20	I

Camp Ripley, Minnesota Mob Group I Total \$27,398

(Total)(Location Factor 0.99) \$27,124

TABLE 8

Group II Full Mobilization Projects

Camp Ripley, Minnesota

Instl Prj No	Proj Code	Cat	Description	U/M	Quantity	Current		Latest Start Date	Project Group
						Working Estimate (\$000)	Required Occupancy Date		
26	IM5705	722 20	Winterize off fld ration din fac	SF	6,529	76	M+21	M+7	I
27	IM5720	872 10	Fencing	LF	7,200	361	M+30	M+8	I
28	IM5722	211 10	Winterize aircraft maintenance hanger	SF	14,000	116	M+60	M+0	II
29	IM5751	136 70	Apron and hardstand lighting with outlets	LF	2,800	81	M+30	M+10	II
30	IM5732	136 13	Visual approach slope indicator	Sum	job	296	M+30	M+10	II
31	IM5733	134 10	Low frequency non-direct radio beacon	EA	1	29	M+30	M+10	II
32	IM5734	442 45	Aircraft flammable storage buildings	SF	100	11	M+30	M+10	II
33	IM5735	730 30	Fixed laundry and steam plant	SF	19,800	2,803	M+180	M+10	II
34	IM5741	740 48	Open dining facility, officers	SF	5,500	801	M+180	M+10	II
35	IM5742	740 47	Open dining facility, NCO	SF	12,000	1,949	M+180	M+10	II
36	IM5744	740 41	Main library building	SF	4,500	445	M+180	M+10	II

Camp Ripley, Minnesota Mob Group II Total \$6,968

(Total)(Location Factor 0.99) \$6,898

TABLE 9

Group III Full Mobilization Projects
Camp Ripley, Minnesota

Instl Prj No	Proj No	Cat Code	Description	U/M	Quantity	Current			Mob. No.
						Working Estimate	Required Occupancy	Latest Start	
						(\$000)	Date	Date	
37	IM5738	740 69	Multi-purpose recreation building with swimming pool and bathhouse	SF	17,600	2,956	M+120	M+10	III
38	IM5743	740 76	Theater with dressing room	SF	11,500	1,202	M+180	M+10	III - 43
39	IM5746	442 40	Inflammable material storehouse	SF	800	96	M+180	M+60	III -
40	IM5747	442 61	Lumber and pipe shed, FE	SF	5,750	186	M+180	M+90	III
41	IM5748	219 20	Facilities engineer facility loading platform and fence	Sum	Job	185	M+180	M+10	III
42	IM5749	750 12	Basketball courts - exterior	EA	16	490	M+180	M+90	III
43	IM5750	750 13	Volleyball courts - exterior	EA	10	94	M+180	M+90	III

Camp Ripley, Minnesota Mob Group III Total \$5,209
(Total)(Location Factor 0.99) \$5,157

Camp Ripley, Minnesota Mob Group I, II, III Grand Total \$39,179

disturbed areas within the cantonment area where development already exists, particularly between East Exchange and East Service Roads in Areas 3, 5 and 7, between West Service and Bodey Roads in Area 11, and in the Utility area.

Furthermore, none of the proposed Group I or II winterization projects will have any adverse impact on barracks, dining facilities, supply and administrative buildings, or other camp structures. Most of these buildings were built during the 1930s and 1940s and are of cement block or masonry construction with tile or asphalt shingle roofing. None of these buildings are architecturally significant or of any historical importance on either the local, state, or national level.

It is difficult to predict what direct or indirect impacts mobilization will have on unknown cultural resources at Camp Ripley until systematic and intuitive archaeological testing of areas has been conducted within the cantonment area and at other places on the reservation. It is expected that the implementation of the proposed sampling strategies outlined in the following section of the report will result in the identification of hitherto unknown cultural resources and, thus, provide a sound, reliable data base for making predictive statements concerning the probable distribution of prehistoric and historic resources in their spatial relation to natural environmental zones.

SECTION 7

RECOMMENDATIONS FOR MANAGEMENT OF THE CULTURAL RESOURCES DATA BASE

The following recommendations for the management of the cultural resources data base at Camp Ripley have been developed from the information compiled during the literature search and records review. For sake of continuity, the recommendations have been divided into three categories: identification, evaluation, and interpretation. The recommendations have been arranged on a priority basis within these categories so that future cultural resources studies at Camp Ripley develop in an orderly, planned manner. Cost estimates for implementing the future phased cultural resources research at Camp Ripley are presented in Table 10.

Identification

1. Of the 43 proposed mobilization projects, 10 should be archaeologically surveyed to locate and evaluate any evidence of prehistoric and historic occupation that might be present within the cantonment area. This work is deemed necessary in order to protect and preserve significant aspects of the cultural environment from adverse effects which might otherwise occur during full mobilization and construction-related activities. Archaeological surveys should be conducted in compliance with the established policies and procedures of federal laws and state guidelines on historic preservation.

Mobilization projects at Camp Ripley requiring archaeological survey work are presented in Table 11 according to their installation priority. Figure 5 shows their locations in the cantonment area. Each project area was "field-examined" during a visit to Camp Ripley in November of 1984 in order to determine previous soil disturbances, record current land-use conditions, and assess its potential for yielding cultural materials. The results of surveying these project areas should be used to make further predictions concerning site density and distribution within the cantonment area at Camp Ripley.

2. Four non-mobilization projects which are planned at Camp Ripley over the next two years should also be archaeologically investigated. Three of the projects are located within the cantonment area (Figure 5). The projects include:

- 2.1 A proposed (storage?) building located on the north side of Leach Ave. in Area 15 of the cantonment area.
- 2.2 Three proposed bachelor officers' quarters (BOQ) located along the north side of Bettenburg Ave.
- 2.3 A proposed solid waste disposal site area located south of Argonne Road and south of Ferrell Lake in Section 2, T. 130 N., R. 30 W., Town of Darling; and

Table 10 Cost Estimates for Future Phased Cultural Resources Studies at Camp Ripley, Minnesota

<u>Description</u>	<u>Current Working Estimate (\$)</u>	<u>Total (\$)</u>
<u>Identification</u>		
1. Mobilization Projects		
Mob I	12,000	
Mob II	6,000	
Mob III	2,000	
2. Future Non-Mobilization Development Projects (2.1 thru 2.4)	7,000	
3. Non-Random Sample Survey Areas (3.1 thru 3.9)	40,000	
4. Random Sample Survey Areas (Training Areas 1, 5, 8, 18, 21)	65,000	
5. Geomorphological Study	25,000	
*6. Inventory Update	<u>5,000</u>	162,000
<u>Evaluation</u>		
1. Field Evaluations of Existing Data Base (5 prehistoric and 56 historical/architectural sites)	30,000	
2. NRHP Nominations	<u>5,000</u>	35,000
<u>Interpretation</u>		
1. Brochures/Pamphlets	2,000	
2. Interpretive Markers	5,000	
3. Permanent Museum Exhibit	10,000	
**4. Traveling Exhibit	<u>20,000</u>	37,000
***Total		<u>234,000</u>

*Includes the cost of updating the inventory in 5 years.

**Private and public funding sources should be sought to help defray costs.

***Figure does not include the cost of reconstructing Fort Ripley or building an interpretive center.

Table 11 Full Mobilization Projects at Camp Ripley Requiring Archaeological Surveys

<u>Mob Group No.</u>	<u>Instl Priority No.</u>	<u>Project No.</u>	<u>Description</u>	<u>Cantonment Area</u>
I	8	IM5711	Enlisted barracks (2)	W side of Infantry Rd. between Stutz & Collins Rds. across from Military Vehicle Storage Area
I	10	IM5712	Officers quarters (3)	Area 23, along Kohout Rd. between Chickamauga Rd. & Ronnigen Ave.
I	11	IM5714	Cold storage warehouse	Utility Area, SE corner of Bettenburg Ave. & Artillery Rd.
I	12-17	IM5715- IM5721	*Motor park with vehicle maintenance shop, dispatch office, grease rack, oil storage house, outdoor cleaning and lubrication facility, dispatch office, and fuel dispensing points.	East Motor Pool Area along Chickamauga Rd.
I	19	IM5724	Troop dental office	Area 15, E of the USPFO
I	20	IM5725	Liquid fuel storage area	SW corner of Artillery & Bodey Rds.
II	34	IM5741	Open dining facility, officers	Area 8, NE corner of Aviation & Luce Rds.
II	35	IM5742	Open dining facility, NCO	Area 9, SE corner of East Exchange Rd. & Green Ave.
II	36	IM5744	Main library building	Area 8, SW corner of Chickamauga & Infantry Rds.
III	37	IM5738	Multi-purpose recreation building	Area 8, NW corner of Aviation & Infantry Rds.

*Includes a proposed storm sewer main extending from Chickamauga Road to the Mississippi River.

- 2.4 A proposed ammo/range office located west of East Boundary Road along the Mississippi River in the NE 1/4 of Section 5, T. 130 N., R. 29 W., Town of Green Prairie.

Three projects are currently under construction in the cantonment area at Camp Ripley (Figure 5). These projects include an airfield fire and rescue station, a storage building, and an addition to the Visitor Education Center. The fire and rescue station has been identified as a Group I priority project for mobilization. All of the projects are located in previously disturbed areas. As a result, construction does not appear to have had any adverse effects on the cultural resources data base.

It is also recommended that all future development plans at Camp Ripley be reviewed periodically by the SHPO to assess the potential impact of construction and development on known and unknown cultural resources. Any plans for expanding or remodeling the Armory, Nelson Hall, Governor's Lodge, or the Main Entrance development, for example, should be sent to the SHPO for comment and review to ensure that the architectural integrity of the structures are protected and preserved. This phase of the cultural resources management plan will, of course, require the continued cooperation of planners, engineers, architects, historians, and archaeologists to insure proper execution of the conservation preservation process.

3. Besides the mobilization and non-mobilization projects, there are several additional areas at Camp Ripley where prehistoric and historic resources might be expected to be found. The terraces along the Crow Wing and Mississippi Rivers and the sandy ridges and uplands bordering lakes, streams, and wetlands, in particular, appear for one reason or another to be likely spots from which available riverine and woodland resources would have been exploited during both prehistoric and historic times. Rather than recommend extensive shoreline site surveys at Camp Ripley, nine targeted water-related areas of varying potential for yielding archaeological and historic resources were selected for archaeological testing (Figure 6). Eight of the nine targeted survey areas are located along the Mississippi River, while one is located along Round Lake. Two of the targeted survey areas are located along the Mississippi River in the cantonment area (Figure 5). Areas which will be either directly or indirectly impacted by mobilization have been marked by an asterisk (*). The targeted survey areas include:

- *3.1 The river crossing bridge site on both sides of the Mississippi River in Section 18, T. 131 N., R. 29 W., Town of Clough, Morrison County, and Section 34, T. 43 N., R. 32 W., Town of Fort Ripley, Crow Wing County.
- *3.2 Picnic Area No. 1 in De Parcq Woods along the Mississippi River in the extreme southeastern corner of the cantonment area in Section 16, T. 130 N., R. 29 W., Town of Green Prairie.

- *3.3 Picnic Area No. 2 along the Mississippi River and East Boundary Road in Section 30, T. 131 N., R. 29 W., Town of Clough.
- *3.4 Round Lake Recreation Area in the southwestern part of the reservation in Section 27, T. 1313 N., R. 30 W., Town of Clough.
- 3.5 The square mile area around the site of Fort Ripley on the west bank of the Mississippi River, opposite the mouth of the Nokasippi River, in Sections 5, 6, 7, 8, and 18, T. 131 N., R. 29 W. and Section 12, T. 131 N., R. 30 W., Town of Clough, and Section 31, T. 132 N., R. 29 W., Town of Rail Prairie.
- 3.6 Areas bordering the confluence of the Crow Wing and Mississippi Rivers, opposite Crow Wing Island, in Sections 4 and 5, T. 132 N., R. 29 W., Town of Rail Prairie.
- 3.7 The sandy terrace along the west bank of the Mississippi River on either side of Engineer Road from a point of land opposite the "Hole-in-the-Prairie" or "Big-Cut-Sandy-Bank," a known geographic feature to the Chippewa located on the east bank of the river, extending south as far as Picnic Area No. 1 in Sections 4 and 9, T. 130 N., R. 29 W., Town of Green Prairie. Portions of this terrace have been disturbed by road construction, utility poles, camp facilities development, and gravel pit and stock-pile operations.
- 3.8 The west bank of the Mississippi River in the extreme southeast corner of Section 30, T. 131 N., R. 29 W., Town of Clough, opposite a point of land on the east bank of the river where Ben. Baker's trading post of 1831-1832 and a late American Fur Company post of 1832-1835 were located; and
- 3.9 The mouth of Broken Bow Creek in Sections 19 and 30, T. 131 N., R. 29 W., Town of Clough, near Pipe Island. The creek has been channelized and altered within modern times but the area appears a likely spot for prehistoric and possibly historic Indian habitation areas.

4. Systematic on-the-ground reconnaissance surveys of selected sample units and documentation of all prehistoric and historic components encountered should be implemented at Camp Ripley. The selection of random sampling units poses somewhat of a problem due to extensively disturbed soils (e.g. tank traps) within the training and maneuver areas and the existence of unexploded munitions in range areas. The latter, in particular, would make shovel testing difficult, if not dangerous.

Since Camp Ripley is divided into 22 training areas (excluding the cantonment area, Mississippi River islands, and scattered parcels of state-owned land along the west boundary of the camp) it was decided to use these areas as the basis for the random selection of sample units.

The boundaries of the training areas are delineated by roads, trails, waterways, and other features easily recognizable on the ground. Although the training areas vary in size, they average about 4 square miles. After eliminating 14 training areas which contained field artillery and small arms firing ranges, 5 of the remaining 8 training areas were randomly selected for survey with the aid of a random numbers table (Robbins and Ryzin 1975:380-383, Appendix Table 3). Training areas at Camp Ripley selected for survey included Areas 1, 5, 8, 18, and 21. Area 1 is located in the southwestern part of the reservation, Areas 5 and 18 are located along the west boundary of the camp, Area 8 is situated along the Mississippi River and includes the site of Fort Ripley, while Area 21 is located at the confluence of the Crow Wing and Mississippi Rivers. Training areas accessible for survey work but were not selected for sampling included Areas 2, 19, and 22. The sampling method represents slightly less than a 25% random sample of the total military reservation. The selected survey areas include various environmental zones for predictive modeling purposes. Figure 6 shows the proposed archaeological sampling survey areas at Camp Ripley.

The fact that many of the randomly selected survey areas overlap some of the targeted survey areas is coincidental. Any surveyed portion of a targeted survey area would, of course, be deleted from a random sample survey area if it had already been field-tested.

Archaeological reconnaissance surveys using similar sampling methods, to the author's knowledge, have been successfully developed and implemented for compliance purposes at other military installations in the United States, including Fort Knox, Kentucky (O'Malley et al. 1980), Fort Campbell, Kentucky-Tennessee (O'Malley et al. 1983), and the Badger Army Ammunition Plant, Wisconsin (Salkin 1983). Although the proposed sampling methods for Camp Ripley differ from the rectangular coordinated land division system or "quadrants" currently used for the Minnesota Statewide Archaeological Survey (MSAS) research design, the goals are similar, that is, the formulation of models that predict the probable distribution of archaeological and historical resources (Minnesota Historical Society 1981:x).

5. Consideration should be given to initiating a geomorphological study of the Crow Wing and Mississippi River floodplains. Implementation of such a program would provide the means for determining the relative age of topographic landforms where early prehistoric sites could be expected to occur. The results of such an investigation have important predictive and cost-benefit ramifications for identifying previously unrecorded prehistoric sites, many of which probably lie buried and undetected beneath shifting silt and sand deposits on islands in the Mississippi River and in the floodplain.

6. The current inventory of prehistoric archaeological and historical/architectural sites should be updated on a 5 year basis or as additional site information becomes available. This will require periodic communication with the SHOP and Camp Ripley staff. The inventory, maps, and bibliography presented here should be considered working documents to

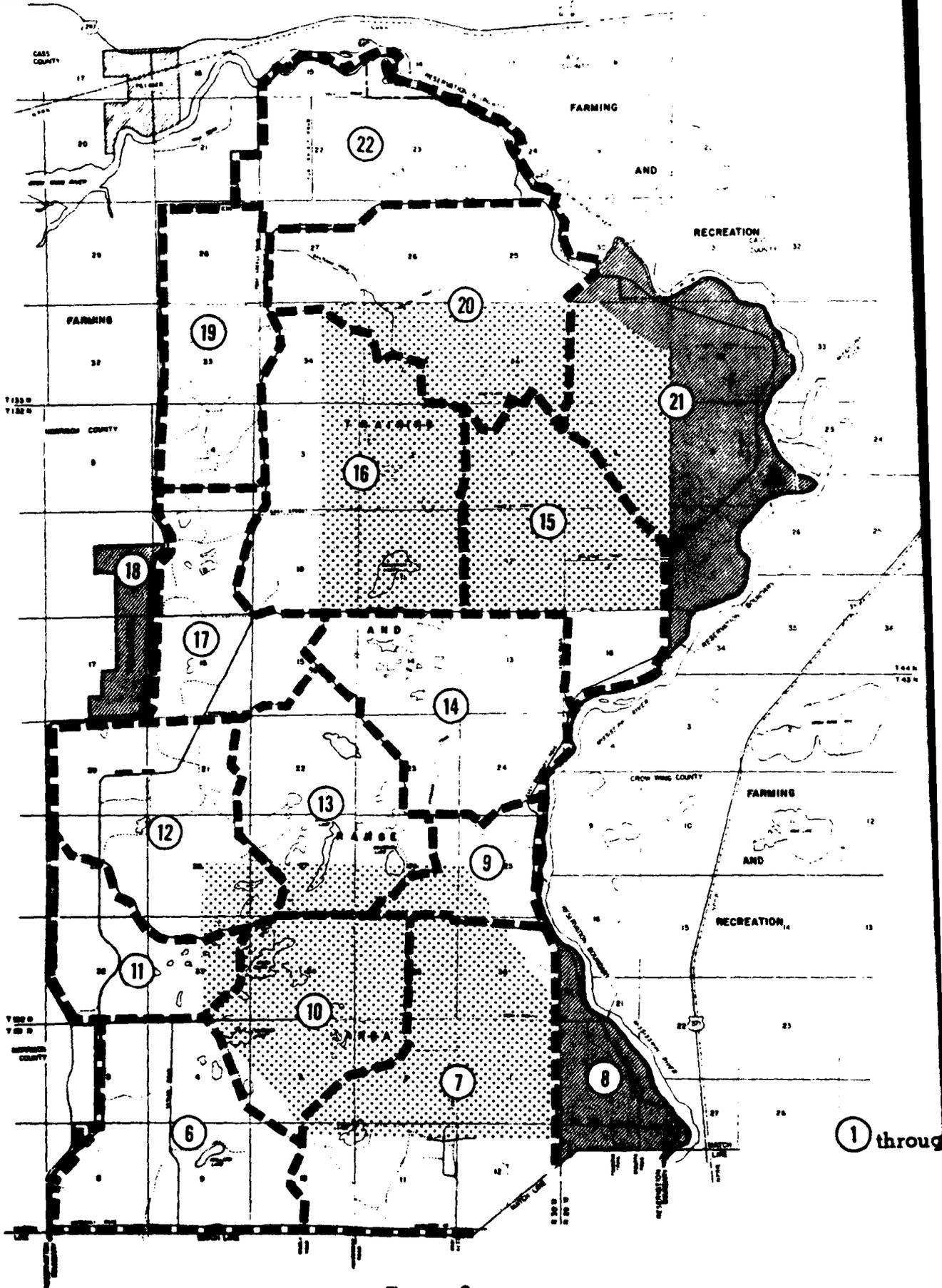


Figure 6
Proposed Archaeological Sampling Survey of Camp Ripley, Minnesota

NEERS

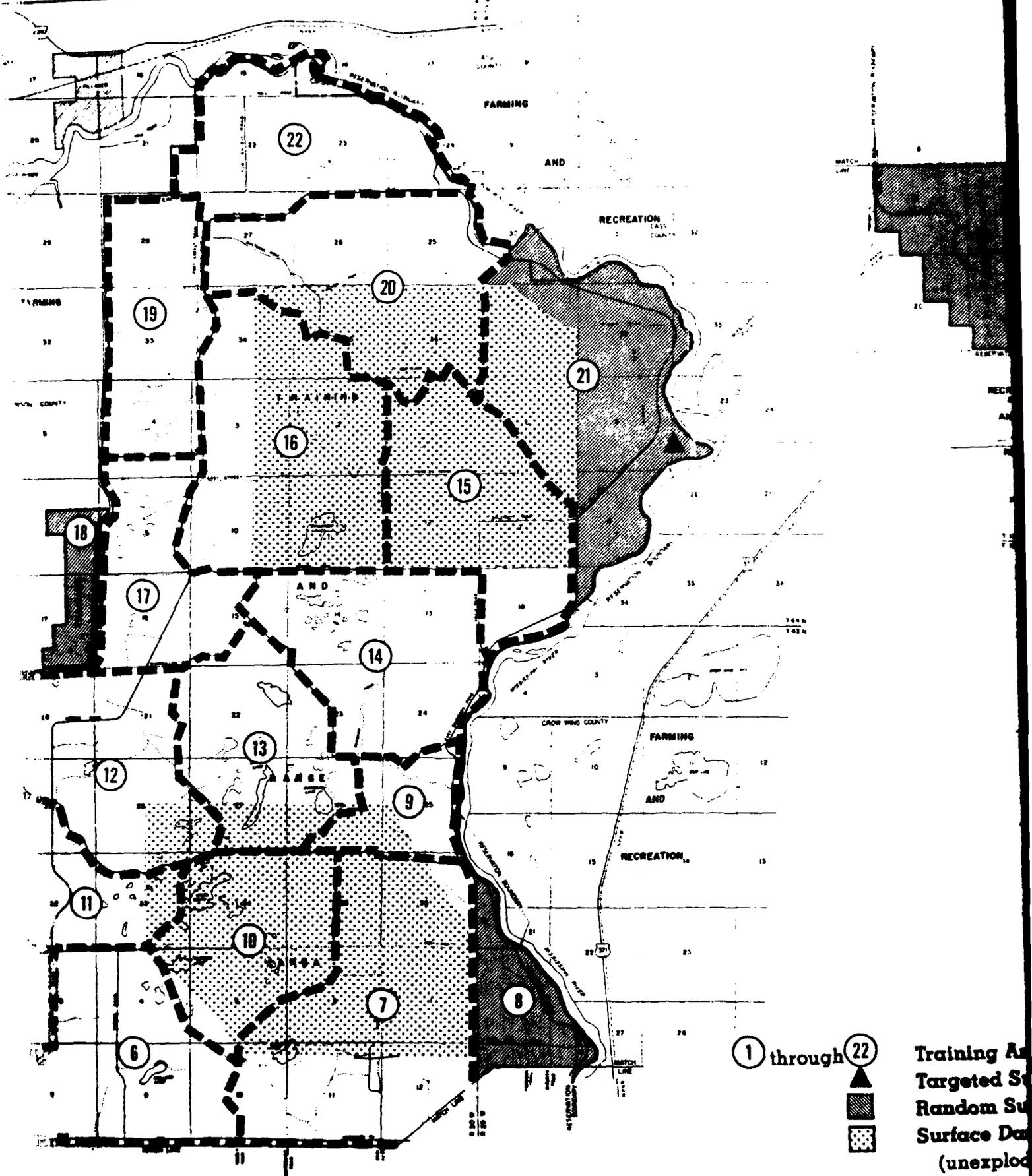
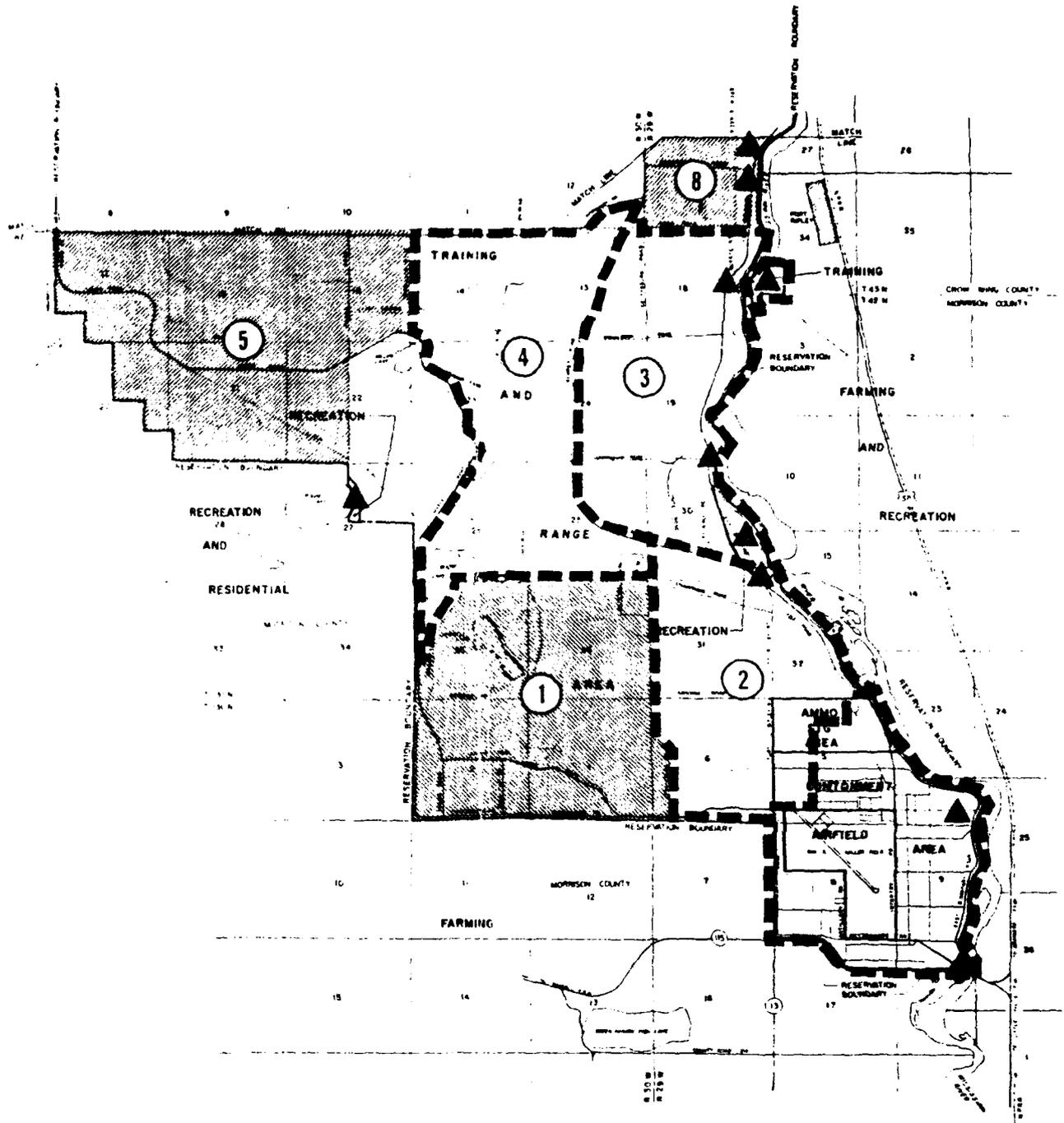
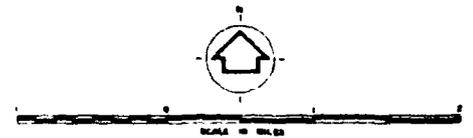


Figure 6
Proposed Archaeological Sampling Survey of Camp Ripley, Minnesota

2



NOTE:
STATE OWNED LAND
AVAILABLE FOR MILITARY USE --- 53,000 ACRES



1 through 22

- ▲
-
-
-

Training Area
Targeted Survey Area
Random Survey Area
Surface Danger Areas
(unexploded munitions present)

3

CAMP RIPLEY LITTLE FALLS, MINNESOTA	
U. S. ARMY ENGINEER DISTRICT, DE MOBILE, ALABAMA CORPS OF ENGINEERS 27 MIL. ENGINEERING GROUP	U. S. ARMY ENGINEER DISTRICT, CORPUS CHRISTI, TEXAS CORPS OF ENGINEERS CHINA, ENGINEER GROUP
MASTER PLAN MOBILIZATION PLAN LAND USE PLAN	
 PROJECT ENGINEER U. S. ARMY ENGINEER DISTRICT, CORPUS CHRISTI, TEXAS	
DATE: 27 APRIL 1967	DRAWN BY: [Signature]
SCALE: AS SHOWN ON THIS PLAN	SHEET NO. 10-08-01

which new baseline data can be easily added with a minimal amount of effort. This will prolong the useful life of the literature search and records review and improve the effectiveness of this report as a long range planning document.

Evaluation

1. Field evaluations of all recorded prehistoric and historic sites at Camp Ripley should be conducted to verify their exact location, record present site conditions, monitor site attrition, and determine their potential for nomination to the National Register of Historic Places. Most of the recorded sites identified during this literature and records review have never been field checked. The prehistoric archaeological sites, in particular, need to be properly recorded and mapped since many of them have never been visited by a professional archaeologist. Although time-consuming, efforts such as this are needed for protecting the cultural, historical, and archaeological resources from misuse, overuse, and vandalism which have occurred under public ownership and for furthering our understanding of central Minnesota prehistory and history. The protection and conservation of cultural resources is one of the state purposes of the Mississippi Headwaters Board's comprehensive management plan and conservation ordinance (Section 3, Part 8) for the river and adjacent lands. Reconstructing the culture and social history and the interactions between human populations and the environment in the Upper Mississippi River Basin are but two of several relevant research topics which the site evaluations could address.

2. Efforts should be made to nominate significant cultural resources located within the study area to the National Register of Historic Places. The Indian burial mounds located along East Boundary Road as well as the Main Entrance development, Governor's Lodge, Armory, and Nelson Hall in the cantonment area, for example, could be nominated individually or, preferably, as part of a Camp Ripley Military Reservation Archaeological and Historic District, multiple resource or thematic group nomination. Possible thematic resources include prehistoric archaeological sites, pioneer farmsteads, rural schools, logging camps, and Camp Ripley buildings.

3. In the event that cultural materials from buried archaeological sites are unearthed during the course of mobilization or future camp development, the State Historic Preservation Officer and the St. Paul District, Corps of Engineers should be notified immediately for assistance in determining the significance of any sites encountered.

4. All human burials and human skeletal remains, both historic and prehistoric, located within the study area should be protected and preserved or removed in accordance with the provisions of the Minnesota Human Burial Law (Minnesota Statutes 1978, Section 307.08, as amended, cited in Gurnoe 1980:153-154).

Interpretation

1. The data compiled during this cultural resources literature search and records review provides the Minnesota Department of Military Affairs with an excellent opportunity to expand its interpretive program at Camp

Ripley and to foster public awareness of the need to preserve and protect not only scenic, scientific, and wildlife areas but archaeological and historical sites as well. While it is not likely that a sophisticated interpretive and educational program will be developed as a result of this study given current funding priorities, it is strongly recommended that some mechanisms for interpreting cultural resources to the public be included in future development and planning strategies.

Efforts should be made to augment the existing public education and interpretive program at Camp Ripley which includes pamphlets, visitors' guides, exhibits, and interpretive markers. A brochure providing background information on the prehistory as well as history of the camp and the surrounding region, for example, is needed and should be developed. The interpretive marker program should also be expanded to include points of interest not already marked. Examples include the former sites of Deaver's Ford on the Crow Wing River, the Green Prairie post-office, the District No. 12 schoolhouse, and several family gravesites and cemeteries.

It is also recommended that a small interpretive exhibit presenting the results of this study and a map showing the locations of known cultural resources at Camp Ripley be prepared and placed in the Camp Ripley Military Museum where information on the history of Fort Ripley as well as the Minnesota National Guard is presented. The museum is open to the public during the summer when most of the troop training is in progress. A traveling panel exhibit could also be prepared for display at area schools, public libraries, hospitals, nursing homes, chambers of commerce, courthouses, museums, and county historical societies.

2. The ruins of old Fort Ripley located on the west bank of the Mississippi River along East Boundary Road provide perhaps the best opportunity for public interpretation and education at Camp Ripley. The area contains known prehistoric and historic archaeological materials as well as several structural features dating to the occupancy of the fort. The latter includes cellar depressions and the ruins of the powder magazine, the only stone structure known to have been constructed at the fort. Many of these features are marked with signs. As a result, it is strongly recommended that no development or training exercises of any sort whatsoever be allowed in or near the ruins of the fort, or within the boundaries of the original square mile military reservation on the west side of the Mississippi River as shown on Figures 12 and 13.

It is also strongly recommended that future plans for the reconstruction of Fort Ripley, accompanied by archaeological and historical documentation, be seriously considered as a long-range goal of this cultural resources management plan. Although funding for such an ambitious project is not currently available, it is, nevertheless, an achievable goal. The reconstruction of this site would compliment the existing statewide historic sites program administered by the Minnesota Historical Society and fulfill the hopes of many Minnesota residents and former camp commanders.

BIBLIOGRAPHY

This bibliography represents a list of sources personally examined by the author during the records review and literature search. The references, for the most part, are available in the library, archives, and historic preservation collections housed at the Minnesota Historical Society in St. Paul. For purposes of this report, the bibliography has been divided into four categories: published and unpublished sources, site records and inventory files, newspapers, and maps. A list of periodicals examined in their entirety for information relating to Fort Ripley and the establishment of Camp Ripley, in particular, as well as libraries and museums visited and individuals contacted during the course of the research are also presented. The bibliography should be considered a working document to which additional references can be added as they are found or become available. It is hoped that this bibliography will serve as a basic reference guide to the cultural resources of Camp Ripley and vicinity in the Upper Mississippi Valley.

PUBLISHED AND UNPUBLISHED SOURCES

- Adjutant General's Office, Minnesota Department of Military Affairs
1962 History of the three steel rifled cannons which were presented to the First Minnesota Volunteers on 22 February 1862. St. Paul.
- Allison, Ira S.
1932 The geology and water resources of northwestern Minnesota. Minnesota Geological Survey Bulletin 22. The University of Minnesota Press, Minneapolis.
- Andrews, Alice E. (editor)
1928 Christopher C. Andrews, pioneer in forestry conservation in the United States: for sixty years a dominant influence in the public affairs of Minnesota: lawyer: editor: diplomat: general in the Civil War, recollections: 1829-1922. The Arthur H. Clark Company, Cleveland.
- Andrews, Christopher C.
1857 Minnesota and Dacotah: in letters descriptive of a tour through the North-west, in the autumn of 1856. Second edition. Robert Farnham, Washington. Reprinted in 1975 by Arno Press, New York.
- Anfinson, Scott F.
1979 A handbook of Minnesota prehistoric ceramics. Occasional Publications in Minnesota Archaeology No. 5. Minnesota Historical Society, St. Paul.
- 1983 A review of archaeological sites in Minnesota, 1982: A report to the state archaeologist. Minnesota Historical Society, St. Paul.
- 1984 Cultural and natural aspects of mound distribution in Minnesota. The Minnesota Archaeologist 43 (1):3-30.
- Anonymous
n.d. Article on the only lynching of Indians in Morrison County. Unpublished manuscript on file, Carnegie City Library, Little Falls, Minnesota.
- n.d. Welcome to Camp Ripley in Minnesota's heartland. Little Falls, Minnesota.
- n.d. Welcome to Little Falls and Camp Ripley. Booklet prepared by the Marketing Club of the Little Falls Community High School and area businesses, Little Falls, Minnesota.
- 1914 Personal reminiscences and obituary, J. B. S. Todd. South Dakota Historical Collections 7:496-501.
- 1917 Notes and documents, relations with western Canada. Minnesota History Bulletin 2 (1):21-23.

Anonymous (continued)

- 1918 The Doud Diary. South Dakota Historical Collections 9:471-474.
- 1920 News and comment. Minnesota History Bulletin 3 (7):481-482.
- 1921 Minnesota Historical Society notes, accession. Minnesota History Bulletin 4 (1-2):72.
- 1927 Minnesota Historical Society notes, accessions. Minnesota History 8 (1):96.
- 1928a News and comments, general Minnesota items. Minnesota History 9 (2):193.
- 1928b News and comment, local history items. Minnesota History 9 (2):200-201.
- 1930 Minnesota Historical Society notes, accessions. Minnesota History 11 (4):444.
- 1931a News and comment, general Minnesota items. Minnesota History 11 (2):202-203.
- 1931b Minnesota Historical Society notes, accessions. Minnesota History 11 (3):317.
- 1931c News and comments, local history items. Minnesota History 12 (1):101.
- 1932 News and comments, general Minnesota items. Minnesota History 13 (3):340.
- 1933a News and comments. Minnesota History 14 (1):110.
- 1933b Minnesota Historical Society notes, accessions. Minnesota History 14 (4):435-436.
- 1934a Minnesota Historical Society notes, accessions. Minnesota History 15 (1):116.
- 1934b News and comments, local history items. Minnesota History 15 (3):366.
- 1936a News and comments, general Minnesota items. Minnesota History 17 (2):224-225.
- 1936b News and comment, general Minnesota items. Minnesota History 17 (4):480-481.
- 1937a Minnesota Historical Society notes, accessions. Minnesota History 18 (2):208.
- 1937b News and comments, general Minnesota items. Minnesota History 18 (3):333.

Anonymous (continued)

- 1938a Minnesota History Society notes, accessions. Minnesota History 19 (1):96.
- 1938b News and comments. Minnesota History 19 (1):102-103.
- 1938c News and comment. Minnesota History 19 (3):353.
- 1941? Camp Ripley, its facilities and advantages for troop training. Unpublished manuscript on file, Minnesota Historical Society Library, St. Paul.
- 1942 News and comment, local historical societies. Minnesota History 23 (3):298.
- 1943 Minnesota Historical Society notes, accessions. Minnesota History 24 (2):167.
- 1944 News and comment, war history activities. Minnesota History 25 (1):94.
- 1948 The historical scene, history in the community. Minnesota History 29 (3):270.
- 1957a On the historical scene, the Minnesota scene. Minnesota History 35 (7):337.
- 1957b On the historical scene, news of the society. Minnesota History 35 (7):340.
- 1959 On the historical horizon, the Minnesota scene. Minnesota History 36 (6):238.
- 1961 History along Great River Road. Minnesota History News 3 (3):1.
- 1963 On the historical horizon, the Minnesota scene. Minnesota History 38 (5):243-244.
- Arthur, Chester A.
1882 Message from the President of the United States, transmitting a communication from the Secretary of the Interior relative to the establishment of an Indian training-school on the site of old Fort Ripley in Minnesota. House Executive Document No. 175. 47th Congress, 1st Session, Serial No. 2030. Washington.
- Babcock, Willoughby M.
1963 Minnesota's frontier, a neglected sector of the Civil War. Minnesota History 38 (6):274-286.
- Baker, Gen. James H.
1901 History of transportation in Minnesota. Collections of the Minnesota Historical Society 9:1-34.

- Baker, Robert Orr
1971 The muster roll, a biography of Fort Ripley Minnesota. H. M. Smythe Company, St. Paul.
- Belknap, William W.
1870 Letter of the Secretary of War communicating, in compliance with a resolution of the Senate of January 10, 1870, information in relation to the Fort Ripley military reservation in Minnesota. Senate Executive Document No. 87. 41st Congress, 2nd Session. Serial No. 1406. Washington.
- 1872 Letter from the Secretary of War, in answer to a resolution of the House of February 6, 1872, relative to the military reservations of Fort Harker, Kansas; Fort Benton, Montana Territory; and Fort Ripley, Minnesota. House Executive Document No. 159. 42nd Congress, 2nd Session. Serial No. 1513. Washington.
- Beltrami, G. C.
1828 A pilgrimage in Europe and America, leading to the discovery of the sources of the Mississippi and Bloody rivers. 2 vols. Hunt and Clarke, London. Reprinted in 1962 by Quadrangle Books, Inc., Chicago.
- Bettenburg, P. C. and E. B. Miller
1936 History and development of Camp Ripley. The Military Engineer 28 (158):129-131. The Society of American Military Engineers, Washington, D. C.
- Billings, John Shaw
1870 A report on barracks and hospitals, with descriptions of military posts. U. S. Surgeon-General's Office, Circular No. 4. Government Printing Office, Washington.
- 1875 A report on the hygiene of the United States army, with descriptions of military posts. War Department, Surgeon-General's Office, Circular No. 8. Government Printing Office, Washington.
- Birk, Douglas A.
1971 A preliminary report on the Chippewa Agency, Cass County, Minnesota. Archaeology Department, Minnesota Historical Society, St. Paul.
- 1979 Sampling and intuition: an archaeological survey of the Nokasippi River Valley, Crow Wing County, Minnesota. Archaeology Department, Minnesota Historical Society, St. Paul.
- 1979, 1980 Letter report dated September 13, 1979 and postscript dated March 15, 1980 to Donn Coddington regarding a probable French period habitation site in Morrison County, Minnesota. Unpublished manuscript on file, Minnesota Historical Society, Fort Snelling History Center, St. Paul.

- Bleed, Peter
1969 The archaeology of Petaga Point. Minnesota Prehistoric Archaeology Series. Minnesota Historical Society, St. Paul.
- Blegen, Theodore C.
1926 Minnesota pioneer life as revealed in newspaper advertisements. Minnesota History 7 (2):99-121.
1928 The state historical convention at Brainerd. Minnesota History 9 (3):257-269.
1938 The Minnesota Historical Society in 1937. Minnesota History 19 (1):43-62.
1943 War on the Minnesota frontier. Minnesota History 24 (1):11-25.
1975 Minnesota, a history of the state. University of Minnesota Press, Minneapolis.
- Blegen, Theodore C. and Bertha L. Heilbron (editors)
1931 Index and classified list of articles. Minnesota History Volumes I-X (1915-29).
- Board of Commissioners on Publication of History of Minnesota in Civil and Indian Wars
1890 Minnesota in the Civil and Indian Wars 1861-1865. Volume I: 257-260. Pioneer Press Company, St. Paul. Second edition published in 1891.
1893 Minnesota in the Civil and Indian Wars 1861-1865. Volume II: 189-194. Official reports and correspondence. Pioneer Press Company, St. Paul. Revised edition published in 1899.
- The Board of Supervisors of the Morrison Soil and Water Conservation District
1971 Morrison soil and water conservation district, progress report, 1960-1971.
- Boutwell, William T.
1894 Frederick Ayer, teacher and missionary to the Ojibway Indians, 1829-1850. Collections of the Minnesota Historical Society 6:429-437.
- Bray, Edmund C.
1962 Billions of years in Minnesota, the geological story of the state. The Science Museum of Minnesota, St. Paul.
- Bray, Martha Coleman (editor)
1970 The journals of Joseph N. Nicollet, a scientist on the Mississippi headwaters with notes on Indian life, 1836-37. Minnesota Historical Society, St. Paul.
- Brew, Alan P. and William J. Yourd
1979 Archaeological survey of Mississippi River Park, Belle Prairie, Minnesota. Final report to Morrison County Commissioners. Bemidji State University, Bemidji, Minnesota.

- Brook, Michael
1974 Reference guide to Minnesota History, a subject bibliography of books, pamphlets, and articles in English. Minnesota Historical Society, St. Paul.
- Brook, Michael and Sarah P. Rubinstein
1983 A supplement to reference guide to Minnesota History, a subject bibliography, 1970-80. Minnesota Historical Society Press, St. Paul.
- Brower, Jacob V.
1898 Prehistoric man at the headwaters of the Mississippi River. Collections of the Minnesota Historical Society 8:232-263.
- 1902 Memoirs of explorations in the basin of the Mississippi. Vol. 5 Kakabikansking. H. L. Collins Company, St. Paul.
- Brown, Dee Alexander
1963 The galvanized Yankees. University of Illinois Press, Urbana.
- Brown, Ralph H. (editor)
1942 With Cass in the Northwest in 1820: the journal of Charles C. Trowbridge (3 parts). Minnesota History 23 (2):126-148; 23 (3):233-252; 23 (4):328-348.
- 1948 Minnesota: territory and state. In Historical geography of the United States, pp. 326-344. Harcourt Brace and Company, New York.
- Brunson, Alfred
1868 Sketch of Hole-in-the-Day. Collections of the State Historical Society of Wisconsin 5:387-399.
- Caine, Christy A. H.
1974 The archaeology of the Snake River region in Minnesota. In Aspects of Upper Great Lakes Anthropology, edited by Elden Johnson, pp. 55-63. Minnesota Historical Society, St. Paul.
- Caldwell, Joseph R.
1958 Trend and tradition in the prehistory of the eastern United States. Memoirs, No. 88. Scientific Papers, Vol. 10. American Anthropological Association, Illinois State Museum.
- Carley, Kenneth
1976 The Sioux uprising of 1862. Minnesota Historical Society, St. Paul.
- Carver, Jonathan
1956 Travels through the interior parts of North America. Ross and Haines, Inc., Minneapolis. Facsimile reprint of the 1781 London edition.

- Caswell, Irving A.
1932 Old Fort Ripley history given; early transportation and defense recalled with opening of camp. Unpublished manuscript on file, Morrison County Historical Society, Weyerhaeuser Museum, Little Falls, Minnesota. Originally published in the Little Falls Daily Transcript, June 29, 1932.
- Christensen, Thomas P.
1927 Danish settlement in Minnesota. Minnesota History 8 (4):363-385.
- Clark, Dan E.
1914 The westward movement in the Upper Mississippi Valley during the fifties. Proceedings of the Mississippi Valley Historical Association for the Year 1913-1914 7:212-219.
- Clark, Julius T.
1868 Reminiscences of the Chippewa chief, Hole-in-the-Day. Collections of the State Historical Society of Wisconsin 5:378-386.
- Cochrane, Minnie M.
1937 History concerning Fort Ripley. Report submitted to the Morrison County Historical Society. Works Progress Administration Project #3870.
- Cockrell, F. M.
1880 Report from the Committee on Military Affairs to accompany bill H.R. 1153. Senate Report No. 196. 46th Congress, 2nd Session. Serial No. 1893. Washington.
- Coleman, Sister Bernard, Sister Verona La Bud, and John Humphrey
1967 Old Crow Wing: history of a village. Duluth, Minnesota.
- Conley, Major General E. T.
1936 Letter dated September 30, 1936 to the Honorable Harold Knutson. Unpublished manuscript on file. Morrison County Historical Society, Weyerhaeuser Museum, Little Falls, Minnesota.
- Cooper, W. S.
1935 The history of the Upper Mississippi River in late Wisconsin and postglacial time. Minnesota Geological Survey Bulletin 26. The University of Minnesota Press, Minneapolis.
- Coues, Elliott (editor)
1895 The expeditions of Zebulon Montgomery Pike, to the headwaters of the Mississippi River, through Louisiana Territory, and in New Spain, during the years, 1805-6-7. 3 vols. Francis P. Harper, New York.
- Cross, Marion E.
1938 Father Louis Hennepin's description of Louisiana. The University of Minnesota Press, Minneapolis.

- Douglas, Donald M.
1976 Social soldiers: the Winona Company and the beginnings of the Minnesota National Guard. Minnesota History 45 (4):130-140.
- Downs, Lynwood G.
1945 The soldier vote and Minnesota politics. 1862-65. Minnesota History 26 (3):187-210.
- Draper, Lyman Copeland
1868a Note on Hole-in-the-Day. Collections of the State Historical Society of Wisconsin 5:400-401.
1868b Additional note on the younger Hole-in-the-Day. Collections of the State Historical Society of Wisconsin 5:408-409.
- Edsall, Rev. Samuel C.
1908 Rev. Ezekial Gilbert Gear, D. D., chaplain at Fort Snelling, 1838-1858. Collections of the Minnesota Historical Society 12:691-696.
- Edwards, Greenough & Deved
1866 Edwards' descriptive gazetteer and commercial directory of the Mississippi River. First edition. St. Louis, Louisville, Chicago and Milwaukee.
- Enberg, George B.
1940 The rise of organized labor in Minnesota. Minnesota History 21 (4):372-394. Reprinted in Selections from Minnesota History, a fiftieth anniversary anthology, edited by Rhoda R. Gilman and June D. Holmquist, pp. 248-260. Minnesota Historical Society, St. Paul, 1965.
- Fay, Robert P.
1978 A records and literature search of archaeological sites in Wisconsin counties located within the Lake Michigan Coastal Zone. Historic Preservation Division, State Historical Society of Wisconsin, Madison.
- Featherstonhaugh, George W.
1847 A canoe voyage up the Minnay Sotor. 2 vols. Robert Bentley, London. Reprinted in 1970 by the Minnesota Historical Society, St. Paul.
- Fisher, Harold J.
1972 The land called Morrison, a history of Morrison County with brief sketches of Benton, Crow Wing and Todd Counties. 1st edition. Volkmuth Printing Company, Little Falls, Minnesota. Revised 2nd edition published in 1976.
- Fiske, Timothy
1966 Historic sites archaeological survey. The Minnesota Archaeologist 38 (4):145-192.

- Floyd, John B.
1858a Report of the Secretary of War. Senate Executive Document No. 11, p. 15. 35th Congress, 1st Session. Serial No. 920. Washington.
- 1858b Letter from the Secretary of War, in answer to a resolution of the House calling for information relative to the sale of the military reservation at Fort Ripley. House Executive Document No. 94, pp. 1-3. 35th Congress, 1st Session. Serial No. 957. Washington.
- Folger, Chas. J.
1882 Statement of appropriations and expenditures for public buildings, rivers and harbors, forts, arsenals, armories, and other public works, from March 4, 1789 to June 30, 1882. Senate Executive Document No. 196. 47th Congress, 1st Session. Serial No. 1992. Washington.
- Folsom, W. H. C.
1888 Fifty years in the northwest. Pioneer Press Company, St. Paul.
- Folwell, William W.
1908 Minnesota, the north star state. Houghton Mifflin Company, Boston and New York.
- 1921- A history of Minnesota. 4 vols. Minnesota Historical Society,
1930 St. Paul.
- Frazer, Robert W.
1965 Forts of the west. Military forts and presidios and posts commonly called forts west of the Mississippi River to 1898. University of Oklahoma Press, Norman.
- Fridley, Russell W.
1956 Fort Snelling, from military post to historic site. Minnesota History 35 (4):178-192.
- 1966 Minnesota, a students' guide to localized history. Teachers College Press, Columbia University, New York.
- Fuller, Clara K.
1915 History of Morrison and Todd Counties, Minnesota. 2 vols. B. F. Bower & Company, Inc., Indianapolis.
- Gaines, Gen. Edmund P.
1838 A plan for the defense of the western frontier. House Document No. 311, pp. 3-58. 25th Congress, 2nd Session. Serial No. 329. Washington.
- Gamble, Richard D.
1959 Army chaplains at frontier posts, 1830-1860. Historical Magazine of the Protestant Episcopal Church 27 (4):287-306.

- Gibbs, Capt. E. B.
1881 Letters to the Superintendent of the National Cemetery, Rock Island Arsenal, Rock Island, Illinois dated October 12, 1881 and November 1, 1881. Unpublished manuscripts on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul. Photographic copies of originals in the Rock Island Arsenal, Rock Island, Illinois.
- Gilman, Rhoda R., Carolyn Gilman, and Deborah M. Stultz
1979 The Red River trails: oxcart routes between St. Paul and the Selkirk settlement 1820-1870. Minnesota Historical Society, St. Paul.
- Glazier, Captain Willard
1891 Down the great river. Hubbard Brothers, Philadelphia.
- Grant, Bruce
1965 American forts: yesterday and today. First edition. E. P. Dutton & Company, New York.
- Gurnoe, Donald G., Jr.
1980 The Minnesota human burial law. The Minnesota Archaeologist 39 (3):150-154.
- Hage, George S.
1967 Newspapers on the Minnesota frontier 1819-1860. Minnesota Historical Society, St. Paul.
- Hall, Christopher W.
1903 Geography and geology of Minnesota. Vol. 1. The H. W. Wilson Company, Minneapolis.
- Hall, Stephen P.
1977 The Hole-in-the-Day encounter; Hole-in-the-Day remembered. The Minnesota Archaeologist 36 (2):77-81, 91-96.
- Hamilton, Holman
1949 Zachary Taylor and Minnesota. Minnesota History 30 (2):97-110.
- Harder, E. C. and A. W. Johnston
1918 Preliminary report on the geology of east central Minnesota. Including the Cuyuna iron-ore district. Minnesota Geological Survey Bulletin 15. The University of Minnesota, Minneapolis.
- Harpole, Patricia C. and Mary D. Nagle
1972 Minnesota territorial census, 1850. Minnesota Historical Society, St. Paul.
- Heilbron, Bertha L.
1935 Christmas and New Year's on the frontier. Minnesota History 16 (4):373-390. Reprinted in Selections from Minnesota History, A fiftieth anniversary anthology, edited by Rhoda R. Gilman and June D. Holmquist, pp. 94-106. Minnesota Historical Society, St. Paul, 1965.

- Heilbron, Capt. Robert M.
1943 Camp Ripley as a federal camp. Unpublished manuscript on file, Minnesota Historical Society Library, St. Paul.
- Hendrickson, Walter B. (editor)
1944 David Dale Owen and the Chippewa land district survey. Wisconsin Magazine of History 28 (2):210-224.
- Hicks, John D.
1918 The organization of the volunteer army in 1861 with special reference to Minnesota. Minnesota History Bulletin 2 (5): 324-368.
- Hollon, W. E.
1949 Zebulon Montgomery Pike's Mississippi voyage, 1805-1806. Wisconsin Magazine of History 32 (4):445-455.
- Holmes, W. H.
1919 Handbook of aboriginal American antiquities. Part I. Introductory. The lithic industries. Bureau of American Ethnology Bulletin 60. Washington.
- Holmquist, June D. and Jean A. Brookins
1972 Minnesota's major historic sites, a guide. Revised second edition. Minnesota Historical Society, St. Paul.
- Hubbard, Lucius F. and Return I. Holcombe
1908 Minnesota in three centuries. 4 vols. The Publishing Society of Minnesota, Mankato, Minnesota.
- Hubbs, Ronald M.
1965 The Civil War and Alexander Wilkin. Minnesota History 39 (5):173-190.
- Imholte, John Q.
1963 The first volunteers; history of the First Minnesota Volunteer Regiment, 1861-1865. Ross and Haines, Inc., Minneapolis.
- Jackson, Donald (editor)
1966 The journals of Zebulon Montgomery Pike. University of Oklahoma Press, Norman.
- Jennison, S. P.
1872 Fort Ripley reservation. Joint resolution of the legislature of Minnesota, asking Congress to vacate a certain portion of Fort Ripley military reservation. House of Representatives Miscellaneous Document No. 97. 42nd Congress, 2nd Session. Serial No. 1525. Washington.
- Jerabek, Esther
1936 A bibliography of Minnesota territorial documents. Special Bulletin 3. Minnesota Historical Society, St. Paul.

- Jesup, Th. S.
1852 Report of the Quartermaster General. Senate Executive Document No. 1. 32nd Congress, 2nd Session. Serial No. 659. Washington.
- 1859 Expenditures for barracks and quarters. House Executive Document No. 93. 35th Congress, 2nd Session. Serial No. 1008. Washington.
- Johnson, Elden
1962 The prehistory of the Red River Valley. Minnesota History 38 (4):157-165.
- 1969 The prehistoric peoples of Minnesota. Minnesota Historical Society, St. Paul.
- 1971 Excavations at the Gull Lake Dam (21CA27). The Minnesota Archaeologist 31 (2):44-69.
- Johnson, Jasper W. (supposed author)
n.d. History of Fort Ripley. Unpublished manuscript on file, Minnesota Historical Society, St. Paul.
- Jones, J. R., P. D. Akin, And Robert Schneider
1963 Geology and ground-water conditions in the southern part of the Camp Ripley Military Reservation, Morrison County, Minnesota. U.S. Geological Survey Water-Supply Paper 1669-A. Contributions to the hydrology of the United States. U. S. Government Printing Office, Washington.
- Jones R.
1848 Report of the Adjutant General, 1848. House Executive Document No. 1, 161. 30th Congress, 2nd Session. Serial No. 537. Washington.
- 1849 Report of the Adjutant General, 1849. House Executive Document No. 5, pp. 182-183. 31st Congress, 1st Session. Serial No. 569. Washington.
- Jordan, Philip D. (editor)
1947 A wit looks at Old Fort Ripley. Minnesota History 28 (4):339-344.
- Kane, Lucile M., June D. Holmquist, and Carolyn Gilman (editors)
1978 The northern expeditions of Stephen H. Long, the Journals of 1817 and 1823 and related documents. Minnesota Historical Society Press, St. Paul.
- Kasperek, Val E.
n.d. Indian troubles and wars in Morrison, Crow Wing and adjoining counties. Unpublished manuscript on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul.

- Kasperek, Val E. (continued)
- 1942 Historic markers, monuments, Indian burials, Becker-Yellow Medicine counties, Minnesota. W.P.A. Box 320. Unpublished manuscripts on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul.
- 1943 History of the building of Camp Ripley. Unpublished manuscript on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul.
- Katz, Helen T. (editor)
- 1983 Consolidated index to Minnesota History, Volumes 11-40 (1930-67). Minnesota Historical Society Press, St. Paul.
- Keating, William H.
- 1959 Narrative of an expedition to the source of St. Peter's river &c. Ross and Haines, Inc., Minneapolis. Facsimile reprint of 1824 edition published in Philadelphia.
- Kinder, Judge L. B.
- 1937 Story of old Fort Ripley. Long Bow Country of Minnesota, pp. 30, 32. Northern Minnesota Publishing Company, Inc., Brainerd, Minnesota.
- Kraywinkle, Glen
- 1972 History of a river town...Little Falls. Transcript Publishing Company, Little Falls, Minnesota.
- Kunz, Virginia Brainard
- 1958 Muskets to missiles, a military history of Minnesota. Minnesota Statehood Centennial Commission, St. Paul.
- Lane, Richard B.
- 1975 An archaeological survey of the proposed storm sewer improvements, Little Falls, Minnesota. St. Cloud State University, St. Cloud, Minnesota.
- Lanman, Charles
- 1847 A summer in the wilderness; embracing a canoe voyage up the Mississippi and around Lake Superior. D. Appleton & Company, New York.
- Larsen, Arthur J.
- 1940 Roads and the settlement of Minnesota. Minnesota History 21 (3):225-244.
- Lass, William E.
- 1963 The removal from Minnesota of the Sioux and Winnebago Indians. Minnesota History 38 (8):353-364.

- LeBlanc, Stella
1970 The first cross. Diocese of St. Cloud, Minnesota.
1984 "Old" Fort Ripley lives in memory. Morrison County Historical Society News and Comments 3 (1):1-3.
- Le Duc, W. G.
1852 Minnesota Yearbook for 1852, and travelers' guide. St. Paul.
- Ledyard, Edgar M.
1929, American posts. Utah Historical Quarterly 2 (2):55-64; 5 (4):
1932 161-176.
- Leverett, Frank
1932 Quaternary geology of Minnesota and parts of adjacent states. U. S. Geological Survey Professional Paper 161. U. S. Government Printing Office, Washington.
- Lewis, T. H.
1887 Quartz-workers of Little Falls. American Antiquarian, March issue, pp. 15-16.
- Loehr, Rodney C.
1943 Caleb D. Dorr and the early Minnesota lumber industry. Minnesota History 24 (2):125-141.
- Lothson, Gordon A.
1967 The distribution of burial mounds in Minnesota. The Minnesota Archaeologist 29 (2):29-47.
- McClung, J. W.
1870 Minnesota as it is in 1870. St. Paul.
- McMurtie, Douglas C.
1934 The printing press moves westward. Minnesota History 15 (1):1-25.
- McWilliams, Margaret
1928 Manitoba milestones. J. M. Dent and Sons, Ltd., Toronto and London.
- Macgowan, E. S.
1947 The occurrence of black diorite in Minnesota. The Minnesota Archaeologist 13 (3):62-64.
- Markson, Maj. Mark
1964 From fort to farm...to camp; the Camp Ripley story. Little Falls Daily Transcript, Salute to Camp Ripley. Souvenir edition, June 5, 1964. Little Falls, Minnesota.
- Martinson, Flora P.
1961-62 Old Fort Ripley, Minnesota frontier post. Gopher Historian 16 (2):8-11.

- Mason, Philip P. (editor)
1958 Schoolcraft's Expedition to Lake Itasca; the discovery of the source of the Mississippi. Michigan State University Press, East Lansing.
- Merritt, Raymond H.
1979 Creativity, conflict, and controversy: a history of the St. Paul District U.S. Army Corps of Engineers. U. S. Government Printing Office, Washington, D. C.
- Minnesota Governor's Human Rights Commission
1965 Minnesota's Indian citizens - yesterday and today. St. Paul.
- Minnesota Historical Company
1881 History of the upper Mississippi valley. Minneapolis.
- Minnesota Historical Records Survey Project, Division of Professional and Services Project, Work Projects Administration
1940a Inventory of the county archives of Minnesota. No. 49 Morrison County. The Minnesota Historical Records Survey Project, St. Paul.
1940b Guide to historic markers erected by the State Highway Department cooperating with the Minnesota Historical Society. The Minnesota Historical Records Survey Project, St. Paul.
- Minnesota Historical Society
1961 Military posts of pioneer Minnesota (picture packet). St. Paul.
1979 Historic resources in Minnesota, a report on their extent, location, and need for preservation. Report submitted to the Minnesota Legislature. St. Paul.
1981 Minnesota statewide archaeological survey, summary: 1977-1980. St. Paul. Report submitted to the Minnesota Legislature.
- Minnesota Historical Society, Field Services Department
1981 Minnesota Historical Society Directory of Historical Organizations. St. Paul.
- Minnesota National Guard
n.d. Camp Ripley Minnesota; abbreviated history (booklet). Camp Ripley, Little Falls, Minnesota.
- Mississippi Headwaters Board
n.d. Mississippi Headwaters Board organized to protect the Mississippi River through interlocal cooperation (pamphlet). Cass County Courthouse, Walker, Minnesota.
n.d. Upper Mississippi River management plan and conservation ordinance. Cass County Courthouse, Walker, Minnesota.
1981 A management plan for the upper Mississippi River. Walker, Minnesota.

- Morey, G. B., Nancy Balaban, and Lynn Swanson
1981 Bibliography of Minnesota geology 1951-1980. Minnesota Geological Survey Bulletin 46. University of Minnesota, St. Paul.
- Murphy, Patricia
1984 Architecture of the Department of Military Affairs (draft). Unpublished manuscript on file, State Historic Preservation Office, Minnesota Historical Society, Fort Snelling History Center, St. Paul.
- Neill, Edward D.
1858 The history of Minnesota: from the earliest French explorations to the present time. J. B. Lippincott & Company, Philadelphia. Reprinted in 1975 by Arno Press, New York.
- 1881 Minnesota explorers and pioneers from A.D. 1659 to A.D. 1858. North Star Publishing Company, Minneapolis.
- Nelson, Lt. Col. Joseph E.
1931 A history of Fort Ripley 1849-1877. Headquarters, 47th Infantry Division, Minnesota National Guard. Unpublished manuscript on file, Morrison County Historical Society, Weyerhaeuser Museum, Little Falls, Minnesota.
- Newson, Mary Jeanette
1934 Memories of Fort Snelling in Civil War days. Minnesota History 15 (4):396.
- Nicolay, John G.
1863 Hole-in-the-Day. Harper's New Monthly Magazine 26 (152): 186-191. Reprinted in The Minnesota Archaeologist 36 (2):82-91 (1977).
- Nicollet, Joseph N.
1843 Report intended to illustrate a map of the hydrographical basin of the upper Mississippi. Senate Executive Document No. 237. 26th Congress, 2nd Session. Serial No. 380. Washington.
- Norwood, J. G.
1848 Report on the geology of parts of Wisconsin and the Lake Superior region. In Report of a geological reconnaissance (sic) of the Chippewa land district of Wisconsin and the northern part of Iowa by David Dale Owen. Senate Executive Document No. 57, pp. 73-129. 30th Congress, 1st Session. Serial No. 509. Washington.
- 1852 Geological report of a survey of portions of Wisconsin and Minnesota made during the years 1847, '48, '49 and '50. In Report of a geological survey of Wisconsin, Iowa, and Minnesota by David Dale Owen, pp. 209-418. Lippincott, Grambo & Company, Philadelphia.

- Nute, Grace Lee
1925 Notes and documents, the Red River trails. Minnesota History 6:278-282.
- 1930 Posts in the Minnesota fur-trading area, 1660-1855. Minnesota History 11 (4):353-385.
- Nute, Grace Lee and Gertrude W. Ackermann
1935 Guide to the personal papers in the manuscript collections of the Minnesota Historical Society. Special Bulletin 1. Minnesota Historical Society, St. Paul.
- Ogle, Geo. A. & Co.
1904 Compendium of history and biography of central and northern Minnesota. Chicago.
- Olsenius, Richard
1982 Minnesota travel companion, a guide to the history along Minnesota's highways. Bluestem Productions, Wayzata, Minnesota.
- O'Malley, Nancy, Boyce N. Driskell, Julie Riesenweber, Richard S. Levy, and Michael B. Collins
1980 Stage I archaeological investigations at Fort Knox, Kentucky. Report 16. Report submitted to the U.S. Army and Fort Knox. Department of Anthropology, University of Kentucky, Lexington.
- O'Malley, Nancy, Jared Funk, Cynthia Jobe, Thomas Gatus, and Julie Riesenweber
1983 Cultural resources reconnaissance of Ft. Campbell, Kentucky-Tennessee. Archaeological Report 67. Program for Cultural Resource Assessment, Department of Anthropology, University of Kentucky, Lexington. Report submitted to the U.S. Army Corps of Engineers, Nashville District.
- Overstreet, David F., Robert P. Fay, Carol I. Mason, and Robert F. Boszhardt
1982 Literature search and records review of the Upper Mississippi basin: St. Anthony Falls to Lock and Dam 10. Reports of Investigation No. 116. Great Lakes Archaeological Research Center, Inc., Waukesha.
- Owen, David D.
1848 Report of a geological reconnaissance (sic) of the Chippewa land district of Wisconsin and the northern part of Iowa. Senate Executive Document No. 57. 30th Congress, 1st Session, pp. 5-134. Serial No. 509. Washington.
- 1852 Report of a geological survey of Wisconsin, Iowa, and Minnesota. Lippincott, Grambo & Company, Philadelphia.
- Parker, Nathan H.
1857 The Minnesota handbook, for 1856-7. J. P. Jewett and Company, Boston. Reprinted in 1975 by Arno Press, New York.

- Patten, G. W.
1858 Report of the Adjutant General No. 5. Senate Executive Document No. 11, pp. 151-153. 35th Congress, 1st Session. Serial No. 920. Washington.
- Patterson, J. W.
1966 The post office in early Minnesota. Minnesota History 40 (2):78-89.
- Penman, C. Sharpe (supposed author)
1859 The Red River Trail. Harper's New Monthly Magazine (2 parts) 18 (107):602-620; 19 (109):37-54. Harper & Brothers, New York.
- Pestana, Harold R.
1972 Bibliography of congressional geology. Hafner Publishing Company, New York.
- Pike, Zebulon M.
1811 Exploratory travels through the western territory of North America. London. Reprinted in 1895 by W. H. Lawrence & Company, Denver.

1872 Pike's explorations in Minnesota, 1805-6. Extracts from his journal. Collections of the Minnesota Historical Society 1:368-416.
- Pomeroy, Robert D.
1966 Morrison County's only lynching, August, 1857. Unpublished manuscript on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul and the Carnegie City Library, Little Falls, Minnesota.
- Pope, Capt. John
1850 Report of an exploration of the territory of Minnesota. Senate Executive Document No. 42. 31st Congress, 1st Session, pp. 2-56. Serial No. 558. Washington.
- Prucha, Francis P.
1947a The army post on the Minnesota frontier. Unpublished M.A. thesis, University of Minnesota, Minneapolis.

1947b Fort Ripley: the post and the military reservation. Minnesota History 28 (3):205-224.

1948 The settler and the army in frontier Minnesota. Minnesota History 29 (3):231-246. Reprinted in Selections from Minnesota History, a fiftieth anniversary anthology, edited by Rhoda R. Gilman and June D. Holmquist. Minnesota Historical Society, St. Paul, 1965.

1953a Broadax and bayonet: the role of the United States army in the development of the Northwest, 1815-1860. State Historical Society of Wisconsin, Madison.

Prucha, Francis P. (continued)

- 1953b The United States army as viewed by British travelers, 1825-1860. Military Affairs 17 (3):113-124.
- 1958 An army private at old Fort Snelling in 1849. Minnesota History 36 (1):13-17.
- 1964 A guide to the military posts of the United States, 1789-1895. State Historical Society of Wisconsin, Madison.

Rice, H. M.

- 1857 Extending provisions of the Pre-Emption Act of 1841 to a portion of the Fort Ripley reservation. House of Representatives Report No. 118, pp. 1-2. Serial No. 912. Washington.

Richardson, Nathan

- 1880 The mounds of Morrison County, written by Honorable Nathan Richardson and transcribed for the Morrison County Historical Society. Morrison County Historical, W.P.A. Project #65. Unpublished manuscript on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul.

Rising, August C.

- n.d. Historic spots in Minnesota. Unpublished manuscript on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul.

Robbins, Herbert and John Van Ryzin

- 1975 Introduction to statistics. Science Research Associates, Inc., Chicago.

Rossberg, Col. R. A.

- 1936 History of Camp Ripley. Report submitted to the Morrison County Historical Society. Works Progress Administration. Project #3870.

Royce, Charles C.

- 1900 Indian land cessions in the United States. Bureau of the American Ethnology Bulletin 18 (part 2). Washington.

Salkin, Philip H.

- 1983 An archaeological survey of portions of the Badger Army Ammunition Plant in Sauk County, Wisconsin. Report Number 125. Archaeological Consulting and Services, Madison.

Sansome, Constance J.

- 1983 Minnesota underfoot, a field guide to the state's outstanding geologic features. Voyageur Press, Bloomington, Minnesota.

Schneider, Allan F.

- 1961 Pleistocene geology of the Randall region, central Minnesota. Minnesota Geological Survey Bulletin No. 40. University of Minnesota Press, Minneapolis.

Schoolcraft, Henry R.

1821 Narrative journal of travels through the northwestern regions of the United States extending from Detroit through the great chain of American lakes to the sources of the Mississippi River in the year 1820. E. & E. Hosford, Albany, New York.

1834 Narrative of an expedition through the Upper Mississippi to Itasca Lake, the actual source of this river; embracing an exploration trip through the St. Croix and Burntwood (or Brule) Rivers, in 1832. Harper & Bros., New York.

1855 Summary narrative of an exploratory expedition to the source of the Mississippi River, in 1820; resumed and completed, by the discovery of its origin in Itasca Lake, in 1832. Lippincott, Grambo and Co., Philadelphia.

Schultz, John

1894 The old Crow Wing trail. The Historical and Scientific Society of Manitoba Transaction 45:3-32.

Schwartz, George M. and George A. Thiel

1954 Minnesota's rocks and waters, a geological story. Minnesota Geological Bulletin 37. The University of Minnesota Press, Minneapolis.

Shay, C. Thomas

1971 The Itasca bison kill site, an ecological analysis. Minnesota Prehistoric Archaeological Series. Minnesota Historical Society, St. Paul.

Simpson, Capt. J. H.

1851 Letter report to Col. J. J. Abert concerning the military roads in the territory of Minnesota. Senate Executive Document No. 1, pp. 438-443. 32nd Congress, 1st Session. Serial No. 611. Washington.

1855 Annual report of operations of the general government roads in the territory of Minnesota. Appendix H of a report of the Secretary of War. Senate Executive Document No. 1 (part 2), pp. 468-501. 34th Congress, 1st Session. Serial No. 811. Washington.

Singley, Grover

1974 Tracing Minnesota's old government roads. Minnesota Historical Sites Pamphlet Series No. 10. Minnesota Historical Society, St. Paul.

Stacey, C. P.

1937 The Hudson's Bay Company and the Anglo-American military rivalries during the Oregon dispute. The Canadian Historical Review 18 (3):281-300.

- Stanchfield, Daniel
1901 History of pioneer lumbering on the upper Mississippi and its tributaries, with biographic sketches. Collections of the Minnesota Historical Society 9:325-362.
- Stansbury, Capt. Howard
1858 Appendix D of the report of the Secretary of War. Senate Executive Document No. 1 (part 3), pp. 1193-1202. 35th Congress, 2nd Session. Serial No. 976. Washington.
- Stauffer, Clinton R. and George A. Thiel
1933 The limestone and marls of Minnesota. Minnesota Geological Survey Bulletin 23. The University of Minnesota Press, Minneapolis.
- Steinbring, Jack
1974 The preceramic archaeology of northern Minnesota. In Aspects of Upper Great Lakes Anthropology, edited by Elden Johnson, pp. 64-73. Minnesota Historical Society, St. Paul.
- Stevens, Lt. Col. Roger J.
n.d. History of Old Fort Ripley. Bound volume on file. Morrison County Historical Society, Weyerhaeuser Museum, Little Falls, Minnesota.
- Stoltman, James B.
1973 The Laurel culture in Minnesota. Minnesota Prehistoric Archaeology Series No. 8. Minnesota Historical Society, St. Paul.
- Streiff, Jan E.
1972 Roster of excavated prehistoric sites in Minnesota. Minnesota Prehistoric Archaeology Series No. 7. Minnesota Historical Society, St. Paul.
- Swanson, B. W.
1931 Minnesota of quartz, man's age and later already charted. St. Paul Dispatch (newspaper), February 9, 1931. St. Paul, Minnesota.
- Tanner, Rev. George C.
1905 History of Fort Ripley, 1849-59, based on the diary of Rev. Solon W. Manney, D. D., chaplain of this post from 1851 to 1859. Collections of the Minnesota Historical Society 10 (part 1): 179-202.
- 1909 Fifty years of church work in the diocese of Minnesota, 1857-1907. Committee of Publication, St. Paul.
- Thomas, Norman
1949 John Blair Smith Todd. South Dakota Historical Collections and Reports 24:178-219.

- Treude, Mai
1980 Windows to the past, a bibliography of Minnesota county atlases. Center for Urban and Regional Affairs, University of Minnesota, Minneapolis.
- U.S. Army Corps of Engineers, St. Paul District
1984 Installation support book, Camp Ripley, Little Falls, Minnesota. St. Paul (draft report).
- U.S. Department of the Interior, Bureau of Outdoor Recreation
1977 The Upper Mississippi, a wild and scenic river study. Final report and environmental impact study. Washington, D. C.
- U.S. General Land Office
1851, 1852, 1853 Sketch of the public surveys in Wisconsin and Territory of Minnesota.

1858, 1870 Government survey of Morrison County. Townships T130-132N, R29W surveyed by Oscar Taylor, 1858. Townships T130-132N, R30W surveyed by R. D. Lancaster, 1858. Township 133N, R29-30W surveyed by Walker, Allen and Partmann, 1870. Photocopy of original surveyors' fieldnotes on file, County Recorder Office, Morrison County Courthouse, Little Falls, Minnesota.
- Upham, Warren
1888 The geology of Crow Wing and Morrison counties. In The geology of Minnesota by N. H. Winchell, Vol. 2 of the final report, pp. 580-611. Pioneer Press Company, St. Paul.

1969 Minnesota geographic names, their origin and historic significance. Reprint edition. Minnesota Historical Society, St. Paul. Originally published in 1920 as Volume 17 of the Collections of the Minnesota Historical Society.
- Warren, William W.
1885 History of the Ojibways, based upon traditions and oral statements. Collections of the Minnesota Historical Society 5:21-394. Reprinted in 1957 by Ross and Haines, Inc., Minneapolis and in 1984 by the Minnesota Historical Society, St. Paul.
- Wedel, Mildred Mott
1974 Le Sueur and the Dakota Sioux. In Aspects of Upper Great Lakes Anthropology, edited by Elden Johnson, pp. 157-171. Minnesota Historical Society, St. Paul.
- Wheeler, Kristi
n.d. Old Crow Wing, a neverlasting town. Unpublished manuscript on file, Minnesota Historical Society, Fort Snelling History Center, St. Paul.
- Wheelhouse, Mary E.
1928 The history of central Minnesota, a survey of unpublished sources. Minnesota History 9 (3):248-256.

- Wilford, Lloyd A.
1941 A tentative classification of the prehistoric cultures of Minnesota. American Antiquity 6 (3):231-249.
- 1944a The prehistoric Indians of Minnesota. Minnesota History 25 (2):153-157.
- 1944b The prehistoric Indians of Minnesota: the Mille Lacs aspect. Minnesota History 25 (4):329-341.
- 1945a The prehistoric Indians of Minnesota: the Headwaters Lakes aspect. Minnesota History 26 (4):312-329.
- 1945b Morrison County field notes. Unpublished manuscripts on file, Minnesota Historical Society, Fort Snelling History Center, St. Paul.
- 1955 A revised classification of the prehistoric cultures of Minnesota. American Antiquity 21 (2):130-142.
- Wilford, Lloyd A., Elden Johnson, and Joan Vicinus
1969 Burial mounds of central Minnesota. Minnesota Prehistoric Archaeology Series. Minnesota Historical Society, St. Paul.
- Williams, Mentor L. (editor)
1953 Narrative journal of travels through the northwestern regions of the United States extending from Detroit through the great chain of American lakes to the sources of the Mississippi River in the year 1820. Michigan State University Press, East Lansing.
- Winchell, N. H.
1878 The geology of Morrison County. In The geological and natural history survey of Minnesota. The 6th annual report for the year 1877. Johnson, Smith & Harrison, Minneapolis.
- 1883 Historical sketch of explorations and surveys in Minnesota. Johnson, Smith & Harrison, Minneapolis.
- 1888 The geology of Minnesota. Vol. 2 of the final report. Pioneer Press Company, St. Paul.
- 1911 The aborigines of Minnesota, a report based on the collections of Jacob V. Brower and on the field surveys and notes of Alfred J. Hill and Theodore H. Lewis, 1906-1911. Minnesota Historical Society, St. Paul.
- Works Progress Administration
1939 Accomplishments, Minnesota 1935-1939. Washington, D. C.

- Wright, H. E., Jr.
1955 Valdres drift in Minnesota. The Journal of Geology 63 (5):403-411.
- 1972a Quaternary history of Minnesota. Geology of Minnesota: a centennial volume, pp. 515-548. Minnesota Geological Survey, St. Paul.
- 1972b Physiography of Minnesota. Geology of Minnesota: a centennial volume, pp. 561-578. Minnesota Geological Survey, St. Paul.
- 1974 The environment of early man in the Great Lakes region. In Aspects of Upper Great Lakes Anthropology, Papers in honor of Lloyd A. Wilford, edited by Elden Johnson, pp. 8-14. Minnesota Historical Society, St. Paul.
- Zapffe, Carl
1948 It happened here. Brainerd Journal Press, Brainerd, Minnesota.
- 1975 The Chiefs Hole-in-the-Day. The Cass County Independent (newspaper), August 28, 1975, pp. 22-23.
- Zumberge, James H.
1952 The lakes of Minnesota, their origin and classification. Minnesota Geological Survey Bulletin 35. The University of Minnesota Press, Minneapolis.

PERIODICALS BIBLIOGRAPHY

- Collections of the Minnesota Historical Society. (Minnesota Historical Collections). 17 volumes. Minnesota Historical Society, St. Paul. 1872-1920.
- Collections of the State Historical Society of Wisconsin. (Wisconsin Historical Collections). 20 volumes. State Historical Society of Wisconsin, Madison. 1855-1911.
- The Minnesota Archaeologist. 43 volumes. Minnesota Archaeological Society, St. Paul. 1935-1984.
- Minnesota History. 49 volumes (Vols. 1-5 published under the title, Minnesota History Bulletin). Minnesota Historical Society, St. Paul. 1915-1984.
- Minnesota History News. 10 Vols. Minnesota Historical Society, St. Paul. 1959-1969.

Morrison County Historical Society News and Comments. 3 volumes. Little Falls, Minnesota. 1982-1984.

Occasional Publications in Minnesota Anthropology. Numbers 1-9. Minnesota Archaeological Society, St. Paul. 1977-1981.

The Wisconsin Archeologist. 85 volumes (20 old series, 65 new series). Wisconsin Archeological Society, Milwaukee. 1901-1984.

Wisconsin Magazine of History. 67 Volumes. State Historical Society of Wisconsin, Madison. 1917-1984.

MANUSCRIPT AND PHOTOGRAPH COLLECTIONS AT THE MINNESOTA HISTORICAL SOCIETY, ST. PAUL

Camp Ripley Military Reservation, Morrison County, Special Features - photograph collection, ca. 1931-52.

Fuller, Abby Abbe and Family papers, 1840-1928.

Adjutant General's Office, Minnesota Department of Military Affairs correspondence, 1936-37.

Doud, George W. diary, 1862-64.

Fort Ripley, Minnesota. Letters, 1881.

Gear, Rev. Ezekiel Gilbert and Family papers, 1833-1926.

Kasperek, Valentine E. historical articles on Cass, Crow Wing, and Morrison Counties, 1932-1946.

Manney, Rev. Solon W. diary, 1851-59.

Minnesota National Guard papers, 1880-1940.

Pomroy, Jesse H. and Eldridge Gerry Pomroy biographical notes, undated, ca. 1934.

Stearns, Charles Thomas autobiographical sketch, 1872.

Tulman, Moody C. papers, 1856-71.

U. S. War Department, Adjutant General's Office. Records relating to Fort Ripley, 1852-1858. Microfilm copy of originals in Record Group 94 in the National Archives, Washington, D. C.

Washburn, Edson D. diary, 1863.

Whitefield, Wilfred J. papers, 1863.

Works Projects Administration, Minnesota papers, 1923-42.

Note: Basic source material on Fort Ripley is also found in the War Records Division of the National Archives, Washington, D. C. For a review of these records, see the bibliography in Prucha, Broadax and bayonet: the role of the United States army in the development of the Northwest, 1815-1860 (Madison, 1953).

SITE RECORDS AND INVENTORY FILES AT THE STATE HISTORIC PRESERVATION OFFICE,
MINNESOTA HISTORICAL SOCIETY, FORT SNELLING HISTORY CENTER

Minnesota Archaeological Site Files and Atlas
Minnesota County Archaeological Reort Files
The National Register of Historic Places in Minnesota

Cass County

Chippewa Agency Historic District, 5/22/73
Gull Lake Mounds Site, Pillager, 5/7/73
Hole-in-the-Day II Cabin Site, Pillager, 6/19/73
Rice Lake Hut Rings, Pillager, 8/14/73

Crow Wing County

Crow Wing State Park, 7/28/70
St. Columba Mission Site, Pillager, 12/18/73

Morrison County

Ayer Mission Site, Belle Prairie, 6/18/73
Belle Prairie Village Site, 8/14/73
Fort Duquesne, Little Falls vicinity, 11/15/84
Old Fort Ripley, Camp Ripley, 9/10/71
Pelkey Lake Site, Little Falls, 10/2/73
Rice Lake Peninsula Prehistoric District, Little Falls, 10/2/73
Swan River Indian Village Site, Little Falls, 10/2/73
William Warren Two Rivers Cabin Site and McDougall Homestead, Royalton, 12/4/74

MINNESOTA NEWSPAPERS

Bomb Shell

July 26, 1854; August 16, 1854. Fort Ripley, Minnesota.

Brainerd Daily Dispatch

The story of old Fort Ripley. June 13, 1928. Brainerd, Minnesota.

Announcement stating that the site of Fort Ripley is included in a purchase of ground for a National Guard encampment to be known as Camp Ripley where the remains of old fort will be preserved. October 8, 1931. Brainerd, Minnesota.

Statement issued by the Crow Wing County Historical Society advocating the reconstruction of old Fort Ripley "exactly as it was on its old site." June 26, 1934. Brainerd, Minnesota.

Series of articles on Old Crow Wing written by Carl Wright and published irregularly between May 23 and June 11, 1957. Brainerd, Minnesota.

Little Falls Daily Transcript

Little Falls gets military camp; training slated to start in 1931. September 21, 1929. Little Falls, Minnesota.

Old Fort Ripley history given. June 29, 1932. Little Falls, Minnesota.

Little Falls Daily Transcript (continued)

Historic Ft. Ripley handed down name to present Camp Ripley. April 4, 1942. Little Falls, Minnesota.

Lieut. Pike's trip up the Mississippi River in 1805 to a winter post near Little Falls. May 16, 1942. Little Falls, Minnesota.

Guard camp bears name of historical military post. June 12, 1948. Centennial supplement of six editions. Little Falls, Minnesota.

2-county ferry north of Ft. Ripley to operate again. June 14, 1950. Little Falls, Minnesota.

Camp Ripley's 92-year-old cannon have new wheels. June 28, 1954. Little Falls, Minnesota.

Old Fort Ripley to be partially restored soon. June, 1957. Little Falls, Minnesota.

Crow Wing's rise and fall told; Indians had faith in chief. February 17, 1960. Little Falls, Minnesota.

Camp Ripley will be expanded to 50,000 acres, Gen. Moeglein announces. 2000-acre military camp opened 30 years ago today. June 14, 1961. Little Falls, Minnesota.

Salute to Camp Ripley. Souvenir edition. June 5, 1964. Little Falls, Minnesota.

Early military post preceded Camp Ripley. April 4, 1967. Little Falls, Minnesota.

Old Fort Ripley closed 100 years. July 11, 1977. Little Falls, Minnesota.

Little Falls Herald

Old Ripley ruins mirror frontier. December 17, 1926. Little Falls, Minnesota.

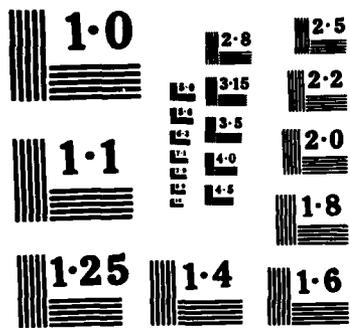
Text of talk presented by Val E. Kasperek before Farm Bureau meetings in Morrison County. September 30, 1933. Little Falls, Minnesota.

Proposes larger Camp Ripley area, War Department seeks to increase present area from 13,000 to 100,000 acres. May 17, 1940. Little Falls, Minnesota.

Old Fort Ripley "fort". April 24, 1942. Little Falls, Minnesota.

Frontier days, Fort Ripley fort in 1880. August 28, 1945. Little Falls, Minnesota.

Frontier days, Fort Ripley. Fort in 1880. November 30, 1945. Little Falls, Minnesota.



NATIONAL BUREAU OF STANDARDS
MICROCOPY RESOLUTION TEST CHART

Little Falls Herald (continued)

Historic old landmark in Morrison County. September 6, 1946. Little Falls, Minnesota.

Camp Ripley due for expansion in near future. November 26, 1948. Little Falls, Minnesota.

Little Falls Transcript

The history of Morrison County. A series of weekly articles written in 1876 by Nathan Richardson and published in the Transcript in the same year. Revised and brought down to the present time by Nathan Richardson in 1880. February 6, 1880. Little Falls, Minnesota.

Minneapolis Journal

Gov. reviews National Guard at Camp Ripley, Little Falls. July 5, 1931. Minneapolis, Minnesota.

Minneapolis Times

Old Fort Ripley built in 1849 on the upper Mississippi, near the Chippewa agency. Once occupied by regulars and volunteers. Now deserted and fast disappearing. September 5, 1897. Minneapolis, Minnesota.

Minneapolis Tribune

Believe it or not - Camp Ripley. July 20, 1947. Minneapolis, Minnesota.

Story of Civil War hero linked to Old Fort Ripley. August 1, 1949. Minneapolis, Minnesota.

Camp Ripley to get new name Sunday, honoring National Guard "patron saint." September 8, 1984. Minneapolis, Minnesota.

Artifacts of Pike's 1805 trek in state uncovered. September 28, 1984. Minneapolis, Minnesota.

Muzzle Blast

January 1, 1942 - September 22, 1943. Camp Ripley, Minnesota.

St. Cloud Journal

The murder of Hole-in-the Day. July 9, 1868. Reprinted in the Collections of the State Historical Society of Wisconsin 5:406-409 (1868).

St. Paul Dispatch

Minnesota of quartz man's age and later already charted. February 9, 1931. St. Paul, Minnesota.

St. Paul Pioneer Press

A frontier fort that knew no wars. January 4, 1931. St. Paul, Minnesota.

Diggers probe trading post's past. August 2, 1964. St. Paul, Minnesota.

St. Paul Press

Death of the Younger Hole-in-the-Day. June 30, 1868. Reprinted in the Collections of the State Historical Society of Wisconsin 5:402-406 (1868).

Upsala News-Tribune

Historic sites in Morrison County written by Val E. Kasperek. May 8, 1947. Upsala, Minnesota.

The Walker Pilot

Announcement concerning the U.S. War Department's plans for placing markers on a number of sites of historical interest in Minnesota, including those of Fort Ripley and the Crow Wing Agency. January 22, 1931. Walker, Minnesota.

MAPS

- Andreas, A. T.
1874 Illustrated historical atlas of the state of Minnesota. Chicago.
- Anonymous
n.d. Fort Ripley reservation. Manuscript map on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul.
- 1864 Plan of Fort Ripley, Minnesota. Manuscript map on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul.
- Borchert, John R. and Neil C. Gustafson
1980 Atlas of Minnesota resources & settlement. Third edition. Center for Urban and Regional Affairs, University of Minnesota, Minneapolis.
- Burt, A.
1876 Map of Fort Ripley. Map on exhibit, Camp Ripley Military Museum, Major Gen. Ellard A. Walsh Training Center.
- Chapman, Silas
1866 Chapman's sectional map of the surveyed part of Minnesota. Milwaukee.
- Derby, Lieut.
1848a Sketch of the site selected by Gen. Brooke for a fortification, opposite the mouth of the Nokay River, Sept. 24, 1848. Surveyed by Lieuts. Derby and Williamson, Topographical Engineers. Manuscript map on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul. Published in Baker, The muster roll, a biography of Fort Ripley, Minnesota (St. Paul, 1971, p. 12).
- 1848b Map of the site selected by General Brooke for a military post, including the reservation in the vicinity of the Crow-wing river, Minnesota Territory, Sept. 24, 1848. Surveyed by Lieuts. Derby & Williamson, U. S. Topographical Engineers. Manuscript map on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul.
- Farmer, John
1836 Map of the territories of Michigan and Ouisconsin. Albany, New York.
- Foote, C. M. & Co.
1892 Plat book of Morrison County, Minnesota. Minneapolis.
- Gamble, W. H.
1867 County map of Minnesota. S. Augustus Mitchell, Philadelphia.
- Hixson, W. W. & Co.
n.d. Plat book of the State of Minnesota. Rockford, Illinois.

Ludlow, Capt. W.

1880 Plan of Fort Ripley, Minnesota. Senate Report No. 196. 46th Congress, 2nd Session. Serial No. 1893. Washington. Reprinted in Baker, The muster roll, a biography of Fort Ripley Minnesota (St. Paul, 1971, p. 119).

1880 Military reservation of Fort Ripley, Minnesota. Surveyed June 5, 1874, Senate Report No. 196. 46th Congress, 2nd Session. Serial No. 1893. Washington. Reprinted in Prucha, Fort Ripley: the past and the military reservation, Minnesota History 28 (3):217 (St. Paul, 1947) and in LeBlanc, "Old" Fort Ripley lives in memory, The Morrison County Historical Society News and Comments 3 (1):1 (Little Falls, Minnesota, 1984).

1880 Plan of part of Fort Ripley, Minnesota. Senate Report No. 196. 46th Congress, 2nd Session. Serial No. 1893. Washington.

Marshner, Francis J.

1974 The original vegetation of Minnesota. Redrafted from the original 1930 map which was compiled from United States General Land Office survey notes. North Central Forest Experiment Station, Forest Service, United States Department of Agriculture, St. Paul.

Miller, Capt. E. B.

1932 Camp Ripley military reservation. Topographical survey conducted by Capt. E. B. Miller, 206th Infantry, Minnesota National Guard, 1931-32. Reproduced in the Office of the Engineer, Headquarters, Seventh Corps area, May, 1932. Revised April 1933. Map on file, Minnesota Historical Society, Division of Archives and Manuscripts, St. Paul.

Mississippi River Commission

1898 Survey of the Mississippi River made under the direction of the Mississippi River Commission in 1898. Charts No. 220-224. Julius Bien & Co. Lith., New York.

1906 Survey of the Mississippi River. Sheets No. 140-141.

Nelson, Thomas O.

1971 Atlas of the State of Minnesota. Fergus Falls, Minnesota.

Randall, Philip S. and R. R. Reilly

1919? Atlas of Morrison County, Minnesota. Little Falls, Minnesota.

Rockford Map Publishers, Inc.

1965 Tri-annual atlas & plat book, Morrison County, Minnesota. Sponsored by Morrison County 4-H Federation. Rockford, Illinois.

1978 Land atlas & plat book, Morrison County, Minnesota. Distributed by Morrison County 4-H Federation. Rockford, Illinois.

Simpson, Lieut. James H.

- 1851 Map of road from Point Douglas to Fort Ripley, surveyed under the general direction of 1st Lieut. James H. Simpson. Manuscript map on file, Minnesota Historical Society Research Center, Division of Archives and Manuscripts, St. Paul.
- 1854 Map of the general government roads in the Territory of Minnesota, September 15, 1854. Manuscript map on file, Archives Division, State Historical Society of Wisconsin, Madison.

Title Atlas Company

- 1970 Pictorial atlas of Morrison County, Minnesota. Minneapolis.
- 1978 Pictorial atlas of Morrison County, Minnesota. Minneapolis.

Todd, Capt. John B. S.

- 1850 Map of Fort Gaines, including the reserves. Drawn by Captain Todd, Company A, 6th Regiment, U.S.A. April 17, 1850. Original copy on file, U.S. Archives, U.S. General Land Office Papers, 1873-75. Washington, D. C. Photocopy of map on file, Weyerhaeuser Museum Morrison County Historical Society, Little Falls, Minnesota. Reprinted in Baker, The muster roll, a biography of Fort Ripley, Minnesota (St. Paul, 1971, p. 17).

Trygg, J. Wm.

- 1964, 1967, 1969 Composite map of United States land surveyors' original plats and field notes. Sheets 9 and 12, Minnesota series. Ely, Minnesota.

United States Army Corps of Engineers, St. Paul District

- 1982 Camp Ripley, Little Falls, Minnesota. Drawing No. 18-08-01.

United States Army Topographic Command

- 1969 Camp Ripley & vicinity sheet. Department of Defense, Washington, D. C.

United States Geological Survey

- 1954 Baxter, Minnesota 7.5 minute series quadrangle.
- 1954 Pillager, Minnesota 7.5 minute series quadrangle.
- 1956 Belle Prairie, Minnesota 7.5 minute series quadrangle.
- 1956 Belle Prairie NW, Minnesota 7.5 minute series quadrangle.
- 1956 Fort Ripley, Minnesota 7.5 minute series quadrangle.
- 1956 Randall East, Minnesota 7.5 minute series quadrangle.
- 1963 Motley SE, Minnesota 7.5 minute series quadrangle.
- 1975 Brainerd, Minnesota 1:250,000 series quadrangle.
- 1981 Cushing, Minnesota 7.5 minute series quadrangle.

United States Government Land Office

1851, A sketch of the public surveys in Wisconsin and Territory of
1853 Minnesota. Manuscript maps on file, State Historical Society
of Wisconsin, Archives Division, Madison.

1884 Government plat book, Morrison County. Copy of the original plats
dated 1858 and 1870 in the Surveyor General's Office, St. Paul.
Bound volume on file, County Recorder Office, Morrison County
Courthouse, Little Falls, Minnesota.

LIBRARIES AND MUSEUMS VISITED DURING THE RECORDS REVIEW AND LITERATURE SEARCH

Camp Ripley Military Museum, Camp Ripley, Maj. Gen. Ellard A. Walsh Training
Center.

Carnegie Library, Little Falls.

Evelyn Payne Hatcher Museum of Anthropology, St. Cloud State University,
St. Cloud.

Learning Resources Center, Centennial Hall, St. Cloud State University,
St. Cloud.

Charles A. Weyerhaeuser Memorial Museum, Morrison County Historical Society,
Little Falls.

Minnesota Historical Society, Fort Snelling History Center library, St. Paul.

Minnesota Historical Society Reference, Newspaper, Audio-Visual, and Map
Libraries, 690 Cedar Street, St. Paul.

Minnesota Historical Society Research Center, Division of Archives and Manu-
scripts, 1500 Mississippi Street, St. Paul.

State Historical Society of Wisconsin Library and Archives, Madison.

University of Wisconsin Geology Library, Weeks Hall, Madison.

INDIVIDUALS CONTACTED DURING THE RECORDS REVIEW AND LITERATURE SEARCH

David E. Berwick, Senior Archaeologist, U. S. Army Corps of Engineers,
St. Paul District.

Douglas A. Birk, Archaeologist, Institute for Minnesota Archaeology, Minneapolis.

Cliff Carlson, Area Forest Supervisor, Minnesota Department of Natural Resources,
Brainerd.

Robert Clouse, Archaeologist, State Historic Preservation Office, Minnesota
Historical Society, Fort Snelling History Center, St. Paul.

John Ebert, Environmental Resources Specialist, Camp Ripley, Minnesota.

Bruce Heide, Planner, U. S. Army Corps of Engineers, St. Paul District.

Thomas W. Houghtaling, Supervisor, Land & Property, Minnesota Power, Duluth.

Tom Jenkinson, Minneapolis.

Major Wayne A. Johnson, Minnesota Army National Guard, Camp Ripley.

Veryl E. Kalahar, Principal Engineering Specialist, Office of Engineering and Architecture, Camp Ripley, Minnesota.

Rob Karwedsky, Archaeologist, U. S. Army Corps of Engineers, Nashville District.

Dr. Richard B. Lane, Evelyn Payne Hatcher Museum of Anthropology, St. Cloud State University, St. Cloud, Minnesota.

Ted Lostrom, Archaeologist, State Historic Preservation Office, Minnesota Historical Society, Fort Snelling History Center, St. Paul.

Bruce Mellor, Little Falls.

Joseph Minshaw, Little Falls.

Ruth Mullins, Executive Secretary, Mississippi Headwaters Board, Cass County Courthouse, Walker, Minnesota.

Patricia Murphy, Architectural Historian, State Historic Preservation Office, Minnesota Historical Society, Fort Snelling History Center, St. Paul.

Charles Nelson, Historical Architect, State Historic Preservation Office, Minnesota Historical Society, Fort Snelling History Center, St. Paul.

Nancy O'Malley, Archaeologist, Department of Anthropology, University of Kentucky, Lexington.

Leslie D. Peterson, Trunk Highway Archaeologist, Minnesota Historical Society, St. Paul.

David Pollack, Archaeologist, Kentucky Heritage Council, Frankfort, Kentucky.

Anne Rebischke, Carnegie Library, Little Falls.

Norene Roberts, Historical Research, Inc., Minneapolis.

Susan Roth, Research Historian, State Historic Preservation Office, Minnesota Historical Society, Fort Snelling History Center, St. Paul.

Cheryl Seelen, Carnegie Library, Little Falls.

Jan Warner, Morrison County Historical Society, Weyerhaeuser Museum, Little Falls.

**Scope of Work
Literature Search and Records Review
for Cultural Resources of Camp
Ripley, Morrison County, Minnesota**

1.00 General

1.01 The contractor will undertake a literature search and records review of Camp Ripley, Minnesota. Based upon these results and coordination with various State and Federal agencies, the contractor will also develop a phased program for future cultural resources studies. All work will be incorporated into a detailed technical report.

1.02 The cultural resources investigation reports serve several functions. The technical report is a planning tool which aids in the preservation and protection of our cultural heritage. It is also a comprehensive, scholarly document that not only fulfills Federally-mandated legal requirements but also serves as a scientific reference for future professional studies. As such, the report's contents should be both descriptive and analytic in nature.

1.03 The investigation and reports represents partial fulfillment of Federal obligations toward cultural resources as required by the National Environmental Policy Act of 1969 (P.L. 91-90); National Historic Preservation Act of 1966 (P.L. 89-665); Protection and Enhancement of the Cultural Environment (E.O. 11593); Advisory Council's Procedures for the Protection of Historic and Cultural Properties (36 CFR 800); and Preservation of Historic and Archeological Data 1974 (P.L. 93-291).

2.00 Regional Description

2.01 Camp Ripley is located in the central portion of the State of Minnesota, approximately 125 miles northwest of Minneapolis/St. Paul (see figure 1, attached). Fort McCoy is approximately 250 miles to the southeast of Camp Ripley. The nearest communities to Camp Ripley are Brainerd, 29 miles to the north, and Little Falls, 4 miles to the south (see figure 2, attached). The camp is located entirely within Morrison County.

3.00 Installation

3.01 The camp covers 53,000 acres and is approximately 18 miles north to south and 5-7 miles east to west (see figure 3, attached). The camp is bounded on the east by the Mississippi River and on the north by the Crow Wing River. Land along the south and west boundary of Camp Ripley is a predominantly rural mixture of farmland, marshes, lakes, and woodlands. The topography ranges from flat to hilly and elevations vary from 1,120 feet to 1,520 feet above sea level. Vegetation is generally coniferous, oak, or poplar trees with open areas.

3.02 Cantonment Area: The cantonment area is located in the southeastern corner of Camp Ripley. The main gate enters on Infantry Road (see figure 3 and 4, attached). The cantonment area covers about 260 acres and is laid out in a rectangular shape that is oriented north and south. All of the buildings

are constructed in a very uniform fashion off the roads, which run north and south or east and west. There are a large number of unheated metal building (hutments) on the east side of the cantonment which are used as temporary barracks during the summer months. The remaining permanent buildings are primarily cement block or masonry construction and have tile or asphalt shingle roofing. In area 10 there are also a few World War II-type, two-story wood frame barracks that are winterized. The level terrain and undeveloped space within the cantonment area is ideally suited to building construction.

3.03 Training and Maneuver Area: The areas north of the cantonment area are used for various types of training (range firing, tactical maneuver exercises, winter training, engineer training, etc.). Existing on-post maneuver acres total 47,035. Off-post maneuver acres total 1,672, including some islands in the Mississippi River. Camp Ripley has the advantage of being located in a rural area of low population density without and significant encroachment of residential or industrial land uses. Approximately 8,600 acres of leaseable property suitable for military purposes is available along the camp's western boundary.

4.00 Project Description

4.01 The literature search and records review for Camp Ripley is being undertaken as a part of the St. Paul District's effort to prepare a mobilization master plan for the installation. The master plan will outline what steps are necessary in order to support the installation's full mobilization mission. A number of projects have been identified which would bring the installation to full mobilization capability. These have been placed into three groups based upon construction priority during peacetime. Projects range from new construction to winterizing existing structures.

4.02 Mobilization efforts will focus on the cantonment area as described above. While the entire Camp is included in the literature search and records review portion of this cultural resources effort, development of a phased program for future studies will emphasize the work to be done as a result of the St. Paul District's mobilization efforts.

5.00 Definitions

5.01 "Cultural resources" are defined to include any building, site, district, structure, object, data, or other material relating to the history, architecture, archeology, or culture of an area.

5.02 "Literature search" is defined as an examination review of written reports, books, articles, etc., published and unpublished, which are pertinent to the cultural resources investigation to be carried out for a particular project. The purpose of the literature search is to familiarize the contractor with the culture, history, and past investigations which have been carried out in the area of the study, and to provide this information in a summarized form to the agency requesting the search. While the existing data could be extensive, the literature search should be limited, as much as possible, to providing a useable body of data for the purposes outlined above.

5.03 "Records review" is defined as the examination and review of records, files, etc., which are maintained by various local and State agencies. The purpose of the records review is to document the location of known sites which may exist within the project area, their condition, the extent of past work undertaken at the site, and any other information which may be relevant in assessing the significance of the site.

6.00 Study Area

6.01 The areas to be examined as part of this study are those areas within the Camp Ripley boundary as shown on figure 3. Both the cantonment area and the training and maneuver area will be dealt with at the same level of detail for the literature search and records review.

6.02 A number of issues to be addressed in the preparation of the phased program for future studies (discussed below) will require the contractor to be familiar with the history and prehistory of central Minnesota.

7.00 Performance Specifications

7.01 The contractor will utilize a systematic, interdisciplinary approach in conducting the study. The contractor will provide specialized knowledge and skills during the course of the study, to include expertise in archeology and other social and natural sciences as required. Personnel involved with the work under this contract must meet the minimum professional qualifications.

7.02 The extent and character of the work to be accomplished will be subject to the general supervision, direction, control, and approval of the contracting officer.

7.03 Techniques and methodologies used during the investigation shall be representative of the current state of knowledge for their respective disciplines.

7.04 The contractor shall keep standard records which shall include, but not be limited to, research notes, site survey forms, maps, and photographs.

7.05 The contractor shall provide all materials and equipment as may be necessary to expeditiously perform those services required of the study.

Literature Search

7.06 Information and data for the literature search and records review will be obtained from, but not limited to, the following sources:

a. Published and unpublished reports and documents such as books, journals, theses, dissertations, manuscripts, newspapers, W.P.A. reports, surveyors' maps and notes, early atlases, and missionary records.

b. Site files and other information held at the Minnesota Historical Society, the State Archeologist's Office; the University of Minnesota Department of Anthropology and libraries; and materials available from county

and local historical societies.

c. The contractor will obtain from the State Historic Preservation Offices information regarding any cultural resources in the project area that have been nominated or are being considered for nomination to the National Register of Historic Places.

d. Consultation with other professionals familiar with cultural resources in the area.

7.07 A study and evaluation of previous archeological and historical studies of the region, including the date, extent, and adequacy of the past work as it reflects on the interpretation of what has been done in the area should be undertaken and summarized in the report.

7.08 The literature search should include a listing of all sites (historic and prehistoric) identified during the course of the study and an evaluation of the impact of the project upon them.

8.00 Development of a Phased Cultural Resources Program

8.01 The contractor will develop a cultural resources program for Camp Ripley which will identify future research needs on a priority basis. This program should be phased so that future research develops in an orderly, planned manner. Phasing should be developed so that each phase is capable of standing as a distinct unit within the overall plan, for example: an archeological survey of Group I priority projects within the cantonment area or a reconnaissance survey of the training and maneuver area would be acceptable phases - an intensive archeological survey of Camp Ripley would not be acceptable. The contractor should keep in mind that funding for cultural resources will probably be limited, therefore, smaller, less costly phases are likely to be funded sooner than larger, more encompassing phases.

8.02 As part of this phased program, a discussion should be included in the text of the technical report which predicts site density and distribution within the study area. This discussion should be based on the literature search and records review and on the contractor's knowledge of the regional data base. This predictive model will, out of necessity, be intuitive, but it should provide resource managers with general planning guidance. This discussion should also include the limitation of the model as a cautionary statement for its use as a sole planning device. In addition to this discussion, a map showing areas of varying potential for archeological and historic properties will be prepared.

8.03 The contractor will identify areas of past disturbance which may limit the archeological or historic potential of an area. For example, there are areas within the training and maneuver area which have previously been used as tank traps. These traps are excavated ditches which likely destroyed any resources which may have existed in these areas. The contractor shall also identify problems which may make data collection difficult. For example, many unexploded munitions may exist in the range area which would make shovel testing difficult if not impossible. Suggested alternative methods of data

collection or methods of overcoming these problems should also be discussed. Fulfillment of these work tasks will require close coordination with Camp Ripley staff.

8.04 The technical report will discuss known and predicted impacts to the cultural resources of Camp Ripley. All known and predicted impacts should be discussed, however, special attention should be given to those associated with mobilization efforts.

8.05 The contractor will identify the interpretive potential for any sites which may have special or significant interests to the public such as the Fort Ripley historic site. Recommendations for implementing interpretive work is also sought.

8.06 The contractor will provide detailed cost estimates for each phase of work developed to implement future cultural resources research.

9.00 General Report Requirements

9.01 The technical report shall include, but not be limited to, the following sections. These sections do not necessarily need to be discrete sections, however, they should be readily discernable to the reader.

a. Title Page: The title page should provide the following information: the type of investigation undertaken; the cultural resources which were assessed (archeological, historical, and architectural); the project name and location (county and State); the date of the report; the contractors name; the contract number; the name of the author(s) and/or Principal Investigator; the signature of the Principal Investigator; and the agency for which the report is being prepared.

b. Administrative Summary: The summary will be a synopsis of the report defining the project area and the level of the cultural resources investigation. It shall summarize the research objectives and problems; methods, numbers, and types of resources identified; the significant recommendations; and any unusual or innovative findings or techniques developed during the course of the investigation. The summary should be as detailed and succinct as possible. Normally the summary will not exceed one typewritten page.

c. Table of Contents.

d. Introduction: This section should include the purpose of the report; a description of the project; the location of the project including map of the general area; and a project map.

e. Environmental Setting: This section should contain a brief description of the environment of the study area, both present and past conditions, and it should be a length commensurate with other sections of supporting type information. The purpose of this section is to document changes in past environmental conditions and the manner in which man has adapted to or attempted to change these conditions. The discussion should

follow a broader habitat approach rather than a listing of faunal and floral species. When possible, specific examples should be provided as supportive evidence of these changes, such as pollen studies and environmental data contained within prehistoric sites.

f. Study Methods: This section should give an explicit statement of the study methods and rationale under which the investigation was completed. It should document the general sources which were sought and the types of data which were expected of these sources. (For example, an archeological journal may provide information on past surveys and excavations which is useful not only for site locations but also for assessing the quality of past work and apparent data gaps which may exist, whereas field notes of General Land Office (GLO) surveys may provide information on the location of prehistoric and early historic sites and early vegetation of an area.)

g. Summary of Regional Prehistory and History: This section should discuss the regional cultural developments in their spatial and chronological position.

h. Investigation Results: This section should describe the historical as well as the prehistoric archeological resources encountered in the literature search and survey, with each site discussed as the separate unit. The site description should include the legal description of the site and the USGS quadrangle map on which it can be found, the size of the site, the type of site (i.e., historic dwelling, prehistoric village, mound group, etc.), the cultural component(s) of the site (if discernable), and any available information on the general nature of the site, to include a general evaluation of impacts of the project upon them. For those sites listed on the National Register of Historic Places, the description shall include a statement of significance and a map showing the boundaries of the site or district. A site map should be included for all other sites described in this study. This section should also contain a brief summary of previous archeological and historical work undertaken at the site including the date, extent, and adequacy of the past work as it reflects on the interpretation of what might be found in the project area. Official site designations should be included for the resources discussed. A means of cross-referencing these sites with the bibliographic entries in which they may be located should also be developed.

i. Future Studies Required: This section will present the phased cultural resources program for future cultural resources investigations at Camp Ripley as outlined in section 8.00 above. Each phase should present the rationale behind the recommended studies (i.e., probability of sites, survey problems, past disturbance, etc.), the phase itself and the costs of implementing the phase.

j. References: American Antiquity format should be used.

k. Appendix: This section should contain the scope of work and the resumes of the Principal Investigator and other major contributors to the study.

9.02 Failure to fulfill these report requirements may result in the rejection of the report by the contracting officer.

10.00 Format Specifications

10.01 Text material will be typed (single-spaced) on good quality bond paper, 8.5 inches by 11.0 inches, with a 1.5-inch binding margin on the left, 1-inch margins on the top and right, and a 1.5-inch margin at the bottom. The report should be reproduced on paper of sufficient weight to allow for printing on both sides of each page.

10.02 Information will be presented in textual, tabular, and graphic forms, whichever is most appropriate, effective, or advantageous to communicate the necessary information.

10.03 All figures must be readily reproducible by standard xerographic equipment.

11.00 Submittals

11.01 The contractor will submit reports according to the following schedules:

a. Draft Final Report: Ten copies will be submitted 212 calendar days after contract award. The contracting officer will provide the contractor with comments on this draft report.

b. Revised Final Report: An original, camera ready copy will be submitted 60 calendar days after receipt of comments by the contractor. This final report will include appropriate revisions in response to the contracting officers comments.

11.02 The contractor shall submit the photographic negatives for all black and white photographs which appear in the final report.

11.03 The contractor shall not release any sketch, photograph, report, or other material of any nature obtained or prepared under this contract without specific written approval of the contracting officer prior to the acceptance of the final report by the Government.

12.00 Method of Payment

12.01 Requests for partial payment under this fixed price contract shall be made monthly on ENG Form 93. A 10-percent retained percentage will be withheld from each partial payment. Upon approval of the final reports by the contracting officer, final payment, including previously retained percentage, shall be made.

APPENDIX B

Vita of Principal Investigator

ROBERT PATRICK FAY

Date and Place of Birth: 16 May 1952, Waukesha, Wisconsin

Marital Status: Married, 1975, to Georgia (Pauly)
One daughter, Erin

Education:

M.A. - Anthropology, University of Kentucky-Lexington, 1980

B.A. - Anthropology, University of Wisconsin-Madison, 1974

Special Areas of Interest:

North American Prehistory, Eastern United States and Western Great Lakes Region; Historical Archaeology; Problems in Cultural Resource Management; Faunal Analysis.

Present Position:

Self-employed contract archaeologist, Old Northwest Research.

Previous Employment:

- 1975-1977 Archaeologist/Environmental Reviewer, Anthropology Office, State Historical Society of Wisconsin (full time - 10 months, part-time - 11 months). Reviewed environmental impact statements for the State Archaeologist and State Historic Preservation Officer and maintained the Wisconsin Archaeological Codification Files.
- 1977-1978 Research Analyst I - Historic Preservation Division, State Historical Society of Wisconsin (7 months). Employed under a Coastal Zone Management grant to compile, systematize, and update an inventory of known Wisconsin archaeological sites in Lake Michigan counties.
- 1978 Curator II, Anthropology Office, State Historical Society of Wisconsin (4 weeks). Employed under a Wisconsin Department of Transportation, Division of Highways grant to conduct a records search of archaeological sites reported during the Wisconsin Highways Survey Program.
- 1980-1981 Natural Resource Specialist 2 - Staff Archaeologist, Wisconsin Department of Natural Resources, Bureau of Parks and Recreation (15 months). Employed under a federal survey and planning subgrant to conduct archaeological field surveys on Department lands and implement a Departmental cultural resource management program.
- 1982 Research Associate, Great Lakes Archaeological Research Center, Inc., Waukesha, Wisconsin (5 months). Conducted a literature search and records review of historical, historic archaeological, and architectural resources in the Upper Mississippi River Basin

- 1982 (cont.) from the Falls of St. Anthony to Lock & Dam No. 10 at Guttenberg, Iowa. Report submitted to the U.S. Army Corps of Engineers, St. Paul District.
- 1982-1983 Research Analyst 2 - Archaeologist/Planner, Historic Preservation Division, State Historical Society of Wisconsin (9 months). Employed under a federal survey and planning grant to develop the historic archaeological component of a state-wide cultural resource management (RP3) plan.
- 1983-1984 Natural Resource Specialist 3 - Project Archaeologist, Wisconsin Department of Natural Resources, Bureau of Parks and Recreation (9 months). Conducted archaeological field surveys of proposed developments on Department lands in accordance with federal standards and state guidelines and a cultural resources literature search and records review of the proposed Lower Wisconsin River State Forest.

Fieldwork Experience:

Wisconsin

- 1972 Eight week field school, Aebischer (Paleo-Indian-Archaic) and Geiser (Woodland) Sites, Calumet County, Wisconsin. University of Wisconsin-Oshkosh, Dr. Alaric Faulkner, Field Director.
- 1974 Archaeological Site Survey, Proposed Upland Recreation Areas of Lake LaFarge Project, Vernon County, Wisconsin (10 weeks) crew member, State Historical Society of Wisconsin, John Halsey, Project Director.
- 1974 Test Excavations, Cortois (Pedretti) Village Site (Hopewell), Crawford County, Wisconsin (1 day) field volunteer.
- 1975 Site Survey and Test Excavations, Proposed Lower Pool of the Lake LaFarge Project, Vernon County, Wisconsin (10 weeks) crew member, State Historical Society of Wisconsin, John Halsey, Project Director.
- 1975 Aztalan State Park, Proposed Warehouse Site, Jefferson County, Wisconsin (1 day) field assistant, State Historical Society of Wisconsin, Dr. Joan E. Freeman, Project Director.
- 1975 Lenius Village Site (Woodland), Door County, Wisconsin (3 days) field assistant, State Historical Society of Wisconsin, John Halsey, Project Director.
- 1976 Highway Survey in Brown, Iowa, Richland, and Washington Counties, Wisconsin (12 weeks) project assistant, State Historical Society of Wisconsin, Dr. Joan E. Freeman, Supervisor.

- 1976 Archaeological Site Survey, Otter Creek Watershed, Iowa County, Wisconsin, U.S. Department of Agriculture-Soil Conservation Service (10 days) project assistant, State Historical Society of Wisconsin, Dr. Joan E. Freeman, Supervisor.
- 1976 Test excavations at Rolette House (c. 1840), Prairie du Chien, Crawford County, Wisconsin (1 week) crew member, State Historical Society of Wisconsin, Dr. Joan E. Freeman, Project Director.
- 1977 Archaeological Site Survey, Stricker and Tiedeman Ponds, Middleton, Wisconsin (3 weeks) Co-Principal Investigator.
- 1977 Test excavations at Rolette House (c. 1840), Prairie du Chien, Crawford County, Wisconsin (4 weeks) project assistant, State Historical Society of Wisconsin, Dr. Joan E. Freeman, Project Director.
- 1978 North West Company Wintering Post (c. 1802-1803), Burnett County, Wisconsin (8 weeks) crew member, State Historical Society of Wisconsin, Dr. Joan E. Freeman and Edgar S. Oerichbauer, Project Directors.
- 1980-1981 Archaeological Site Surveys and Test Excavations at several Wisconsin Department of Natural Resources properties: Buffalo River State Trail (Buffalo County), Devil's Lake State Park (Sauk County), Dunnville Wildlife Area (Dunn County), Governor Nelson State Park (Dane County), Havenwoods State Forest Preserve (Milwaukee County), Hoffman Hills Recreation Area (Dunn County), Pike Lake State Park (Washington County), and Tower Hill State Park (Iowa County), Principal Investigator.
- 1982 Salvage Excavations at "Hardscrabble" (c. 1820s-1840s), an early lead mining community near Hazel Green, Grant and Lafayette Counties, Wisconsin (5 days), Principal Investigator.
- 1983 Test Excavations at the site of Fort Koshkonong (1832), Fort Atkinson, Jefferson County, Wisconsin (1 day), Co-Principal Investigator, Hoard Museum.
- 1983 Archaeological Site Surveys at several Wisconsin Department of Natural Resources properties: Devil's Lake State Park (Sauk County), Havenwoods Forest Preserve and Nature Center (Milwaukee County), Indian Mounds State Forest Campground and Picnic Area (Oneida County), and Red Cedar Lake Wildlife Production Area (Jefferson County), Principal Investigator.
- 1984 Archaeological Site Surveys and Test Excavations at several project areas: Whitefish Dunes State Park (Door County), Sokaogon Chippewa Housing Authority, Mole Lake Indian Reservation (Forest County), City of New Lisbon Multi-Housing Parcel (Juneau County), Lake Redstone Protection District Permit Area (Sauk County), CTH bridge replacements (Sauk County), and Jackson Bay Elderly Apartment Parcel (Washington County), Principal Investigator.

Kentucky

- 1978 Johnson Site (Fort Ancient), Scott County, Kentucky (1 day) field volunteer, Charles Hockensmith, Principal Investigator, Department of Anthropology, University of Kentucky.
- 1978 Test Excavations at Liberty Hall (c. 1796), Frankfort, Kentucky (1 week), Principal Investigator. Kentucky Chapter of the National Society of Colonial Dames in America.
- 1979 Salvage Excavations, Archaic Burial Site, Logan County, Kentucky (1 day) field volunteer, Department of Anthropology, University of Kentucky.
- 1979 Test Excavations at Liberty Hall (c. 1796), Frankfort, Kentucky (12 weeks) Principal Investigator. Kentucky Chapter of the National Society of Colonial Dames in America.
- 1979 Archaeological Site Survey, Daniel Boone National Forest, Bath and Menifee Counties, Kentucky (1 day) crew member, Cultural Resource Assessment Program, Department of Anthropology, University of Kentucky.
- 1980 Test Excavations at Lee's Tavern (c. 1790), Nugent's Crossroads, Woodford County, Kentucky (4 weeks) Co-Principal Investigator. Woodford County Historical Society, Versailles, Kentucky.

California

- 1980 Archaeological Site Survey, Tahoe National Forest, Sierra and Nevada Counties, California (2 weeks) field supervisor, Adena Information Management Corporation, Lexington, Kentucky, Dr. Richard Levy, Principal Investigator.

Publications:

- 1977 The Codification of Wisconsin's Archaeological Sites: An Update Report. The Wisconsin Archeologist 58 (1):62-70.
- 1984a Annotated Bibliography for the Identification of Nineteenth Century Artifacts. The Wisconsin Archeologist 64 (3-4):288-302 (with John T. Penman).
- 1984b Archaeology, History, and Preservation: Hardscrabble - A Case Study. Wisconsin Academy Review 30 (2):8-10 (March).

Technical Reports:

- 1975 A Report on Ceramic Material Recovered from the Preston Rockshelter (Gt-157): An Archaic to Late Woodland Rockshelter in Grant County, Wisconsin. MS. on file, Department of Anthropology, University of Wisconsin, Madison.

- 1976 Archaeological Survey Report: The Otter Creek Watershed, Structures #4, #5, and #11, Iowa County, Wisconsin. Report submitted to U.S.D.A.-Soil Conservation Service. MS. on file, State Historical Society of Wisconsin.
- 1976 Three Archaeological Highway Survey Reports for projects in Brown, Iowa, and Washington Counties, Wisconsin. Report submitted to Wisconsin Department of Transportation, Division of Highways. MS. on file, State Historical Society of Wisconsin.
- 1978 An Archaeological Survey of Stricker and Tiedeman Ponds, Middleton, Wisconsin. MS. on file, Anthropology Office, State Historical Society of Wisconsin.
- 1978 A Records and Literature Search of Archaeological Sites in Wisconsin Counties Located Within the Lake Michigan Coastal Zone. Report submitted to Wisconsin Coastal Zone Management Program Office. MS. on file, State Historical Society of Wisconsin.
- 1978 A Records Search of Archaeological Sites in the Highway Survey Files located at the State Historical Society of Wisconsin. Report submitted to Department of Transportation, Division of Highways. MS. on file, State Historical Society of Wisconsin.
- 1979 Test Excavations at Liberty Hall, Frankfort, Kentucky. Report submitted to Liberty Hall, Inc. MS. on file, Kentucky Heritage Commission.
- 1980 Archaeological Investigations at Liberty Hall, Frankfort, Kentucky: 1979 Test Excavations. Report submitted to Liberty Hall, Inc. MS. on file, Kentucky Heritage Commission.
- 1980 The Vertebrate Faunal Remains from Liberty Hall, Frankfort, Kentucky: A Preliminary Report. MS. on file, Department of Anthropology, University of Kentucky.
- 1980 Preliminary Report of an Archaeological Survey of Proposed Developments at Interstate State Park, Polk County, Wisconsin. Report of Investigations No. 1. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1981 Final Report of an Archaeological Survey of Proposed Developments at Interstate State Park, Polk County, Wisconsin. Report of Investigations No. 2. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1981 Final Report of an Archaeological Survey of the Proposed Corridor for the Relocation of CTH "S" at Interstate State Park, Polk County, Wisconsin. Archaeological Report No. 3. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.

- 1981 An Archaeological Survey of the Proposed Dunnville Streambank Stabilization Project on the Red Cedar River, Dunnville Wildlife Area, Dunn County, Wisconsin. Archaeological Report No. 4. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1981 Final Report of an Archaeological Survey of Proposed Developments at Tower Hill State Park, Iowa County, Wisconsin. Archaeological Report No. 5. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1981 Summary Report of DNR Staff Archaeologist Activities for 1980-1981. Archaeological Report No. 6. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1981 Wisconsin Department of Natural Resources Cultural Resources Bibliography. Archaeological Report No. 7. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1983 History of American Settlement in the Upper Mississippi Valley - 1805 to Present. In Cultural Resources Literature Search and Records Review - Upper Mississippi River Basin. Reports of Investigation No. 116. Great Lakes Archaeological Research Center, Inc., Waukesha, Wisconsin.
- 1983 Report of an Archaeological Survey of Proposed Developments at Havenwoods Forest Preserve and Nature Center, Milwaukee County, Wisconsin. Archaeological Report No. 8. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1983 An Archaeological Survey of Proposed Development at Indian Mounds State Forest Campground and Picnic Area, Northern Highland-American Legion State Forest, Oneida County, Wisconsin. Archaeological Report No. 9. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1983 An Archaeological Survey of the Proposed North Campground and Amphitheater Area at Devil's Lake State Park, Ice Age National Scientific Reserve, Sauk County, Wisconsin. (Addendum to National Park Service Archaeological Survey Report, November 1981). Archaeological Report No. 10. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1984 A Cultural Resources Literature Search and Records Review of the Proposed Lower Wisconsin River State Forest. Archaeological Report No. 11. Wisconsin Department of Natural Resources, Bureau of Parks and Recreation.
- 1984 A Cultural Resources Reconnaissance Survey: The Lake Redstone Protection District Permit Area (NCSCO-RF-83-289-23), Town of LaValle, Sauk County, Wisconsin. Old Northwest Research Report No. 1.

- 1984 A Cultural Resources Reconnaissance Survey: The Sokaogon Chippewa Housing Authority Project Area, Mole Lake Reservation, Forest County, Wisconsin. Old Northwest Research Report No. 2.
- 1984 An Archaeological Survey of a Proposed Multi-Family Housing Parcel in the City of New Lisbon, Juneau County, Wisconsin. Old Northwest Research Report No. 3.
- 1984 Site Evaluation Studies of Archaeological Sites 47SK322, 47SK324, and 47SK325, The Lake Redstone Protection District Permit Area (NCSCO-RF-83-289-23), Town of LaValle, Sauk County, Wisconsin. Old Northwest Research Report No. 4.
- 1984 An Archaeological Survey of the High-Low Road Bridge Replacement Project Area, Town of Excelsior, Sauk County, Wisconsin. Old Northwest Research Report No. 5.
- 1984 An Archaeological Survey of the Briar Bluff Road Bridge Replacement Project Area, Town of Dellona, Sauk County, Wisconsin. Old Northwest Research Report No. 6.

Papers Presented:

- 1979 A Nineteenth Century Underground Drainage System at Liberty Hall, Frankfort, Kentucky. Paper presented at the 36th annual meeting of the Southeastern Archaeological Conference, Atlanta.
- 1983 Restoration Archaeology at Liberty Hall, Frankfort, Kentucky: the 1978 and 1979 Excavations. Paper presented at the Symposium on Ohio Valley Urban and Historic Archaeology, Louisville.

Teaching Experience:

- 1977 Student Residency, James Madison Memorial High School, Madison, Wisconsin. Natural History Course, Sophomore curriculum, spring semester.
- 1979 Teaching Assistantship, ANT 121 Human Ancestry, University of Kentucky, spring semester.

Professional Memberships:

Society for Historical Archaeology
The Wisconsin Archaeological Society
Survey and Codification Committee 1976-78
The Wisconsin Archaeological Survey
Aztalan Committee 1981-present
Legislative Committee 1982-83
Public Information Committee 1982-present
Vice-President 1983-present
The Wisconsin Academy of Sciences, Arts and Letters
The National Trust for Historic Preservation
Minnesota Historical Society



DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
1135 U. S. POST OFFICE & CUSTOM HOUSE
ST. PAUL, MINNESOTA 55101-1479

REPLY TO
ATTENTION OF:

June 3, 1985

Environmental Resources Branch
Planning Division

Mr. Robert P. Fay
Old Northwest Research
2310 Rowley Avenue
Madison, Wisconsin 53705

Dear Mr. Fay:

Enclosed are the comments of the St. Paul District, the State Historic Preservation Officer, and the National Park Service on your draft report of February 15, 1985 entitled Cultural Resources Literature Search and Records Review of the Camp Ripley, General E.A. Walsh Training Center, Morrison County, Minnesota.

We look forward to receiving the final report which incorporates the submitted comments. Should you have any questions on any of the comments and how these should be incorporated into the final, please call Mr. David Berwick of my staff at (612) 725-7854.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne A. Knott".

Wayne A. Knott
Chief, Environmental Resources Branch
Planning Division

Enclosure

ST. PAUL DISTRICT COMMENTS ON A REPORT ENTITLED
CULTURAL RESOURCES LITERATURE SEARCH AND RECORDS REVIEW
OF THE CAMP RIPLEY, GENERAL E. A. WALSH TRAINING CENTER
MORRISON COUNTY, MINNESOTA

1. We are very pleased with the report. It is a well researched and well written document. The text is clear, concise, and interesting.

① 2. There are a number of typographical and editorial errors in the document which need to be corrected. Please carefully review the report and make appropriate changes.

② 3. The "targeted survey area", p. 42, figure 5, is missing the crosshatching in the key of the figure.

③ 4. Figures 8-15 are poorly reproduced. The clarity of these figures should be corrected for the final report. These should be of a quality to be easily reproduced by standard copying equipment.

5. Please contact Mr. David Berwick to discuss the comments of the National Park Service and the Minnesota State Historic Preservation Officer. It may be desirable to contact Mr. John Ebert of Camp Ripley to discuss these comments in relation to their needs; however, first contact Mr. Berwick.



STATE OF MINNESOTA
DEPARTMENT OF MILITARY AFFAIRS
OFFICE OF THE ARCHITECT AND ENGINEER
P.O. BOX 348
CAMP RIPLEY
LITTLE FALLS, MINNESOTA 56345-0348

J. Ebert/cs
612-632-6631/447

April 19, 1985

Mr. Wayne A. Knott
Chief, Environmental Resources Branch
Planning Division
U.S. Corps of Engineers
1135 U.S. Post Office and Custom House
Saint Paul, Minnesota 55101

Dear Mr. Knott:

Thank you for the opportunity to review the draft report entitled Cultural Resources Literature Search and Records Review of the Camp Ripley, General E.A. Walsh Training Center, Morrison County, Minnesota by Mr. Robert Fay of Old Northwest Research.

The report seems to be a quality report that is well written. The following comments are provided to make it accurate and current:

<u>Page</u>	<u>Para/Line</u>	<u>Present</u>	<u>Change to Read</u>	<u>Reason</u>	
1	2	2-7	Trunk Highways 6 and 115	County Highway 1 and State Highway 115	Accuracy
	2	4-2	260	1955	Accuracy
		4-4	Infantry Road	Walsh Drive	Accuracy
		4-5	Trunk Highway 115	State Highway 115	Accuracy
		4-8	Freehem	Freedhem	Accuracy
	7	3-9	Towns	Townships	Accuracy
	79	4	Army Reserve National	Army National	Accuracy
	S-5	Site Location	Trunk Highway 6	County Highway 1	Accuracy
	S-78	Site Location	Infantry Road	Walsh Drive	Accuracy

Should you have any questions concerning these comments, please contact Mr. John Ebert of my staff at 612-632-6631, extension 447.

Sincerely,

WAYNE A. JOHNSON
Major, Infantry
Minnesota Army National Guard
Facilities Management Officer



FOUNDED IN 1849

- 110 -

MINNESOTA HISTORICAL SOCIETY

690 Cedar Street, St. Paul, Minnesota 55101 • (612) 296-6126

20 May 1985

Mr. Wayne A. Knott
Corps of Engineers
1135 U.S. Post Office & Custom House
St. Paul, Minnesota 55101

Dear Mr. Knott:

RE: Cultural Resources Literature Search
and Records Review of the Camp Ripley,
General E.A. Walsh Training Center,
Morrison County, Minnesota

MHS Referral File Number: X-435
(PLEASE REFER TO THIS NUMBER IN
ALL FUTURE CORRESPONDENCE)

5
Thank you for the opportunity to review the above-referenced report. It is a well-researched and well written effort. The only disagreement I have is with the proposed random sampling scheme (pp.44-45). I can think of no reason to utilize such a scheme. What would it accomplish? A better course for future investigations would be to identify zones of high-probability for either historic or prehistoric sites, and then examine those areas, prioritizing the work by likely construction or use impacts.

Thank you for undertaking this important cultural resources reconnaissance. We look forward to receiving the final copy.

If you have any questions on our review, please contact Ted Lofstrom, Environmental Assessment Officer, Minnesota Historical Society, Fort Snelling History Center, St. Paul, Minnesota 55111.

Sincerely,

for *Donna Coddington*

Russell W. Fridley
State Historic Preservation Officer

cc: ✓ David Berwick, Corps of Engineers



United States Department of the Interior

NATIONAL PARK SERVICE

ROCKY MOUNTAIN REGIONAL OFFICE

655 Parfet Street

P.O. Box 25287

Denver, Colorado 80225

IN REPLY REFER TO:

H2415 (RMR-PR)

APR 05 1985

Mr. Wayne A. Knott
Chief, Environmental Resources Branch
Planning Division
Attention: Mr. David Berwick
Department of the Army
St. Paul District, Corps of Engineers
1135 U.S. Post Office & Custom House
St. Paul, Minnesota 55101

Dear Mr. Knott:

In response to your request of March 1, 1985, we have reviewed the draft report entitled "Cultural Resources Literature Search and Records Review of Camp Ripley, General E. A. Walsh Training Center, Morrison County, Minnesota." Enclosed please find a copy of the review comments.

The thorough effort in compiling a data base of known resources is noted. However, recommendations for evaluation and management of resources are incomplete. The report does not provide sufficient guidance for implementation of historic preservation needs.

Thank you for allowing us to review this report; we trust that our comments prove useful.

Sincerely,

Jack R Rudy, Chief
Branch of Interagency Archeological Services

Enclosure

UNITED STATES GOVERNMENT

memorandum

DATE:

April 3, 1985

Agency Archeological Services

SUBJECT:

Review of "Cultural Resources Literature Search and Records Review of the Camp Ripley, General E. A. Walsh Training Center, Morrison County, Minnesota"

TO:

Review Coordinator *JFH*

Subject report is a draft reviewed at request of the St. Paul District, Corps of Engineers. Purposes of the study are to locate and evaluate archeological and historic sites from existing information, assess potential impacts to resources posed by planned mobilization projects, and develop a phased program for future study and management of resources. The author partially succeeds in meeting these proposes.

Brief summaries of regional environment and culture history are presented for backgrounding, and made pertinent to the study area. Understandably, the historic overview of Fort/Camp Ripley is the more thorough discussion. The "methodology" of the study is described in terms of archival repositories and major types of sources examined, and individuals consulted. The extensive bibliography of examined documents indicates a rather thorough effort, but the author notes that there is no guarantee that all known resources are identified.

The resultant data base consists of five prehistoric sites, only one of which is recorded in state files. Fifty-six historic sites, including standing structures, are identified. These are largely concerned with turn of the century rural development; only a few military sites are present. A detailed inventory of resources and a compilation of site records are included. The author also assesses the data base for biases and gaps.

6
7
Expectedly, much of Camp Riply has been impacted by past training activities, especially the cantonment. Impacts stemming from land use prior to expansion of camp development are not addressed. The forty-three proposed mobilization projects, which are the impetus for this study, are not adequately described. Hence, the reader is unable to determine the full potential for impacts to known or unknown resources. Apparently, most of these projects concern winterization of existing structures. If this is the case, the author may be correct in stating that none of the proposed projects will have significant adverse effect on known sites. The uncertainty here is the presence of unknown resources within presently impacted areas. The author addresses this by recommending systematic archeological survey and testing.

8
Recommendation for management of the data base center on further identification, evaluation, and interpretation of sites. Intensive survey is recommended for specific project areas ("Targeted Survey"), and sample survey is recommended for the balance of the camp. For the latter effort, the author identifies randomly selected survey tracts that encompass major environmental zones. However, there is no explanation for the sample size that consists of less than 25% of the camp area. The reader is left wondering whether more or

9 less would suffice. The recommendations for geomorphological study could be expanded to clarify potentially important results. Recommendations for evaluation concern field examination to record known sites, and efforts to nominate significant resources to the National Register of Historic Places.

10 Regrettably, the author does not present any research topics, or design, for supportable application of National Register criteria to individual or collected sites. Management recommendations also fail to consider the

11 following major points (1) Treatment of sites yet to be discovered, including emergency discovery situations, (2) Treatment of human burials, both historic and prehistoric, (3) Identification and consideration of American Indian religious sites under Public Law 95-341, and (4) Historic architectural assessment of standing structures, including engineering works.

12 Recommendations for interpretation are provided per contract terms, although it is difficult to envision the National Guard being in the business of

13 educating the public in local history and archeology.

14 Summarily, the author has addressed half of the project needs in this study; a data base is provided. However, recommendations for resource evaluation and management are incomplete. As presently written, this report will not provide suitable and economic compliance with historic preservation requirements.

Responses by Old Northwest Research to the Draft Report Review Comments

U.S. Department of the Army, St. Paul District, Corps of Engineers

1. Typographical and editorial errors in the document have been corrected.
2. Crosshatching has been added to "targeted survey area" in the key of Figure 5.
3. Figures 8-15 have been reproduced for clarity.

State of Minnesota Department of Military Affairs, Office of the Architect and Engineer

4. All of the comments listed to make the document accurate and current have been made.

State Historic Preservation Officer, Minnesota Historical Society

5. The development of a sampling strategy to predict site density and distribution within the study area is specified in the scope of work (Section 8.02). As indicated on p. 50, Section 7 of the report, several areas within the camp boundaries where both prehistoric and historic sites might be expected to be found are not available for field survey due to training and maneuver areas and unexploded munition fields. These restricted areas are "off limits" and closed to the general public. The five randomly selected survey areas encompass a variety of environmental zones (river terraces, wetlands, inland lakes, wooded uplands) that are accessible for reconnaissance survey work. It is expected that the results from surveys conducted in these areas will provide much needed data concerning prehistoric site density as well as information on any historic period sites located on the military reservation. The results will also be used to establish additional data sets and cultural resource management recommendations and to make predictions concerning site density in restricted areas of the camp which, more than likely, will never be investigated for archaeological remains. The "proposed random sampling scheme" augments nine "targeted survey areas" (pp. 49-50) that appear to have a high probability for sites. Work in these areas has not been prioritized since it does not appear that mobilization development and use will directly impact any known cultural resources.

U.S. Department of the Interior, National Park Service, Rocky Mountain Regional Office

6. Impacts stemming from Euro-American frontier settlement and rural land use prior to the expansion of Camp Ripley are mentioned on p. 11, paragraph 2, and include dams, roads, bridges, churches, schools, and farms. For purposes of clarification, a paragraph summarizing these

impacts on the cultural resource data base within the study area has been prepared and inserted as paragraph 4 under Section 6 on p. 39.

7. The 43 proposed mobilization projects at Camp Ripley are summarized in Tables 7-9 which have been inserted in the report to clarify the statement made on p. 44 that most of the proposed mobilization projects concern the winterization of existing structures or will occur in areas of previous soil disturbances. None of the projects, as currently planned, will adversely effect any known significant cultural resource.
8. A 25% random sample is suggested only as a possible sample size. Alternative sampling procedures obviously exist. However, the use of a large random sample size has several distinct advantages over other sampling methods. For example, it permits the unbiased estimation of site density accompanied by mathmatically derived confidence levels, has the potential for identifying large numbers of sites, and facilitates the location of sampling units in the field. Given the opportunity to survey a large tract of public land in a region that is virtually unknown archaeologically, a relatively large random sample was decided upon as a plausible and realistic sampling strategy.
9. It is reasonable to assume that river management practices and natural processes are seriously impacting cultural resources located along the Crow Wing and Mississippi Rivers within the study area. A study of the geomorphology in combination with a reconnaissance survey to locate and identify potentially significant sites possibly impacted by riverbank erosion and ground disturbances or are deeply buried in the area should be conducted so that recommendations for the management of cultural resources located on river islands and in the floodplain within the study area can be properly formulated and implemented.
10. A sentence listing possible research topics and themes has been inserted at the end of paragraph 2, line 16, on p. 53.
11. Paragraphs summarizing the treatment of sites yet to be discovered as well as human burials located within the study area have been inserted as Sections 3 and 4, respectively, on p. 53.
12. An historic architectural survey of standing structures at Camp Ripley conducted by Patricia Murphy of the State Historic Preservation Office, Minnesota Historical Society, identified four architecturally significant structures in the cantonment area (Murphy 1984). No significant engineering works were identified during the survey. Information on the four architecturally significant structures is summarized in Table 4, p. 32, and has been included in the historic sites inventory. The second sentence in paragraph 3, p. 53, has been changed for clarity.
13. Although the Minnesota National Guard is admittedly not in the "business of educating the public in local history and archaeology," the Camp Ripley Military Museum located in the cantonment area already contains some very informative exhibits and displays on the history of Fort

Ripley and the Minnesota National Guard and is open to the general public during the summer months. A small exhibit showing the locations of prehistoric and historic sites at the camp could be easily prepared and installed in the museum, if desirable, and would require a minimal amount of time, effort and money. Such an exhibit would augment the museum's educational function by providing additional enjoyment for the general public.

14. The recommendations for resource evaluation and management have been expanded and clarified to make them more comprehensive for compliance and planning purposes.