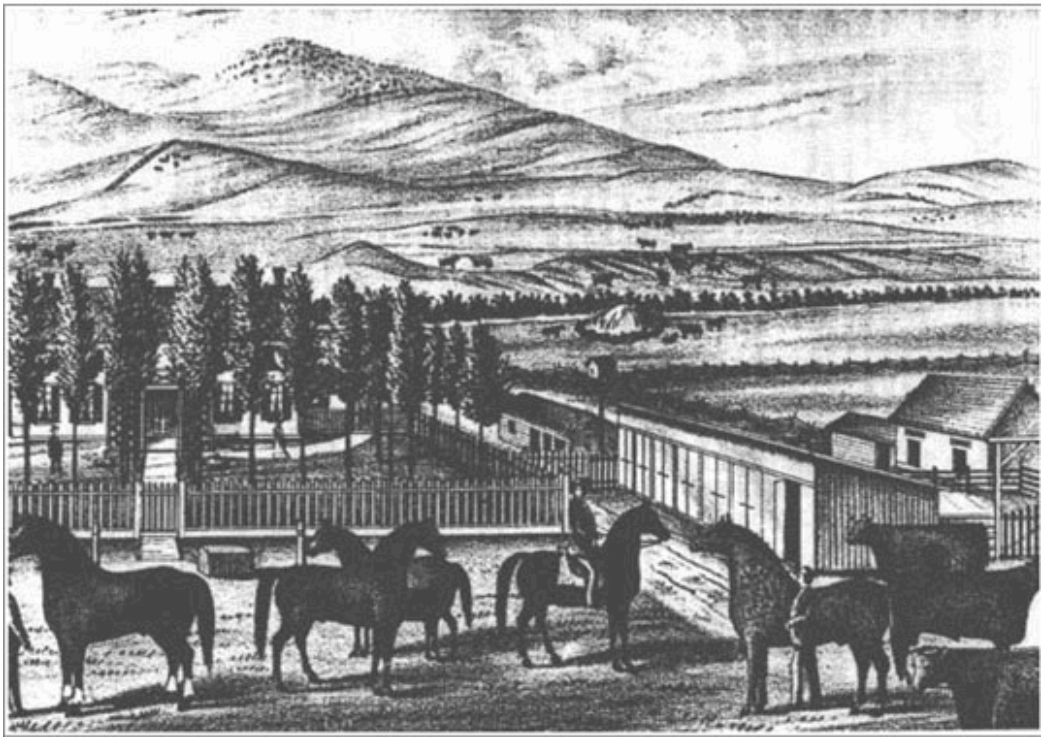
National Park Service
Cultural Landscapes Inventory

2007



Grant-Kohrs Ranch NHS Landscape
Grant-Kohrs Ranch National Historic Site

Table of Contents

Inventory Unit Summary & Site Plan

Inventory Summary

The Cultural Landscapes Inventory Overview:

CLI General Information:

Purpose and Goals of the CLI

The Cultural Landscapes Inventory (CLI), a comprehensive inventory of all cultural landscapes in the national park system, is one of the most ambitious initiatives of the National Park Service (NPS) Park Cultural Landscapes Program. The CLI is an evaluated inventory of all landscapes having historical significance that are listed on or eligible for listing on the National Register of Historic Places, or are otherwise managed as cultural resources through a public planning process and in which the NPS has or plans to acquire any legal interest. The CLI identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved CLIs when concurrence with the findings is obtained from the park superintendent and all required data fields are entered into a national database. In addition, for landscapes that are not currently listed on the National Register and/or do not have adequate documentation, concurrence is required from the State Historic Preservation Officer or the Keeper of the National Register.

The CLI, like the List of Classified Structures, assists the NPS in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2006), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two GPRA goals are associated with the CLI: bringing certified cultural landscapes into good condition (Goal 1a7) and increasing the number of CLI records that have complete, accurate, and reliable information (Goal 1b2B).

Scope of the CLI

The information contained within the CLI is gathered from existing secondary sources found in park libraries and archives and at NPS regional offices and centers, as well as through on-site reconnaissance of the existing landscape. The baseline information collected provides a comprehensive look at the historical development and significance of the landscape, placing it in context of the site's overall significance. Documentation and analysis of the existing landscape identifies character-defining characteristics and features, and allows for an evaluation of the landscape's overall integrity and an assessment of the landscape's overall condition. The CLI also provides an illustrative site plan that indicates major features within the inventory unit. Unlike cultural landscape reports, the CLI does not provide management recommendations or

treatment guidelines for the cultural landscape.

Inventory Unit Description:

The Grant-Kohrs Ranch NHS Landscape is located in Powell County, Montana. John Grant established the ranch in 1862 and Conrad Kohrs operated the ranch from 1866-1920. Grant-Kohrs Ranch is an outstanding representation of the days of the open range cattle industry in the American West during the 19th and early 20th centuries. Grant's and Kohrs' dominance of the regional beef market demonstrated the possibilities available to entrepreneurs on the developing frontier, and the ability to run cattle over a virtual empire of open and free grassland.

While the current boundaries of the site encompass approximately 1,618 acres, this is only a fraction of what was once a much larger ranch. During the 1890s, the ranch extended over 27,000 acres, with feed, water, and grazing rights over ten million acres of public land that spanned across Montana, parts of Utah, Idaho, Wyoming, Colorado, and the Canadian province of Alberta, Saskatchewan. The Home Ranch, a term that historically defined the Grant-Kohrs ranch home and building complex and its adjacent lands, extended beyond the current boundary to the east approximately 1.75 miles and west from one to five miles to reach grazing leases on state lands and the Deer Lodge National Forest. Other holdings in the Deer Lodge Valley included Dog Creek Pasture (9,129 acres) and Humber Ranch (1,160 acres) to the northeast, and the Upper Ranch (also known as Nick Bielenberg place, 4,800 acres) to the southeast.

The Grant-Kohrs Ranch NHS encompasses both the Grant-Kohrs Ranch home and building complex as well as the Warren Hereford Ranch and residence. Operated by Conrad Warren from 1929-1982, the Grant-Kohrs Ranch/Warren Ranch, which has been nominated to the National Register of Historic Places, represents the modernization of cattle ranching on the Great Plains of the American West, specifically in the era that began in the early 20th century and which marked the close of the open range. Conrad Warren, the grandson of Conrad Kohrs, moved to his grandfather's former ranch in 1929. In 1932 Warren assumed management of the Conrad Kohrs Company Ranch, and transformed the relatively small financial and physical remnants of his grandfather's once vast cattle empire into a modern cattle breeding and sales complex. Warren ran the ranch for over 50 years.

Altogether, the Grant-Kohrs Ranch NHS represents changes in agriculture, and the continuum of cattle ranching from the days of the open range into the modern era. Its landscape encompasses the cultural and physical resources that help interpret the story of continuity of ownership and the evolution of western cattle ranching operations throughout the 19th and 20th centuries.

This CLI boundary conforms to the official boundaries of the Grant-Kohrs Ranch National Historic Site. While the park has identified a number of important areas within the Grant-Kohrs Ranch, JMA defined a number of component landscapes discussed in the 2004 CLR. These areas are primarily the result of design, construction, and agricultural/grazing practices under Kohrs/Bielenberg and Warren. For the purposes of this CLI, these component landscapes are as follows:

•Home Ranch Complex: This area includes all landscape features associated with the core complex of the Grant-Kohrs Ranch. It is bounded by the railroad corridor on the east, the riparian corridor of the Clark Fork River on the west, and consists of the Lower Yards, Lower House Yards, Bunkhouse Yards,

Johnson Creek Field, West Corrals, and West Feedlots.

•East Feed Lot/Warren Hereford Ranch: This area consists of the area east of the railroad corridor, which was developed by Con Warren. It contains the land bordered by the main entry road on the south, the park boundary on the east, the rail corridor on the west, and the south edge of Front Field on the north;

•Grant-Kohrs Residence: This consists of the features contained with the domestic landscape immediately surrounding the ranch home built by John Grant, and later, Conrad Kohrs;

•Warren Residence: This consists of the features contained with the domestic landscape immediately surrounding the home built by Conrad Warren;

•Pasture/Hay Field: This area includes the irrigated and low-lying lands bordering the Clark Fork riparian corridor. It consists of Stuart Field, the Lower Yard Fields, the North Meadows, L-Barn Fields, Western Hay Fields, Olson Fields, as well as the Front Field located to the north of the East Feed Lot.

•Upland Pasture: This area includes the land west of the Westside Ditch, and includes Big Gulch, Little Gulch, and Taylor Field, as well as the ranges and hilltops in between. While this area contains both hay fields and pasture land, it is considered a separate component landscape because of its relative sense of isolation from the rest of the ranch.

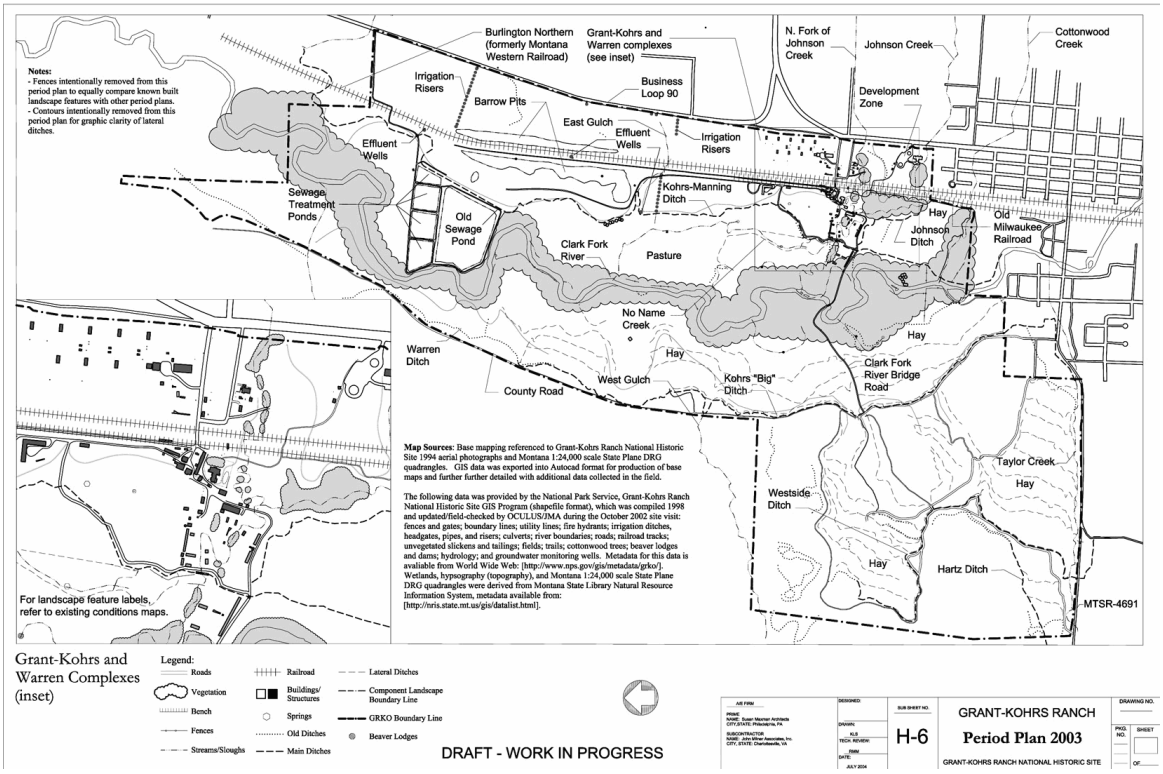
•Riparian Area/Woodland: This area consists of the riparian woodlands found along the Clark Fork River corridor, Johnson Creek, Cottonwood Creek, and the Olson property along the park's northern boundary.

•Railroad Bed & Barrow Pit/Wetland: This area consists of the linear railroad corridor and utility lines associated with it. It also includes the depressed wetland areas (barrow pits) bordering the railroad corridor.

•Development Zone: This area contains the Visitor Center building, restrooms, curatorial building, and visitor parking lot. A portion of Johnson Creek comprises the southern boundary of this zone (CLR 1.13).

This CLI finds that the Grant-Kohrs Ranch National Historic Site retains historic integrity. Overall, the condition of the inventory unit is good.

Site Plan



The IU boundary is the same as that for the Grant-Kohrs Ranch National Historic Site. It includes 9 component landscapes. Source: John Milner Associates.

Property Level and CLI Numbers

Inventory Unit Name: Grant-Kohrs Ranch NHS Landscape

Property Level: Landscape

CLI Identification Number: 890194

Parent Landscape: 890194

Park Information

Park Name and Alpha Code: Grant-Kohrs Ranch National Historic Site -GRKO

Park Organization Code: 1586

Park Administrative Unit: Grant-Kohrs Ranch National Historic Site

CLI Hierarchy Description

The Grant-Kohrs Ranch National Historic Site is a parent landscape. Component landscapes include: Home Ranch Complex; East Feed Lot/Warren Hereford Ranch; Grant-Kohrs Residence; Warren Residence; Pasture/Hay Fields; Upland Pasture; Riparian Area/Woodlands; Railroad Corridor and Barrow Pit/Wetland; and Development Zone

Concurrence Status

Inventory Status: Complete

Completion Status Explanatory Narrative:

This CLI is adapted from the Grant-Kohrs Ranch National Historic Site Landscape Cultural Landscape Report, Part I. The CLR Part I was prepared by John Milner Assoicates (JMA) in July 2004. Shapins Associates converted the data from the CLR into the CLI format in 2007. CLI data was entered in May-June 2007.

In February 2009, a CLR Part 2 was written for the Pasture / Hay Fields and Upland Pastures component landscapes.

Concurrence Status:

Park Superintendent Concurrence: Yes

Park Superintendent Date of Concurrence: 08/10/2007

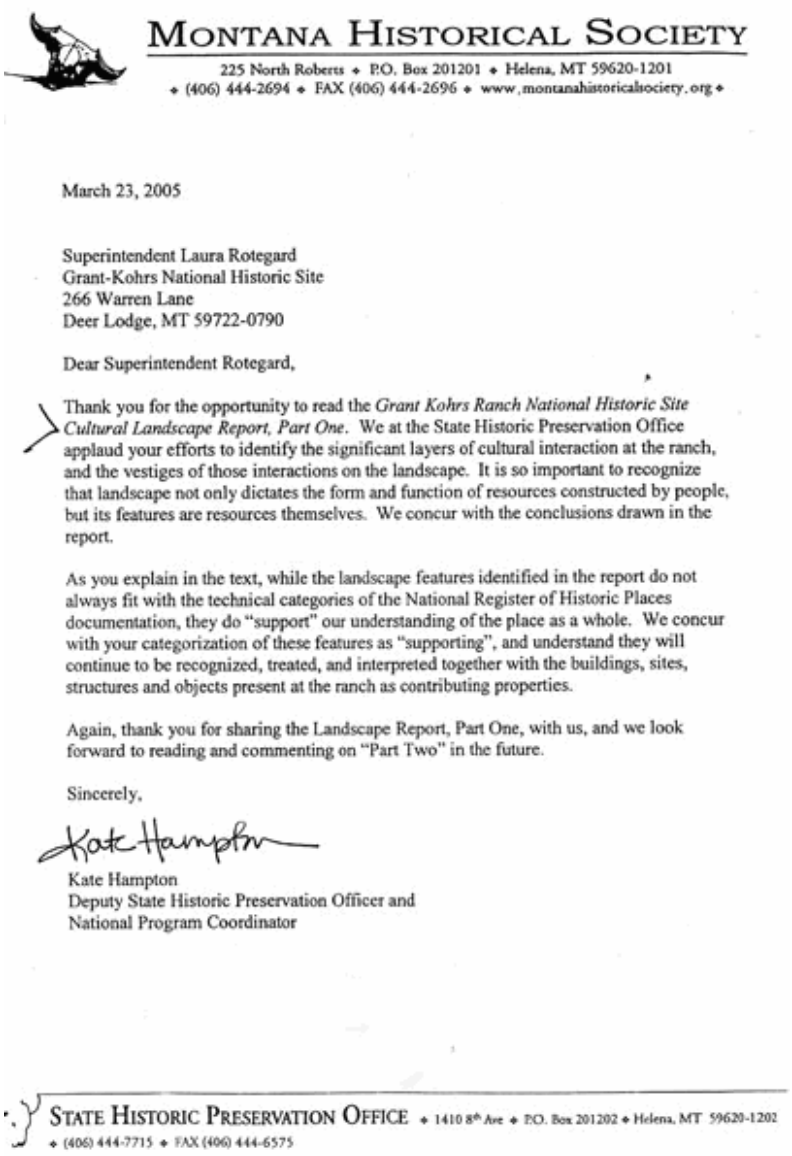
National Register Concurrence: Eligible -- SHPO Consensus Determination

Date of Concurrence Determination: 03/23/2005

National Register Concurrence Narrative:

The Montana SHPO concurred with the GRKO Cultural Landscape Report, Part One (the basis of this CLI) on March 23, 2005.

Concurrence Graphic Information:



MONTANA HISTORICAL SOCIETY
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♦ (406) 444-2694 ♦ FAX (406) 444-2696 ♦ www.montanahistoricalsociety.org ♦

March 23, 2005

Superintendent Laura Rotegard
Grant-Kohrs National Historic Site
266 Warren Lane
Deer Lodge, MT 59722-0790

Dear Superintendent Rotegard,

Thank you for the opportunity to read the *Grant Kohrs Ranch National Historic Site Cultural Landscape Report, Part One*. We at the State Historic Preservation Office applaud your efforts to identify the significant layers of cultural interaction at the ranch, and the vestiges of those interactions on the landscape. It is so important to recognize that landscape not only dictates the form and function of resources constructed by people, but its features are resources themselves. We concur with the conclusions drawn in the report.

As you explain in the text, while the landscape features identified in the report do not always fit with the technical categories of the National Register of Historic Places documentation, they do "support" our understanding of the place as a whole. We concur with your categorization of these features as "supporting", and understand they will continue to be recognized, treated, and interpreted together with the buildings, sites, structures and objects present at the ranch as contributing properties.

Again, thank you for sharing the Landscape Report, Part One, with us, and we look forward to reading and commenting on "Part Two" in the future.

Sincerely,

Kate Hampton

Kate Hampton
Deputy State Historic Preservation Officer and
National Program Coordinator

STATE HISTORIC PRESERVATION OFFICE ♦ 1410 8th Ave ♦ P.O. Box 201202 ♦ Helena, MT 59620-1202
♦ (406) 444-7715 ♦ FAX (406) 444-6575

Montana SHPO concurrence on the findings of the CLR (CLI produced from the CLR), 3/23/2005.

MEMORANDUM

To: Deputy Associate Regional Director
Cultural Resources
12795 W. Alameda Pkwy.
Lakewood, CO 80228

From: Superintendent
Grant-Kohrs Ranch National Historic Site
266 Warren Lane,
Deer Lodge, MT 59722

Subject: Grant-Kohrs Ranch National Historic Site Cultural Landscape Inventory (CLI)

I concur with the content and the assessment of the Grant-Kohrs Ranch National Historic Site cultural landscape.

The CLI has identified the Grant-Kohrs Ranch National Historic Site parent landscape as a "Historic Site," a "Historic Vernacular Landscape," and a "Historic Designed Landscape."

1. The CLI rates the condition as "GOOD" (pg. 157) and the Management Category is listed as "Must be Preserved and Maintained" (pg. 9).
2. The period of significance for the Grant-Kohrs Ranch National Historic Site parent landscape is 1862-1982 (pg. 12), and the Statement of Significance is located on pgs. 12-27.
4. The contributing features are discussed and listed in the "Analysis and Evaluation" section (pg. 43-156).

Superintendent, Grant-Kohrs Ranch National Historic Site — Date 8/10/07

Cc: Michele Curran, IMR, Landscape Historian, CLI Coordinator
Jill Cowley, IMR, Historical Landscape Architect

Grant-Kohrs NHS CLI park superintendent concurrence, 8/10/2007.

Revisions Impacting Change in Concurrence:

Other

Revision Narrative:

Uploaded CLR to Landscape Documents section and edited text to include sources for images, May 2012.

Geographic Information & Location Map

Inventory Unit Boundary Description:

The IU boundary is the same as that for the Grant-Kohrs Ranch National Historic Site. It includes 9 component landscapes. The IU includes: all of Section 32 except for the SE 1/4 of the SE 1/4; the NW 1/4 of Section 33; the East 1/2 of Section 29; the west 1/2 of Section 28; and an irregular portion of Section 21, mostly within the SW 1/4. The east boundary runs primarily along Main Street, the west boundary primarily along the toe of the hills. The IU includes 70 acres of City of Deer Lodge land (sewage treatment), 57 acres owned by the Union Pacific Railroad, and 165 acres of private land under scenic easement with the NPS.

State and County:

State: MT

County: Powell County

Size (Acres): 1,618.00

Boundary UTMS:

Source:	USGS Map 1:24,000
Type of Point:	Point
Datum:	NAD 83
UTM Zone:	12
UTM Easting:	366,410
UTM Northing:	5,144,480
Source:	USGS Map 1:24,000
Type of Point:	Point
Datum:	NAD 83
UTM Zone:	12
UTM Easting:	366,380
UTM Northing:	5,143,650
Source:	USGS Map 1:24,000
Type of Point:	Point
Datum:	NAD 83
UTM Zone:	12
UTM Easting:	366,760
UTM Northing:	5,143,650
Source:	USGS Map 1:24,000
Type of Point:	Point
Datum:	NAD 83
UTM Zone:	12
UTM Easting:	366,770
UTM Northing:	5,143,250
Source:	USGS Map 1:24,000

Type of Point:	Point
Datum:	NAD 83
UTM Zone:	12
UTM Easting:	367,150
UTM Northing:	5,143,240
Source:	USGS Map 1:24,000
Type of Point:	Point
Datum:	NAD 83
UTM Zone:	12
UTM Easting:	366,620
UTM Northing:	5,140,430
Source:	USGS Map 1:24,000
Type of Point:	Point
Datum:	NAD 83
UTM Zone:	12
UTM Easting:	365,900
UTM Northing:	5,140,240
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Type of Point:	Point
Datum:	NAD 83
UTM Zone:	12
UTM Easting:	365,470
UTM Northing:	5,139,660
Source:	USGS Map 1:24,000
Type of Point:	Point
Datum:	NAD 83
UTM Zone:	12

UTM Easting:	364,200
UTM Northing:	5,139,700
Source:	USGS Map 1:24,000
Type of Point:	Point
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UTM Easting:	364,290
UTM Northing:	5,141,280
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UTM Zone:	12
UTM Easting:	365,260
UTM Northing:	5,141,280
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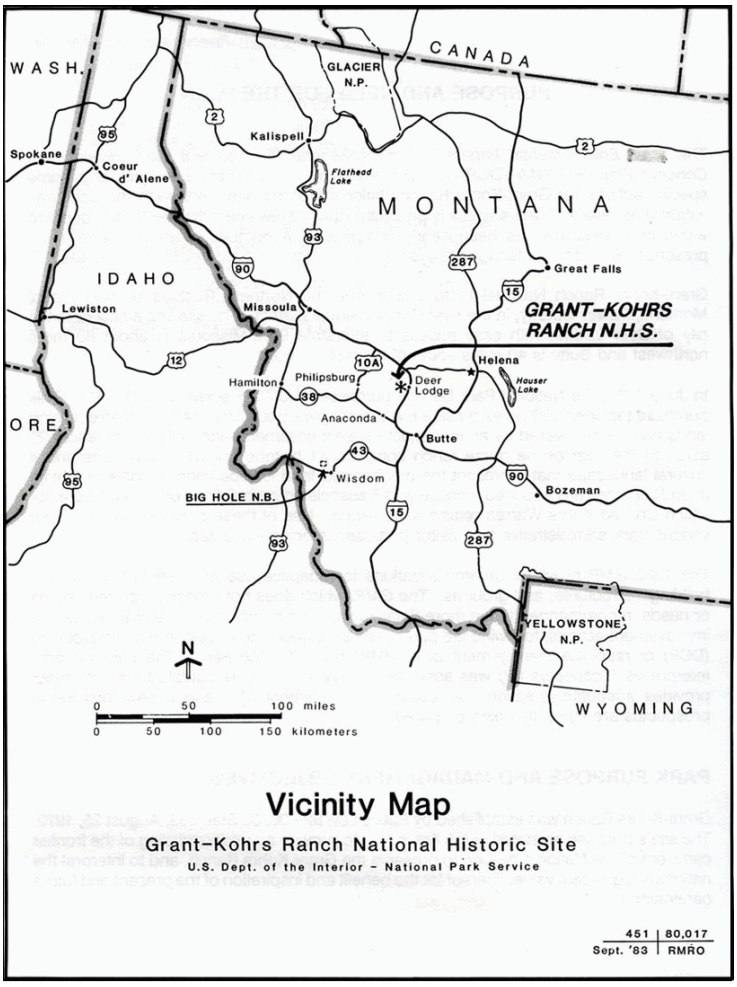
UTM Easting:	366,370
UTM Northing:	5,144,490

Location Map:



Location of Grant-Kohrs Ranch NHS in west central Montana. The site lies adjacent to the city of Deer Lodge. Source: NPS.

GIS File Name: grko_bdy1998.shp

GIS File Description:

Management Information

General Management Information

Management Category: Must be Preserved and Maintained

Management Category Date: 07/31/2004

Management Category Explanatory Narrative:

Grant-Kohrs Ranch is a National Historic Landmark and therefore, must be preserved and maintained. Superintendent concurrence was received 8/10/2007.

Agreements, Legal Interest, and Access

Management Agreement:

Type of Agreement:

NPS Legal Interest:

Type of Interest: Fee Simple

Explanatory Narrative:

Within the bounds of the historic site, 1,326 acres of land are fee owned by the federal government. These lands compose the developed areas of the Grant-Kohrs and Warren Hereford Ranches, as well as the pasture land and hay fields on either side of the Clark Fork River.

Type of Interest: None - Local Government Owned

Explanatory Narrative:

The City of Deer Lodge retains ownership of approximately 70 acres for sewage treatment.

Type of Interest: None - Privately Owned

Explanatory Narrative:

Approximately 165 acres of land along the site's northern boundary, currently owned by Lars Olsen, are under scenic easements with the NPS

Type of Interest: None - Privately Owned

Explanatory Narrative:

57 acres remains under ownership of the Union Pacific Railroad which leased the rail line to the Burlington Northern Railroad until 2003, when Burlington Northern Railroad purchased the line. This line remains active.

Public Access:

Type of Access: Unrestricted

Type of Access: No Access Currently

Explanatory Narrative:

Significant portions of the NHS are currently in private ownership.

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

Approximately 1,100 acres of upland pasture west of the current park boundary are held in private ownership and not managed by the NPS. This area has been identified as an area of land that is significant for its historic and visual relationship to the Grant-Kohrs Ranch, and could be included within the site boundary through the purchase of scenic easements or similar management strategy. The park is currently exploring a number of options for the future management of this land.

National Register Information

Existing National Register Status

National Register Landscape Documentation:

Entered Inadequately Documented

National Register Explanatory Narrative:

Grant-Kohrs Ranch House and Home Ranch was designated a National Historic Landmark (NHL) in 1960. In 1972 the Grant-Kohrs Ranch NHS was established. In 2003 the 20th century Grant-Kohrs Ranch/Warren Ranch historic district was determined eligible by the MT SHPO and was listed on the National Register. The boundary for this district amends the NR district listed in 1972. It includes all lands within the NHS except for the Developed Zone; it encompasses all of the land within NHL boundary, as well as the Warren Hereford Ranch. It excludes the development zone, which is not eligible.

Existing NRIS Information:

Name in National Register:	Grant-Kohrs Ranch National Historic Site
NRIS Number:	72000738
Primary Certification Date:	08/25/1972
Other Certifications and Date:	Grant-Kohrs Ranch NHL - 1/4/1960
Name in National Register:	Grant-Kohrs Ranch National Historic Site
NRIS Number:	72000738
Primary Certification Date:	08/25/1972
	Grant-Kohrs Ranch NHL - 1/4/2002
Name in National Register:	Grant--Kohrs Ranch/Warren Ranch
NRIS Number:	03000127
Primary Certification Date:	07/11/2003

National Register Eligibility

National Register Concurrence:	Eligible -- SHPO Consensus Determination
Contributing/Individual:	Individual
National Register Classification:	District
Significance Level:	National

Significance Criteria:	A - Associated with events significant to broad patterns of our history
Significance Criteria:	B - Associated with lives of persons significant in our past
Significance Criteria:	C - Embodies distinctive construction, work of master, or high artistic values
Criteria Considerations:	G -- A property less than 50 years of age

Period of Significance:

Time Period:	AD 1862 - 1919
Historic Context Theme:	Developing the American Economy
Subtheme:	The Cattle Frontier
Facet:	Ranches
Time Period:	AD 1862 - 1919
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Ways of Life
Facet:	Ranching Communities
Time Period:	AD 1929 - 1982
Historic Context Theme:	Developing the American Economy
Subtheme:	The Cattle Frontier
Facet:	Ranches
Time Period:	AD 1929 - 1982
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Ways of Life
Facet:	Ranching Communities

Area of Significance:

Area of Significance Category:	Agriculture
Area of Significance Subcategory:	None
Area of Significance Category:	Exploration - Settlement
Area of Significance Subcategory:	None
Area of Significance Category:	Architecture
Area of Significance Subcategory:	None
Area of Significance Category:	Engineering
Area of Significance Subcategory:	None

Statement of Significance:

Note: This statement of significance has been abridged from that contained in the CLR, pages 4.1 through 4.15.

SUMMARY:

This CLI concurs with the NHL nomination, that the Kohrs Ranch House and Home Ranch meet NHL Criterion #1 for its association with agriculture and exploration/settlement, at the national level. This CLI concurs with the National Register nomination that the NHS as a whole meets National Register Criteria A and C. This CLI also finds that : 1) the NHS meets Criterion B, at the state and national level, for its association with Johnny Grant, Conrad Kohrs, and Conrad Warren; and 2) the NHS meets Criterion A at the state and national level for its association with modern ranching techniques and practices. It may also meet Criterion C for the Warren Era, however, a national theme study on twentieth century ranching is needed to make this determination. This CLI uses the period of significance 1862 to 1982, which combines the NHL and NR periods of significance. 1862 is when Johnny Grant established his ranch, and 1982 is when Conrad warren retired from active ranching.

SUMMARY OF PREVIOUS EVALUATIONS OF SIGNIFICANCE

Two recent documents, the National Historic Landmark Boundary Study (2001, approved 2002) for Grant-Kohrs Ranch, and the National Register of Historic Places Registration Form (listed 2003) for

Grant-Kohrs Ranch/Warren Ranch Historic District evaluate significance for portions of the project area and identify contributing and noncontributing resources based upon National Register criteria. The relevant information contained in these documents is summarized below.

National Historic Landmark Boundary Study, Grant-Kohrs Ranch (2001, approved 2002)

Grant-Kohrs Home Ranch was designated a NHL on December 19, 1960. The site was identified in a 1959 NHL "Westward Expansion: Cattlemen's Empire" theme study for its association with the lives of John Grant and Conrad Kohrs, and for its association with the growth and development of the open-range cattle industry. The ranch was found to be significant under National Historic Landmark Criterion 1 in the areas of Agriculture and Exploration/Settlement (see page 4-3 for a description of NHL Criteria).

The National Historic Landmark Boundary Study for the Grant-Kohrs Ranch was completed in 2001 and approved in 2002. This documentation defines the boundary of the National Historic Landmark District and identifies both contributing and noncontributing resources. The National Historic Landmark District boundary encompasses approximately 1,600 acres and is identical to the current boundary of the National Historical Site with the following exception: approximately fifteen-acres along the National Historic Site's southeastern boundary, including the Warren Hereford Ranch and the park visitor contact station, rest room, curatorial storage facility, and parking area, are excluded from the National Historic Landmark District because they do not reflect the period of significance. The National Historic Landmark District was found to be nationally significant under Criterion 1 as "representative and harbinger of sweeping changes in the Great Plains cattle industry." The associated Themes for the National Historic Landmark District have been identified as Agriculture, and Developing the American Economy. The Areas of Significance for the National Historic Landmark District have been identified as Agriculture, and Exploration/Settlement. The period of significance for the National Historic Landmark District has been identified as 1862 – 1919.

The National Historic Landmark District reflects two broad types of cultural landscapes, rural and residential, and includes sixty-eight historic resources, twenty-three of which are identified as contributing, and forty-five as noncontributing due to their association with the later twentieth century Warren era. All sixty-eight of these historic resources are also included within the boundary of the Grant-Kohrs/Warren Ranch National Register District, many of which contribute to the National Register District at a state level of significance. The National Historic Landmark documentation identifies a residential landscape, including the original Grant-Kohrs ranch house building cluster, and a rural vernacular landscape including an extensive complex of supporting agricultural buildings, fencing, corrals, pastures, fields, and railroad beds, as nationally significant. The ranch buildings however, have not been evaluated as 'exceptionally' valuable for the study of a period, style, or method of construction and have not been nominated under National Historic Landmark Criterion 4.

National Register of Historic Places Registration Form, Grant-Kohrs Ranch / Warren Ranch Historic District (listed 2003)

The Grant-Kohrs Ranch was administratively listed on the National Register of Historic Places in August of 1972 when it was designated as a National Historic Site. This designation identified 34 contributing buildings and 20 contributing structures but did not include a list of these resources. The nomination form, approved in 2003, redefined the boundary and amended the resource count for the National Register District, identifying both 72 contributing and 26 noncontributing resources contained within it. Of these 98 historic resources, some were previously listed on the National Register. Because the National Register District encompassed the National Historic Landmark District and all of its nationally significant resources associated with the Grant and Kohrs period of use between 1862-1919, the National Register documentation focused on the resources of the Grant-Kohrs Ranch National Historic Site that had a state (rather than national) level of significance, specifically focusing on those historic resources associated with Conrad Warren's management of the ranch between 1929-1958.

The National Register District boundary encompasses approximately 1,600 acres and includes all of the National Historic Landmark District. The National Register District also includes the Warren Hereford Ranch parcel and is identical to the boundary for the National Historical Site established in 1972 with the following exception: the park Visitor Contact Area, which includes the visitor contact station, rest rooms, curatorial storage building, and parking areas, is excluded from the National Register District because it does not reflect the period of significance.

The Grant-Kohrs/Warren Ranch District was nominated to the National Register of Historic Places at the state and national levels under Criterion A for its significant associations with the history of agriculture, and under Criterion C for its vernacular architecture (see page 4-5 for a description of National Register Criteria). The National Register District reflects two broad types of cultural landscapes, residential and rural vernacular, and includes ninety-eight historic resources, seventy-five of which are identified as contributing, and twenty-three as noncontributing (see CLR 4.3). The National Register of Historic Places Registration form identifies two residential complexes, including the original Grant-Kohrs and later Warren ranch house building clusters, and a larger rural vernacular landscape that includes an extensive complex of fencing, irrigation systems, fields, roads and railroad lines. The period of significance for the National Register District is identified as 1929-1958.

SIGNIFICANCE BY NATIONAL HISTORIC LANDMARK CRITERIA

NHL Criterion 1: Association with events that have made a significant contribution to, or are identified with, or that outstandingly represent, the broad national patterns of U.S. history and from which an understanding and appreciation of those patterns may be gained.

Based on the research, analysis, and documentation conducted for preparation of this CLR, we agree with the existing National Historic Landmark Nomination and find that the Grant-Kohrs Ranch NHS cultural landscape possesses national significance according to National Historic Landmark Criterion 1 in the areas of Agriculture and Exploration/Settlement. This significance is summarized below.

The Establishment and Growth of the Home Ranch and the Development of the Ranching Industry on the Northern Plains, 1862-1919.

After several years of wintering his cattle in the luxuriant grass covered Deer Lodge Valley, Johnny Grant permanently settled at the confluence of the Deer Lodge River and Little Blackfoot Creek in 1859. By 1861, he had moved to a bluff overlooking the Clark Fork River, establishing what would subsequently become the Grant Kohrs National Historic Site Home Ranch. During the early 1860s, Grant had laid out the larger spatial relations at his home ranch that were to guide its future agricultural and ranching development through to the twentieth century. Beyond the domestic core, Grant established a vegetable garden, an irrigated field system within the rich bottom lands adjacent to the Clark Fork River, and an extensive fenced pasture land on both sides of the Clark Fork River. The incipient Open Range grazing system, a direct descendent of the cattle trade that flourished under the 'road ranch system' during the 1840s and 1850s, clearly benefited Grant and other regional pioneer ranchers of the northern plains. During his brief tenure in the Deer Lodge Valley, Grant continued to sell and trade horses and cattle with local residents, regional miners, American Indians, U. S. Military expeditions, and immigrants moving west. Grant's livestock trading activities, and the economic relationships he helped to establish, laid the foundation for the corporately dominated Open Range cattle industry that followed.

Conrad Kohrs first came to the Deer Lodge Valley in 1861. Within a few short years, he had purchased Johnny Grant's ranch and owned nearly all of the cattle in the region. Early on, most of the cattle owned by Kohrs supplied his chain of regional butcher outlets, which depended upon the business of gold miners. As the gold miners moved elsewhere by the late 1860s, Kohrs turned exclusively to ranching and cattle breeding. With the help of a number of associates and relatives, Kohrs was able to turn his butcher stock into a highly organized and productive beef ranch dependent on both Open Range, and fenced pasture and cropland.

Conrad Kohrs, and his partner and half-brother John Bielenberg, adopted several key practices that led to their success in livestock ranching. In 1872, Kohrs and Bielenberg purchased larger herds of Longhorn and Shorthorn cattle in an attempt to improve their own stock. By the late 1870s, Kohrs and Bielenberg also purchased thoroughbred and Clydesdale stallions, the former was acquired in an attempt to breed a better ranch horse. During the early 1880s, Kohrs and Bielenberg also imported Hereford and Angus cattle and over the course of a number of years made several breeding experiments. By the mid-1880s, Kohrs and Bielenberg had begun to sell both purebred cattle and horses to local and regional ranchers, thereby improving the overall product of the region wide ranching industry.

Kohrs and Bielenberg were quick to take advantage of any strategy that would benefit their ranch. During the early-to-mid 1880s, Kohrs and Bielenberg abandoned the long cattle drives of the past in favor of convenient railroad stock cars. Kohrs took advantage of the new rail transportation system that linked his ranch to the stockyards of Chicago. The resultant relationships established with Chicago merchants would aid Kohrs in the years to come. Likewise as ranchers began to realize that the Open Range could not support an ever increasing amount of stock, those with foresight adapted. As a result of overgrazing and the hard winter of 1886-1887, Kohrs and Bielenberg adapted by sending their herds farther afield for new range, turning to pooled herds, and adopting pasture ranching and expanding the

amount of acreage they owned within and beyond the Deer Lodge Valley. Simultaneously they also increased their purchase of grain seed and production of native hay. By the first quarter of the 20th century, the Open Range as many regional ranchers had known it had ceased to exist.

While the majority of day-to-day ranch activities were oriented towards the large-scale sale of beef cattle, the Kohrs-Bielenberg Ranch was well diversified, as were Kohrs and Bielenberg individually. The breeding and sale of working, thoroughbred, carriage, imported Clydesdales, Shires and Norman Coach horses, and purebred Shorthorn and Hereford bulls and herd-sires was an integral part of their business.

The physical features of the National Historic Landmark landscape directly reflect the efforts of Grant, Kohrs and Bielenberg in carrying out their ranching activities. The Grant-Kohrs ranch house served as home for Johnny Grant and Conrad and Augusta Kohrs and also doubled as office headquarters for the ranch, with nearby outbuildings supporting the business operations and domestic requirements. Immediately surrounding the residential complex are a number of vernacular barns, sheds, corrals and fencing that served the day to day needs of livestock management. The construction and materials used in these and other structures directly reflects the utilitarian needs and functioning of the ranch, and the successful livestock management strategies of Grant, and subsequently Kohrs and Bielenberg. Further afield are the numerous pastures, fields, fences, and irrigation systems that reflect the evolution and changing use of the larger ranch landscape. This rural landscape directly reflects the transformation from a nearly exclusive Open Range system of ranching, to one that depended more heavily on the development and irrigation of pasture and crop land.

Many of the challenges that Grant, and Kohrs and Bielenberg faced between 1861 and 1919 were identical to those sweeping the ranching industry in the larger northwest. Hard winters, cattle theft, disease, overgrazing and decimation of the Open Range posed problems for all cattle ranchers. In this sense, the Grant-Kohrs Ranch is representative of the cattle ranching industry of the greater northwest. However, in the long-term success of Grant and Kohrs and Bielenberg, the Grant-Kohrs Ranch is also an example of adaptation and the ability to meet the challenges of an increasingly changing industry. As operators of one of the largest ranches in Montana and the larger northwest, Kohrs and Bielenberg were leaders in local and state wide politics and as an advocate for the enhancement and expansion of the regional cattle ranching business.

SIGNIFICANCE BY NATIONAL REGISTER CRITERIA

The National Register documentation identified the Grant-Kohrs/Warren Ranch District as possessing significance at a state and national level under Criterion A for its significant associations with the history of agriculture, and at a state and national level under Criterion C for its vernacular architecture. The National Register District predominantly focused on the Warren era historic resources that had a state level of significance, but also included all 68 historic resources (23 contributing, 45 noncontributing) that were previously identified as part of the National Historic Landmark District. Based on the research, analysis, and documentation conducted for the preparation of this CLR, we agree with the National Register documentation that the Grant-Kohrs Ranch NHS cultural landscape has been found to possess

significance according to National Register Criterion A at a state and national level, and Criterion C at a state and national level, but also find that the Grant-Kohrs Ranch NHS cultural landscape possesses significance according to Criterion B at both a state and national level. The areas of significance associated with Grant-Kohrs Ranch National Historic Site include Agriculture, Architecture, and Engineering. This significance is summarized below.

CRITERION A

Grant-Kohrs Ranch National Historic Site possesses significance at a state and national level for its association with events that have made a significant contribution to the broad patterns of our history. In addition to the theme 'Establishment and Growth of the Home Ranch and the Development of the Ranching Industry on the Northern Plains, 1862-1919' identified in the National Historic Landmark significance statement, we also recommend that the Grant-Kohrs Ranch National Historic Site be considered significant at a state and national level for its associations with modern ranching techniques and practices. These events are summarized below.

Modern Ranching: The application of scientific agriculture and advances in veterinary medicine, 1929-1982

After conducting historical research associated with the Cultural Landscape Report, the authors find that the Grant Kohrs Ranch National Historic Site may possess significance at both state and national levels for its associations with modern ranching techniques and practices. The authors recommend redesignation of the National Historic Site under this category at a state and national level. Between 1929 and 1982, Conrad Warren, the grandson of Conrad Kohrs, took on the management and operation of the Conrad Kohrs Co. Ranch. General ranch operations and the physical changes made to the cultural landscape during this period may be characterized as an application of modern scientific ranching practices in the fields of both agriculture and livestock management.

Like his grandfather, Conrad Warren was first and foremost a product of his generation. Sent to the University of Virginia in the mid-1920s to study medicine, Warren thrived but eventually left college to follow his true desire, ranching. Between 1926 and 1928, Warren spent summers at the Kohrs ranch as one of several ranch hands. By 1928 he had begun working at the ranch full time and in late 1931 had taken over as its manager. From 1932 on, Warren was to direct the ranch's development according to his own standards. Perhaps a result of his medical background at the University of Virginia, one of the hallmarks of Warren's herd management was the application of modern science and improved veterinary medicine to increase the overall productivity and economic value of his livestock and to maintain the general health of his herds. Warren's purebred registered herds of Belgians and Herefords required selective breeding, the constant maintenance of siring and birth records, and the selective isolation and feeding of bulls and cows, and stallions and mares. Warren vaccinated his livestock and regularly tested for the presence of diseases such as tuberculosis, cholera, and brucellosis. As a successful breeding program was integral to the bottom line, Warren and his ranch hands also tested cows and mares for pregnancy and assisted where necessary in birthing and early nourishment of calves and foals. Shortly after World War II, Warren became interested in the manipulation and

blending of feeds. During this period he conducted several scientific tests by feeding certain cattle on purchased grains and others on range grassland and hay. The results were compared in terms of both cost and end product. Understanding that he could not effectively compete with much larger cattle operations nationwide, Warren eventually joined the corporate ranching system after the dispersal of his Hereford herd in 1958. This was likely a natural move for Warren as the consolidation and streamlining of the nationwide cattle industry utilized many of the same ranching strategies that he did, including improvement of pasture grass and crop yields through irrigation and fertilization, and a greater reliance on grain feed to fatten cattle. Between 1958 and 1963, Warren engaged in the finishing business, fattening commercial feeder cattle. By 1963 he raised yearling steers and three years later was raising cows and calves.

The changes to the Warren Ranch landscape during this period reflect his approach to modern livestock management. The construction of the numerous bull barns and extensive corrals, pens, cow sheds, and feeding troughs are based in the philosophy of modern cattle management and the need to isolate breeding herds that Warren brought to the ranch.

Warren came to ranching in the second quarter of the twentieth century, a time which saw the implementation of a number of federal, state, and local programs that were designed to stimulate agricultural production by educating farmers nationwide on modern principles and practices, and the conservation and improvement of range and pasture soils. Warren took full advantage of these programs, using them to improve the productivity of his grazing and hay lands, to restore productivity in abandoned lands, and to adapt to the rapidly changing requirements of cattle production in the twentieth century. Like many other farmers, Conrad Warren adopted a rigorous schedule of crop rotation to get the most benefit from his fields, planting crops that did well in drought like conditions and ones that were also essential to the survival of his livestock. Because dry cropping was not economically feasible, irrigation played an important role in the ranch's expansion. Warren improved upon the earlier system of irrigation ditches provided by his grandfather. By the late 1930s he had created a new system of contour irrigation ditches on the west side of the Clark Fork River that relied upon intermittent drainages. This system was enhanced with the addition of a water pump in 1940, and subsequent to that, another one in the early 1960s. Warren also reclaimed the once productive bottom lands adjacent to the Clark River polluted by mine waste. During the 1940s he plowed these lands and added compost and other organic additives, slowly reviving his bottom lands. In addition, the second quarter of the twentieth century saw the widespread adoption of mechanization on farms of all sizes. As soon as Warren realized that the era of horse power on American farms had ended, he sold his herd of purebred registered Belgians. Warren immediately recognized the advantages of mechanization and new technology and applied them where appropriate at the Warren Ranch. Warren also took advantage of a U.S. Forest Service policy that allowed ranchers to graze their livestock on federally owned land. Warren applied for and received a U.S.F.S. grazing allotment on the east side. The allotment supplemented his own range and allowed him to increase the limited carrying capacity of his home ranch.

The physical features of the National Register landscape directly reflect the efforts of Warren in implementing his modern ranching practices. He molded the existing ranch infrastructure to his own

needs, demolishing irrelevant and deteriorated structures, updating many with more modern facilities, and building new components that greatly enlarged the utilitarian landscape. The form and materials used in much of the new construction, frame and concrete, directly reflect the business of a modern cattle breeding and selling complex. The changes to the larger landscape of fields and pasture during this period reflect Warren's application of both science and technology in the expansion and reclamation of agricultural fields. Nearly all of the irrigation ditches on the west side that are still in use today date from the late 1930s through the 1940s when Warren redesigned the existing irrigation system to incorporate new grading and contour ditching, while simultaneously increasing the flow of water throughout the system via pumps. Between the late 1930s and the mid-1950s, Warren also dramatically increased the acreage of irrigated fields and pasture. The productivity of the extensive fields and meadows lining the Clark Fork River now used for grazing and cultivation are a direct result of Warren' s efforts at reclamation during the mid-twentieth century.

Due to an increasing bank debt, Warren made the decision to disperse his registered Hereford herd at auction in 1958. After the dispersal auction, Warren subsequently entered the business of feeding and selling (finishing via feedlot) commercial Herefords (feeder cattle) to stockyards, ultimately managing a herd of about 350. By mid-century, as large corporate feed lots began to dominate the cattle business, Con Warren continued to adapt to the times. In 1963, Warren sold his small herd of commercial feeder cattle and entered the yearling steer business. He continued raising yearling steers until 1966 when he shifted to raising cows and calves. Small ranching operations like the Warren Hereford Ranch could not meet the economies of scale demonstrated by corporate feed lots. Ultimately in 1982, Warren sold his remaining stock and ranching equipment and ceased active ranching.

The Warren Ranch is recommended as significant at a national level because it represents the modernization of cattle ranching and the growth of corporate feed lot ranching during the second and third quarters of the twentieth century, periods when sweeping changes dramatically impacted the cattle industry. In order for the Grant-Kohrs Ranch/Warren Ranch to be evaluated as nationally significant, the Keeper of the National Register and NPS National Historic Landmark staff have determined that such a finding would require a national theme study of twentieth-century cattle ranches. This theme study would evaluate the Grant-Kohrs Ranch/Warren Ranch within the broader national context of ranching and agricultural activities in the West, and would need to evaluate the Grant-Kohrs Ranch/Warren Ranch in terms of its significance and physical integrity, as compared to all other historic twentieth century cattle ranches. This process is identical to the theme study that resulted in the designation of Grant-Kohrs Ranch as a National Historic Landmark (for its associations with the open range era of cattle ranching) in 1960. The authors of this Cultural Landscape Report recommend that such a twentieth-century ranching theme study be completed, and believe that it may result in a recommendation of national significance for the Conrad Warren-era resources at the ranch.

Many of the challenges that Warren faced between 1929 and 1982 were identical to those faced by the ranching industry in the larger Northwest: the Great Depression, the region wide drought in the 1930s, the need for scientific management and monitoring of livestock, price caps for beef during the war years, and the influence of increasingly dominant corporate economies of scale. In this sense, the Warren Ranch and the physical features that compose the cultural landscape today are representative

of the cattle ranching industry of the greater northwest. Like his grandfather, Warren too met these challenges and ultimately persevered, placing his own personal stamp on the ranching business. Warren's choice to use modern veterinary science to advance his ranching interests, to take advantage of state and federal programs that enabled him to expand his cultivated fields and pasture, and his ability to adapt to and succeed in an increasingly streamlined birth-to-market cattle industry make the Warren Ranch a nationally significant property.

CRITERION B

The existing National Register documentation did not find that the Grant-Kohrs Ranch / Warren Ranch historic district possessed significance according to Criterion B. We believe that the Grant-Kohrs Ranch National Historic Site possesses significance at both a state and national level for its association with three important individuals significant to the cattle ranching industry. The significance of these individuals are summarized below.

Johnny Grant

Even though the Grant-Kohrs Ranch is designated as a NHL under Criterion 1, and listed on the National Register under Criteria A and C, the authors recommend that the site be further evaluated for significance at a state level for its association with the life of Johnny Grant. Like his father, Johnny Grant originally profited from trading fattened and rested cattle with emigrants traveling the Oregon Trail for their worn out livestock. Johnny Grant first came to the Deer Lodge Valley in 1857 when he wintered his growing herd of horses and cattle there. He eventually settled in the Deer Lodge Valley permanently in 1859 at the confluence of the Little Blackfoot Creek and the Deer Lodge River, only twelve miles north of the Grant-Kohrs Ranch NHS. After encouraging other trappers to settle in the Deer Lodge Valley, Grant eventually moved closer to the small but growing community called Cottonwood. In 1862, Johnny Grant formally established his ranch at Cottonwood with the construction of a Greek Revival style vernacular ranch house, surrounded by a cluster of agricultural outbuildings and livestock facilities. Grant's wealth enabled him to construct a ranch house acknowledged by many as one of the finest in the territory.

Johnny Grant must be considered a pioneer in many respects. He was the first European to graze his cattle on the luxuriant bunch grass present in the Deer Lodge Valley. He was also the first European to permanently settle in the Deer Lodge Valley. Circa 1859-1860, Grant became the first Montanan to drive a portion of his cattle herd westward for sale in a distant market. During the early 1860s, he had a strong relationship and carried on an extensive trade with a number of regional Indian tribes. With the advent of the gold rush circa 1862 in the Montana Territory, Grant supplemented his trading with extensive beef sales to local mining communities. Grant eventually sold his ranch to Conrad Kohrs and left the Deer Lodge Valley in 1866.

Conrad Kohrs

Even though the Grant-Kohrs Ranch is designated as a NHL under Criterion 1, and listed on the

National Register under Criteria A and C, the authors recommend that the site be further evaluated for significance at a national level for its association with the life of Conrad Kohrs. Conrad Kohrs arrived in Montana in 1862 but only four years later could make the claim of being one of the largest cattle ranchers in the Territory. Kohrs' business prowess was a positive influence on cattle ranching in Montana and the larger northern plains during the late nineteenth and early twentieth centuries. Through his constant pursuit of breeding sturdier, more marketable cattle, Kohrs provided guidance to regional ranchers and actively shaped the direction of herd improvement and breed development throughout the larger region. Conrad Kohrs was also actively involved in the organization and supervision of the Montana Stockgrowers Association, established in 1884. The Montana Stockgrowers Association served to advance the interests of all Montana cattlemen at the state and federal levels and also provided information on day-to-day herd management problems such as disease prevention and minimizing losses on the Open Range. Kohrs was also a member of the first Montana Congress in 1884. This Congress was given the label 'Cowboy Congress' because of the number of representatives who were ranchers. With the increased numbers of Texas cattle arriving on Montana's Open Range throughout the 1880s Conrad Kohrs, like a number of other regional ranchers, became concerned about the preservation of the grasslands and discussed ways in which the valuable pasturage could be conserved. While Kohrs cattle operation was centered in the Deer Lodge Valley, he was always knowledgeable of ranching beyond western Montana. Kohrs frequently purchased large herds of cattle from Texas, Idaho and other nationwide cattle centers to provide new genetic stock for his own herds. He also grazed his large herds in four states and Canada where the Open Range promised better opportunities. In addition, Kohrs took advantage of late nineteenth century rail access and was one of the first to ship his cattle directly to the Midwest, establishing a long-term and lucrative business relationship with the Chicago stockyards.

As a leader in the development and direction of the late nineteenth century ranching industry at both the regional and national levels, Kohrs should be recognized as a significant individual to the cattle ranching industry.

Conrad Warren

Even though the Grant-Kohrs Ranch/Warren Ranch is listed on the National Register under Criteria A and C, the authors recommend that the site be further evaluated for significance at a national level for its association with the life of Conrad Warren. Warren began working at his grandfather's ranch as a ranch hand in the mid-1920s, but by 1932 was in charge of its day to day operations. His impact was immediately felt as he actively began to acquire new lands adjacent to the ranch to support additional crop and pasture land. Inefficient or old ranching facilities were torn down and new ones erected.

Between 1932 and 1934, a new ranching cluster consisting of stock shelters, feeders and corrals was constructed adjacent to slough bridge, extending the ranching operations westward. By the early 1950s, Warren moved his purebred Hereford ranching operation east of the railroad tracks to higher ground. During this period he built modern cattle management facilities including cattle sheds, feed racks, corrals, and a new cattle barn and sales barn that facilitated his purebred Hereford operation.

Warren initiated the artificial insemination breeding of Belgian horses in the early 1930s. His successful efforts to breed and sell registered Belgian horses introduced this breed to Montana and the larger northwest, and from a strictly financial perspective carried him through the Depression. Ever adaptable, when Warren realized that tractors had come to dominate farming, Warren sold the majority of his Belgian herd, keeping only a few to work his own land. From a small remnant herd of Hereford and Shorthorn cattle, Warren also built up a purebred registered Hereford cattle herd during the fourth and fifth decades of the twentieth century. As a result, he became a major regional supplier of bulls and heifers. Warren was particularly important to ranching in Montana and the larger northwest because he adopted modern, scientific livestock management techniques. On a daily basis he closely monitored the feeding, general care and health of his purebred livestock, and also kept detailed records of siring and birth, practiced artificial insemination, and regularly inoculated his animals against the major health risks of the period including Black Leg and Bang's disease.

Beginning the late 1930s, Warren began to re-engineer land he had acquired on the West Side so that it could be irrigated through the pump and ditch system. In the process he graded and contoured the land and created lateral or contour ditches. Irrigation allowed him to increase crop fields and pasturage. Warren planted many of the West Side fields in grain. After his purchase of the Kohrs Ranch in 1940, Warren began a program of range and pasture improvements initiated by the federal Agricultural Conservation Program. At the Warren Hereford Ranch he reclaimed fields adjacent to the Clark Fork River by implementing soil conservation practices, adding fertilizers, and planting cover crops. Lastly, by 1954 Warren also initiated a handline irrigation system to reclaim land adjacent to the railroad tracks.

After the sale of his purebred herd in 1958, Warren entered the stockyard system, providing fattened commercial livestock to larger corporate entities. Throughout the 1960s, Warren continued to raise both yearlings, and later cows and calves on his ranch. He ceased active ranching in 1982.

Over the course of his career as a Deer Lodge Valley rancher, Conrad Warren accomplishments proved that he was adaptable to changing conditions and readily adopted new techniques and practices that would advance his interests. Warren also actively promoted the interests of others providing veterinary services to local ranchers, serving as president of the Montana Stock Growers Association, serving on the State Sanitary Board, registering auction yards and brand inspectors, and ensuring Indian registration of brands.

CRITERION C

In order for the Grant-Kohrs Ranch/Warren Ranch to be evaluated as a nationally significant, the keeper of the National Register and the National Park Service National Historic Landmark staff have determined that such a finding would require a national theme study of twentieth century cattle ranches. This theme study would evaluate the Grant-Kohrs Ranch/Warren Ranch within the broader national context of ranching and agricultural activities in the West, and would need to evaluate the Grant-Kohrs Ranch/Warren Ranch in terms of its significance and physical integrity, as compared to all other historic twentieth-century cattle ranches. This process is identical to the theme study that resulted in the designation of Grant-Kohrs Ranch as a National Historic Landmark (for its associations with the open

range era of cattle ranching) in 1960. The authors of the 2004 Cultural Landscape Report recommend that such a twentieth-century ranching theme study be completed, and believe that it may result in a recommendation of national significance for the Conrad Warren era resources at the ranch. Two significant landscape types, residential and rural vernacular, are summarized below.

The Grant - Kohrs residential landscape

The Grant-Kohrs residential landscape possesses significance at a national level for because it embodies the distinctive characteristics of a type and period of construction. In 1862, Johnny Grant built two small log structures adjacent to one another just north of the town of Cottonwood. During the same year, the structures were described as being "a good sized log House, or rather two joined together." At the end of 1862, he contracted with two workmen, Alexander Pambrun and McLeod, to have a more formal Greek Revival Style ranch house constructed on the same site. In 1865, the Montana Post described the grand residence as "by long odds, the finest in Montana …large and two-storied …as if it had been lifted by the chimneys from the bank of the Saint Lawrence and dropped down in Deer Lodge Valley. It has twenty-eight windows, with green painted shutters, and looks very pretty." The ranch house was a log house, thirty by sixty-four feet in dimension. "The building is of poteaux en coulisse construction, a French phrase for a system of log construction that includes other terms such as 'Red River Frame,' piece-sur-piece, or mortise and tenon log construction. It is also sometimes known as 'Hudson's Bay Frame' construction. …In the case of the Grant residence, the uprights were set on a sill plate and infilled with horizontal log mortise and tenoned into the uprights; the wall was then capped with a header or top plate" (NPS, "National Register of Historic Places Registration Form, Grant-Kohrs Ranch, Warren Ranch," 7-17). Conrad Kohrs purchased the Grant ranch in 1866. By 1890, several new additions complimented the original historic core including a formal front entry, four vestibules, and a two-story brick Victorian addition with full basement. By 1907 at the latest, a conservatory addition for Augusta Kohrs was added on the south side. The 1890 Kohrs brick addition is set on a rough dressed stone foundation with mortar infill. The ranch house appears today much as it did in 1890.

Between 1880 and 1890, the landscape surrounding the ranch house was further developed. By 1880 a formal grid-like pattern of cottonwood trees had been planted on the eastern or front side of the house. Late nineteenth century photographs document that the trunks of these trees were eventually painted white for pest control. Underlying the trees was an expanse of grass. The trees and grass received the benefit of a wooden flume irrigation system in the early 1880s that drew from Johnson Creek and emptied into a submerged wooden barrel. In addition a small informal flower garden with stone retaining wall had been established on the south side of the ranch house. Access to the garden was from the east. By the mid-1880s, a white picket fence surrounded the eastern, southern and part of the northern sides of the ranch house, formally demarcating the domestic area from the more utilitarian ranch. Two hitching posts and carriage steps were also added sometime during this period.

At the time of its construction in 1862, the ranch house was indeed an atypical structure for western Montana and was perhaps indeed was the largest and the 'finest' in the Montana Territory. While fairly typical in layout, the clapboard veneer painted trim ordered by Grant differed from other log structures

both within and beyond Deer Lodge and established that the owner possessed somewhat more refined tastes in architecture. The creation of a more formal landscape surrounding the ranch house by Conrad and Augusta in the 1880s, and the subsequent structural enhancements and brick addition in 1890 transformed the residence into a beautiful example of Victorian refinement.

For the majority of its tenure, the ranch house not only served as a primary residence for Conrad and Augusta, but also served as the ranch's main office where the business of ranching took place. John Bielenberg was also a resident of the house and a partner in the ranching operation. In this sense, the ranch house was also significant as a base of operations for one of the largest cattle ranching operations in nineteenth century Montana.

The Warren residential landscape

The Warren residential landscape possesses significance at a state level because it embodies the distinctive characteristics of a type and period of construction. With funds provided by his grandmother, Augusta Kohrs, Conrad and Nellie Warren constructed a new frame and stucco 'cottage' and adjacent garage on property due east of the ranch house in 1934. The design for the cottage was produced by New York architect Lewis E. Welsh and was published in a 1933 Woman's Home Companion article. The one and a half story structure was an example of a colonial style rural ranch home designed in response to Progressive Era reform and the Domestic Economy movement of the early 20th century. The residence and detached garage, as defined by Welsh, combined the conveniences and necessities of city living in a country home. The Warren residence was enlarged and expanded in 1941 when the roof was raised to create a full second story and a porch on the east side was enclosed and expanded. In 1947, an article in the Westerner described the Warren residence as a "modern ranch home" (Cultural Resources and National Register Program Services, "Conrad and Nellie Warren Residence HSR, Grant-Kohrs Ranch NHS 2002, 5).

Shortly after its construction, Con and Nellie Warren began work on the landscape surrounding the new residence. A white picket fence enclosed the immediate yard area on all sides. Nellie added a garden on the west side, and in 1940 a chicken coop was constructed outside of the picket fence, immediately west of the residence. It was not until 1950 that Con also constructed a boat house southwest of the residence. Simultaneous with the construction of the residence, a well was also dug. The well provided water to the house but also irrigated the garden and surrounding vegetation including assorted native and non-native trees, and an expanse of grass. The resultant lush green space created a sheltered and comforting oasis within the larger arid ranch environment. A frame pump house was subsequently built over the well in 1952 and a barbecue pit graced the eastern side of the fenced enclosure by 1958.

The Warren residence is an example of a first quarter of the twentieth century progressive movement that placed a greater emphasis on convenience, health and comfort in the home. The residence appealed to both Con and Nellie. The house exterior possessed simple colonial style lines, however, the interior was designed with modern conveniences including electricity, plumbing and heating and had craftsman-like features such as exposed beams in the ceiling. As reported in 1934, the 'modern improvements' contained in the house would have fit in with the progressive social norms for

modernization sweeping rural America (Cultural Resources and National Register Program Services, "Conrad and Nellie Warren Residence HSR, Grant-Kohrs Ranch NHS 2002, 2).

The Grant-Kohrs Ranch rural vernacular landscape

The Grant-Kohrs Ranch vernacular landscape possesses significance at a state and national level because it embodies the distinctive characteristics of a type and period of construction. The rural vernacular landscape of the 1870s Grant-Kohrs Ranch was designed upon the needs of the ranching industry. Because the Open Range was still a viable if not diminishing option that was utilized by many ranchers through the late nineteenth century; the home ranch's own development was comparatively limited during the 1860s and 1870s. The ranch house and surrounding domestic landscape was clearly separated from the surrounding ranching complex. A few large irrigation ditches watered pastures for grazing--and later haying--on the floodplain lowlands; jack-leg fencing utilizing the plentiful lodge pole pine was erected throughout the ranch to keep cattle in or out of fields, pastures, and other areas; and a limited number of stock shelters, barns, corrals and other livestock support structures were built out of local materials, utilizing log, post and pole, or frame construction, west and north the ranch house. As the loss of a viable Open Range transformed ranching during the last decade and a half of the nineteenth and first two decades of the twentieth century, the development of the home ranch changed in response. From the 1880s onwards, Kohrs and Bielenberg began to place a greater emphasis on growing more hay and other grains and/or purchasing what they needed for winter feed. This directly translated into a greater dependence on irrigated lands and an increase in the amount of cultivated fields and irrigated pasture. By the 1890s and through the first two decades of the twentieth century, the home ranch grew in size as adjacent lands were purchased. Likewise, the quantity of fenced land grew and the type of fencing changed. By 1904, the entire Grant-Kohrs Ranch had been fenced with barbed wire. By the turn of the nineteenth century new structures that represented the changing ranching practices, including granaries, feed racks and cow sheds, began to be constructed with greater frequency at the home ranch.

While Conrad Warren clearly developed and expanded upon the Grant-Kohrs Ranch vernacular landscape, much of the original late nineteenth century spatial relations including the system of irrigation ditches, fields, pastures, building clusters, pedestrian and vehicular circulation routes, and viewsheds remain the same.

The Warren Hereford Ranch rural vernacular landscape
Even though the Warren Hereford Ranch is listed on the National Register under Criterion C, the authors recommend that its vernacular landscape be further evaluated for significance at a national level. The success of Conrad Warren's ranching tenure was dependent upon his ability to improve the existing facilities of the home ranch and adapt them to changing socio-economic conditions, expand the amount of pasture and crop land he had access to, and overhaul the aging irrigation system. The built environment of the larger cultural landscape, including the vernacularly designed and constructed barns, sheds, feeding houses and troughs, fences, corrals, and circulation and irrigation systems reflect the modern ranching practices adopted by Warren in style, materials, spatial organization, and function. Between 1932 and 1958, Conrad Warren's ranching operations focused nearly exclusively on the home

ranch and the management of purebred and registered Hereford and Belgian herds. Because of this, Warren required a larger, more complex system of livestock shelters, feed lots, corrals, and circulation and irrigation systems than his grandfather. The adaptations he made to pre-existing buildings, structures and other landscape features and the extensive new construction carried out during his tenure directly reflected the needs of a mid-twentieth century modern cattle raising and sales operation. Warren utilized the existing building clusters and spatial relationships established in the previous century, but also expanded upon them establishing new circulation routes and building new ranching clusters. Many of Warren's physical improvements utilized modern technology and materials such as concrete, metal, and powerful water pumps--items previously unavailable to a former generation of cattle ranchers. The circulation systems and field patterns in the West Side and along the Clark River bottomlands developed by Warren during the 1930s through 1950s also reflect a renewed emphasis upon the expansion of irrigated acreage and increased production of feed crops and native hay through the efficient re-engineering of an outdated irrigation system and the reclamation and reuse of abandoned and poisoned fields and pastures. The current productivity of these areas must be credited directly to the developments initiated by Con Warren during this period.

PERIODS OF SIGNIFICANCE

According to the National Register Bulletin: How to Prepare National Historic Landmark Nominations, a period of national significance is defined as "the length of time when a property was associated with nationally significant events, activities, and persons, or attained the national characteristics which qualify it for designation as a NHL."

Based on an evaluation of the CLR's physical history and historic context, the authors recommend a period of significance of between 1862 and 1982 for the Grant-Kohrs Ranch National Historic Site. The 1862-1982 period of significance includes two sub-periods. The first period of significance, as identified in the National Historic Landmark Boundary Study, begins with the establishment of the Johnny Grant ranch in 1862 and ends with the dissolution of Kohrs and Bielenberg cattle empire in 1919. The second period of significance, as identified in the National Register documentation, begins with Conrad Warren' s arrival at the Kohrs Ranch in 1929 and ends with his retirement from active ranching in 1982. This end date of the period of significance extends the end date of the period identified in the National Register documentation (1958) to include the ranching adaptations that Warren made to adjust to economic conditions until his retirement in 1982. These ranching adaptations made by Warren, and the physical features of the Warren Ranch cultural landscape that supported them, are characteristic of small rancher responses to increased corporate control and the implementation of the feedlot system nationwide. During a period of sweeping change in the ranching industry in the greater northwest, the actions of Conrad Warren and the physical features of the Warren Ranch cultural landscape are representative of the larger region and nationwide context of ranching during the mid-twentieth century.

Criteria Consideration G

Because a limited number of contributing resources within the Grant-Kohrs Ranch/Warren Ranch Historic District have achieved significance within the last fifty years, it is our opinion that the standards

of Criterion Consideration G need not be met. Criterion Consideration G states that a property achieving significance within the last fifty years is eligible only if it is of exceptional importance. As defined in the National Register Bulletin 'How to Apply the National Register Criteria for Evaluation,' a property does not need to meet Criteria Consideration G if:

A historic district in which a few properties are newer than fifty-years old, but the majority of properties and the most important Period of Significance are greater than fifty-years old.

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Historic Site
Vernacular
Designed

Current and Historic Use/Function:

Primary Historic Function: Livestock

Primary Current Use: Livestock

Current and Historic Names:

Name	Type of Name
Grant-Kohrs Ranch NHS	Current
Grant-Kohrs Ranch	Both Current And Historic
Grant-Kohrs Home Ranch NHL	Current
Gr-Ko Rnch/Warren Rnch HisDi	Current
Johnny Grant Ranch	Historic
Conrad Kohrs Home Ranch	Historic
Kohrs-Bielenberg Ranch	Historic
Warren Hereford Ranch	Historic

Chronology:

Year	Event	Annotation

9000 - 6000 BC	Inhabited	The earliest human occupation of North America dates to the PaleoIndian period. PaleoIndians were predominantly hunters who relied upon large mammals such as large bison, camel, horse, mammoth, and other animals that are now extinct. Archeologists subdivide this period into two distinct cultural entities—early and late. The earliest complex is characterized by the Clovis and later Folsom cultures. These highly nomadic people traveled in small groups, likely following the migration of fauna. They stopped at temporary camps, which could be located in open country or natural rock shelters. The later PaleoIndian complexes are identified in the eastern Plateau region by Plainview, Midland, and Agate Basin type points, found predominantly in valleys. There are no documented PaleoIndian sites within Grant-Kohrs Ranch National Historic Site, but PaleoIndians were clearly present in Deer Lodge Valley, as represented by finds of points and other lithics (CLR 2.2-2.3).
6000 BC - AD 500	Inhabited	During the Archaic period humans adapted to a dramatically changing environment. These changes included a prolonged period of increasingly warm, arid conditions that began during the PaleoIndian period, as well as periods of cooling temperatures and increased moisture. Archaic peoples gradually transitioned to a broader, more diverse subsistence base that included both hunting and gathering. As the large prey animals of the PaleoIndian period became rare and extinct, Archaic peoples hunted bison, deer, and other medium-sized or smaller animals. They gathered berries, pine nuts, roots, and other plant resources for dietary, medicinal, or other uses. Archaic peoples were nomadic, following migrations of fauna and plant resources. Archaic sites have been identified in the area surrounding the park. Within the park, archeological resources that may date to this period include lithic scatters and stone rings, which humans may have used to weight down tipis (CLR 2.5-2.8).

AD 500 - 1700	Inhabited	Settlement patterns during the Late Prehistoric period reflect an increase from smaller hamlets to larger, more permanent villages, generally located adjacent to major rivers. Yet Late Prehistoric peoples continued to practice a nomadic lifestyle, following the migrations of deer, bison, and other animals, and plant resources that were available seasonally. The adoption of the bow and arrow and the use of ceramics were two important developments during this period. Ethnographic and archeological evidence suggests that these people may have also set fires to woodlands and prairies to improve habitat, clear campsites, or for other reasons. Late Prehistoric sites are found in abundance throughout the region. Within the park, archeological resources that may date to this period include lithic scatters and stone rings, which humans may have used to weight down tipis (CLR 2.10-2.13).
AD 1700 - 1860	Inhabited	Between the Protohistoric and Contact periods, the Deer Lodge Valley was transformed from a major thoroughfare to and from seasonal hunting and gathering grounds for Pend d'Oreille, Flathead, Shoshone, and other American Indian groups, into an area that was explored, trapped, and subsequently exploited for its lush grass ranges by European Americans (CLR 2.14).
	Inhabited	During the Protohistoric/Contact period (ca. 1700-1800) European influences dramatically impacted the American Indian residents of the Eastern Plateau region. Diseases including smallpox swept through native populations, devastating cultural groups. The introduction of the horse enabled major changes in settlement patterns. Utilizing horses, the Shoshone swept over most of Montana and helped to establish the nomadic Plains Indian culture centered on hunting the buffalo. The Flathead and Pend d'Oreille likely had horses by 1730 at the latest (CLR 2.14).

	Explored	The first recorded exploration of Montana by Europeans was accomplished by Meriwether Lewis and William Clark. In 1805 Lewis and Clark entered what would one day become northeast Montana. They eventually entered what would later become southwest Montana, crossing south of the Deer Lodge Valley. Lewis and Clark reported that the American Indian groups they encountered had interacted with white men (trappers and traders) for some time, and possessed large hordes of horses, trade goods, and various European items (CLR 2.15).
	Exploited	Following the establishment of the North West Trading Company in 1779, trapping became an increasingly important activity in current day Montana. Early European fur traders and trappers explored the Deer Lodge Valley and vicinity in the pursuit of beaver. Much of the beaver's native habitat in the eastern Plateau region was trapped during the eighteenth and early nineteenth centuries. By 1831 trapper John Work visited the Deer Lodge Valley and commented that the area appeared to have been trapped out (CLR 2.15, 2.16, 2.19).
AD 1857	Ranched/Grazed	In 1857 Johnny Grant wintered his cattle herd in the Deer Lodge Valley, the first event where non-native fauna had grazed in the vicinity (CLR 2.19).
AD 1859 - 1861	Settled	In 1859 Johnny Grant moved to the Deer Lodge Valley, settling at the confluence of the Deer Lodge River and Little Blackfoot Creek, twelve miles north of the Grant-Kohrs Ranch NHS. He built a "rough shack of cottonwood logs" there that year (CLR 2.18).
AD 1860 - 1867	Established	In 1860 Johnny Grant had persuaded several families of traders to settle in Deer Lodge valley at the confluence of Deer Lodge River and Cottonwood Creek. At first, this small permanent settlement was given the name Cottonwood, though the name soon changed to Deer Lodge City. During the 1860s, this growing ranching and agricultural town served as a central supply depot for regional mining camps. In 1865 Deer Lodge City was described as containing approximately 125 log cabins with an enlarged business district, including 3-4 stores, several hotels, a brewery, saloon, and three steam sawmills (CLR 2.21-2.27).

AD 1861	Established	In 1861, Johnny Grant moved from his small ranch at the confluence of the Deer Lodge River and Little Blackfoot Creek to be closer to the new settlement of Cottonwood. With the construction of the first log structures, he initiated the development of a larger home ranch (CLR 2.21, 2.25, 2.27).
AD 1861 - 1867	Developed	Between 1861 and 1867 Johnny Grant made major improvements to the new ranch. Buildings included a log cabin (part of HS-2, 1861), a larger log ranch house (HS-1, 1862), and a livery stable (burned 1866). About 1862 Grant began to cultivate one or more fields adjacent to the ranch house. He constructed an informal irrigation ditch system of unknown length and orientation, which likely drew from the Deer Lodge River. Photographs from this time period illustrate that the core of the ranch and some of the rangelands beyond the core were fenced with jack-leg and other fences (CLR 2.21, 2.24, 2.27).
AD 1864 - 1867	Expanded	By 1864 Conrad Kohrs had begun to expand his regional butchering operations, eventually entering into partnerships with his three half-brothers, Charles, Nick, and John Bielenberg. During that year Kohrs made his first substantial purchase of beef cattle, buying 400 head and wintering them in Deer Lodge Valley. These cattle supplied his butchering shops and began his cattle raising business (CLR 2.24).
AD 1866	Purchased/Sold	In 1866 Conrad Kohrs purchased the Johnny Grant Ranch for a price of $19,200.00. He also bought out his former partner in the butchering business, Ben Peel. By the end of the year he had also acquired the adjacent Louis Demers Ranch on the west side of the Deer Lodge River (CLR 2.31).

AD 1866 - 1887	Expanded	In the two decades after acquiring the Johnny Grant Ranch, Conrad Kohrs' and John Bielenberg's ranching interests grew dramatically. They expanded from a small, local operation to a regionally dominant cattle ranching and butchering business. Kohrs and Bielenberg improved the quality of their own stock by purchasing registered breeds, paid close care and attention to seasonal ranges and their utilization, and provided Montana and other ranchers in the northwest region with quality breeding stock. They dramatically expanded the physical facilities at the home ranch, constructing barns, sheds, and other features to support their needs. As a result, the Kohrs and Bielenberg operation became one of the leading ranches in Montana during the last quarter of the nineteenth century (CLR 2.31).
	Developed	During the late 1860s, Deer Lodge City continued to grow slowly. In 1867 A.K. McClure described it as "a little village of probably 200 inhabitants, situated on the river of the same name" (CLR 2.31).
AD 1868 - 1881	Developed	Between 1868 and 1881, the Ranch House and its surrounding domestic landscape underwent a transformation from a relatively rustic abode to a more civilized and refined residence. A domestic space surrounding the ranch house emerged, which was set apart from the working ranch that surrounded it. Conrad Kohrs and his wife, Augusta, played a prominent role in the layout, design, and seasonal maintenance of this domestic landscape (CLR 2.39). Conrad and Augusta likely participated in creating a formal front lawn, immediately east of the ranch house. This lawn was defined by a white picket fence and planted with a formal, grid-like pattern of cottonwood trees. Many of these trees died during a hard winter of 1880-1881 and were subsequently replanted. A grass lawn was established underneath the trees. Augusta likely also played a major role in the design and maintenance of the south garden (ca. 1880) and lower flower gardens (ca. 1890) (CLR 2.34, 2.38).

	Built	An irrigation system was installed to water the front (east) lawn of the ranch house and the south garden. Water for the lawn and garden was obtained from a ditch that drew from Johnson Creek. Augusta was largely responsible for maintaining the vernacular domestic landscape. She is credited with carrying water in buckets to water the young cottonwood trees from a barrel set into the lawn, which was part of this irrigation system (CLR 2.34).
AD 1872 - 1899	Expanded	Approximately 1872 or 1873, Conrad Kohrs and Judge Manning of Deer Lodge initiated improvements of the existing irrigation ditch network dating to the Grant period. The improvements made to this ditch system would later become known as the Kohrs-Manning Ditch; the water rights were used in stock watering and irrigation. The Kohrs-Manning Ditch obtained water from the Clark Fork River south of the home ranch, and also subsequently obtained water from the smaller drainages of Peterson Creek and Reece Anderson Creek. Presumably, the ditches that drew from Johnson Creek could only have irrigated a few small meadows south of the Ranch House (HS-1), but ditches that drew from the Clark Fork River in the 1870s could have irrigated a large expanse of floodplain west of and adjacent to the Ranch House. The Kohrs-Manning ditch system was expanded within home ranch lands throughout the late nineteenth century (CLR 2.33).
AD 1875 - 1879	Settled	Between 1875 and 1879, western Montana witnessed a series of battles between the U.S. Military and American Indian populations. The conflicts arose out of the tension between settlers' desire for new lands and the resistance of tribes to leave their homeland. By 1879, the Nez Perce, Sioux, Northern Cheyenne, and Crow nations had been forcibly settled on reservations (CLR 2.35).

AD 1883	Built	Throughout the late 1870s and early 1880s, the regional railroads continued to press both east and westward, eventually passing through southwest Montana. In 1883 the Utah Northern railroad built a branch line, the Montana Union from Butte to Garrison, through the Kohrs-Bielenberg Ranch directly in front of the ranch house, and south towards the town of Deer Lodge. Conrad Kohrs granted the railroad an easement but did not sell the land. Though Kohrs opposed the construction of the railroad in this place, he took advantage of the opportunities that the proximity of the line presented. In 1883 he supervised the first shipment of 1,100 head of cattle to Chicago via the Northern Pacific line (CLR 2.36).
AD 1887 - 1922	Expanded	After the hard winter of 1886-1887, Kohrs and Bielenberg began to plant and harvest more hay, and purchase additional winter feed to supplement what the open range could provide. Into the early twentieth century, they continued to purchase substantial additional lands, eventually accumulating over 25,000 acres (CLR 2.45). Acreage was acquired for two primary purposes: to increase range land and to acquire access to water sources and water rights for irrigation. The decision to acquire new fields and place them under cultivation meant that these fields had to be fenced. In 1893 Kohrs ordered 25,000 feet of barbed wire to fence his fields and pastures (CLR 2.46).
	Built	Kohrs and Bielenberg continued to add new structures to the ranch. Structures built during this period include: a machine shed (HS-12; 1890s), granary (HS-18; 1890s), feed rack (HS-42; 1900), privy (HS-20; 1900), feed racks (HS-37, HS-38; 1907), cow shed (HS-13; 1908-09), metal granary (HS-23; 1910), and a coal shed (HS-4; 1915).
AD 1890 - 1900	Expanded	In 1890 Kohrs constructed a major brick addition to the west side of the ranch house (HS-1). Sometime between 1890-1900 the conservatory addition to the south side of the ranch house was built (CLR 2.46-2.47).
	Developed	It is likely that the lower yard area, including the lower garden, developed during the early 1890s after the construction of the rear brick addition. Augusta Kohrs' lower garden reflected popular Victorian horticultural influences, including symmetrical plantings, geometric bed designs, and brightly colored annuals (CLR 2.46).

AD 1900 - 1930	Damaged	By the early twentieth century, the Clark Fork River had begun to show the negative effects of copper mining upstream. Particular areas of the Clark Fork River floodplain were visibly contaminated (CLR 2.57)
AD 1905	Altered	Approximately 1905, wooden boardwalk paths surrounding the ranch house were replaced with brick pavers (CLR 2.47).
AD 1909 - 1920	Homesteaded	In 1909 Congress authorized the Enlarged Homestead Act, which enabled potential settlers to settle up to 320 acres of land if they cultivated at least 1/8 of it in agricultural crops other than native hay. This and other changes to homestead legislation encouraged a large number of "dry farmers" to emigrate to the northern plains of Montana. Many settled on open ranges formerly used by cattle ranchers. By the mid 19-teens, the open range had become "pretty well fenced" (CLR 2.49).
AD 1901 - 1924	Purchased/Sold	After the death of Conrad and Augusta's only son in 1901, the Kohrs and John Bielenberg slowly began to prepare for eventual closing of ranching operations. In 1908 they formed a corporation called the Kohrs and Bielenberg Land and Livestock Company. Dissolution of the substantial land holdings of the Kohrs-Bielenberg Ranch proceeded swiftly in the 19-teens. With the exception of approximately 1,000 acres surrounding the home ranch and stock from the Helena Hereford herd, by 1924 the Grant-Kohrs Ranch had been nearly entirely dispersed.
AD 1922 - 1940	Expanded	Conrad Warren, the grandson of Conrad and Augusta Kohrs, began working on the Kohrs ranch during the mid-1920s; by 1932 he was in charge of daily operations. Under Warren's tenure, the Kohrs ranch expanded from a dwindling herd of commercial Hereford cattle, to a respectably sized herd of purebred registered Hereford and a growing herd of purebred registered Belgian draft horses. In order to accommodate his growing interests, Warren actively purchased land adjacent to the home ranch and rehabilitated and expanded the existing irrigation system, turning once barren and underproductive fields into well-watered hay and grain fields (CLR 2.57).

AD 1928 - 1930	Built	Con Warren helped build the gravel road that ran westward on the north edge of the Stuart field and paralleling the feed bunks (HS-45 and HS-46). The road crossed the Kohrs-Manning Ditch and the Clark Fork River, leading to the west side. Three bridges were built in connection with this road (CLR 2.57).
AD 1930 - 1934	Altered	During the early 1930s, many of the old Kohrs-Bielenberg era buildings were torn down or renovated to meet the changing function of the ranch. Substantial improvements were made to the bunkhouse including new flooring and chicken wire lath and stucco plaster. Old buildings and fences were torn down including a shed with thatched roof, four small feed bunks, and other log structures. About 1934 Con Warren replaced the deteriorating picket fence surrounding the Ranch House. The new fence enclosed a larger area. Warren also constructed stone retaining walls along the western side of the house, both north and south of the 1890 addition (CLR 2.58).
AD 1932 - 1934	Built	Between 1932 and 1934 several new structures were built. Much of the new construction during this period reflected an expansion of the Kohrs-Bielenberg ranching complex westward towards the slough bridge (HS-90). Two new ranching clusters were constructed, the west corral yard, and the west feedlot (CLR 2.58).
AD 1934 - 1939	Built	In 1934 Con and his wife Nell received .71 acre and a new house (HS-58) and garage (HS-61), given to them by Augusta Kohrs. The Warren residence compound was enclosed by a white picket fence on its northern and western sides. By the late 1930s additional features within the residence compound included a swing set, a doghouse, a clothesline, flagstone path, and small bridge, which crossed the north fork of Johnson Creek (CLR 2.60-2.61).
	Planted	Con and Nellie Warren landscaped the immediate area surrounding their new residence. Grass and a variety of trees were planted within the picket fence. Native trees were planted around the house, and a vegetable garden and flower garden were established (CLR 2.60-2.61).

AD 1937 - 1939	Purchased/Sold	Approximately 1937-1939, Con Warren acquired the 160-acre D'Alton property and the Kohrs Company acquired the Kading place, both southwest of the ranch house on the west side of the Clark Fork River. Warren made major changes to the existing improvements at these properties, relocating roads, rehabilitating irrigation ditch networks, removing fences, and leveling old structures. Warren planted his new West Side fields in grain (CLR 2.62-2.63).
AD 1940	Purchased/Sold	In 1940 Con Warren bought the home ranch including all lands and livestock from the Kohrs Company. He christened it the Warren Hereford ranch. Warren also acquired the old Kohrs-Bielenberg "Upper Ranch" the same year (CLR 2.72).
AD 1940 - 1958	Expanded	After his purchase of the home ranch, Warren expanded the role of agriculture using a variety of conservation programs to improve pastures and reclaim damaged fields. Warren adopted scientific strategies in the fields of soil improvement and crop and herd management that were rarely practiced within the region. The physical facilities at the home ranch were also expanded. Warren's pursuit of increased productivity paid dividends as his purebred registered Hereford herd experienced substantial growth until its dispersal in 1958 (CLR 2.72).
AD 1940 - 1941	Built	Warren installed a new water pump on a Deer Lodge lot south of Milwaukee Avenue. The pump station on Mitchell Street allowed him to irrigate his West Side pastures, making them more productive. A road that provides access to the pump house was likely built in association with the facility (CLR 2.72).
AD 1941	Altered	In 1941 Warren made significant renovations to his residence (CLR 2.74).
AD 1945 - 1958	Farmed/Harvested	As bulk grain became less expensive after World War II, Warren made the gradual transition from farming that predominantly featured grain, to one of nearly exclusively hay (CLR 2.74).

AD 1950	Graded	In an attempt to combat cheat grass surrounding the Ranch House (HS-1), Warren placed approximately six inches of earth fill on the front (eastern) lawn of the residence, seeding it to turf grass. The addition of the fill covered the late nineteenth century wooden irrigation system for the lawn and trees (CLR 2.76).
AD 1952 - 1954	Built	New construction throughout the early 1950s reflected the emphasis on the production and sale of purebred registered Hereford bulls. Because of the constant flooding and muddy nature of the lower yard in the Kohrs/Warren ranching complex, Warren constructed a new ranching complex east of the railroad lines and north of his residence on drier ground (CLR 2.75, 2.77).
	Expanded	By 1954 Warren had constructed an irrigation system that diverted water from the Kohrs-Manning Ditch under the railroad and through an underground pipe to a pump house (HS-86). The result was an efficient system that provided convenient pasturage, produced good crops, and ultimately benefited Warren's Hereford management system (CLR 2.76).
AD 1960	Established	On December 19, 1960 the Grant-Kohrs Home Ranch was designated a National Historic Landmark (NHL) . It was one of five sites identified in a 1959 NHL "Westward Expansion: Cattlemen's Empire" theme study as having exceptional value or quality in illustrating or interpreting the heritage of the Untied States (CLR 1.2).
AD 1972	Established	In August of 1972 Congress authorized the establishment of Grant-Kohrs Ranch National Historic Site "to provide an understanding of the frontier cattle era of the Nation's history, to preserve the Grant-Kohrs Ranch, and to interpret the nationally significant values thereof for the benefit and inspiration of future generations. On August 25th President Richard Nixon officially signed the bill into law (CLR 2.87).
AD 1972 - 1975	Purchased/Sold	By the end of 1972 the National Park Foundation had conveyed the property it owned at the Grant-Kohrs Ranch to the National Park Service. Warren eventually sold several additional tracts of land and easements to the National Park Service during the early 1970s. By the end of 1975 the total acreage held by the National Historic Site in fee simple had increased to 216.79 acres (CLR 2.87).

AD 1972 - 1988	Rehabilitated	The National Park Service focused its first decade and a half on establishing a working ranch and stabilizing, and restoring, as much as possible, the materials and fabric of the historic facilities. Over time, major rehabilitation/restoration/reconstruction work was undertaken on the Ranch House, bridges, irrigation ditches, historic paths, and numerous other structures and features. By the mid-1970s, the first cattle and horses were acquired and stabilization work on important interpretive structures and features had begun. By the early 1980s, haying on a share bases was initiated to meet livestock and park interpretive needs (CLR 2.87).
AD 1988	Purchased/Sold	In June 1988 the National Historic Site purchased an additional four tracts of land including 1,059.85 acres and 34 historic structures, the remainder of the Warren Hereford Ranch property. Warren was given a life estate to his residence and associated buildings located on a single acre. Acquisition of these lands enabled the NHS to acquire valuable water rights associated with the West Side and Kohrs-Manning ditches obtained from the Clark Fork River, Modesty Creek, Peterson Creed, and Reece Anderson Creek. Access to this water allowed the NHS to increase their irrigated lands and raise the productivity of adjacent fields and pasture (CLR 2.99).
AD 1988 - 2002	Preserved	The Grant-Kohrs Ranch NHS continued to implement stabilization and restoration on the newly acquired facilities (CLR 2.99).
	Built	The NPS constructed new buildings and other structures. New fences (1996) and a corral and chute system (2000) were built to support grazing and herd management. In 2000 a new Resource building was built to house maintenance and natural resources offices. A new flagstone path was built in the lower garden area (1997) (CLR 2.102-103).
AD 1989	Established	In 1989 the park initiated an Agricultural Use lease program. From this year on, approximately 746 acres were leased to a local rancher for both hay production and cattle grazing. The lease stipulated the number of animal units that could be grazed on the property and the length of the grazing period (CLR 2.99).

AD 1990 - 1994	Moved	During the early 1990s, the NHS made several moves to consolidate operations and to remove them from the center of the historic core of the ranch, which was highly visible to the visiting public. In 1991 the maintenance shop was moved from the dairy barn (HS-9) to the Warren sales barn (HS-65) and the main administrative office was moved to a larger space at 210 Missouri Avenue. The curatorial office and archives were moved to the former Warren residence (HS-58) in 1994 (CLR 2.100).
AD 1992 - 1994	Built	In 1992 new wayside exhibits were installed along the pedestrian path, including a new wayside on railroads. In 1993 construction began on a new interpretive foot trail through the Cottonwood Creek pasture. The trail was formerly opened to the public in 1994 (CLR 2.100).
AD 1996 - 1997	Expanded	In 1996 the Grant-Kohrs Ranch developed an Animal Use Plan for the park. The plan recommended that animals be visible and accessible to park visitors. The management strategy was to gradually build the herd over the ensuing seven years. By the end of 1997, the herd had grown to 45 cows, 17 replacement heifers, 45 calves, 2 bulls, 2 longhorn steers, and 1 longhorn heifer. Other animals on site included 5 Belgians, and 4 Quarterhorses (CLR 2.101).
AD 2001 - 2003	Restored	Restoration of the cultural landscape surrounding the Ranch House began. A new underground watering system was installed and a total of 33 cottonless black cottonwood trees were planted in the front yard in 2001. In 2002 24 cottonwood trees were replanted. In 2003, a replication white picket fence was installed in this area. Work also began on the restoration of the historic Warren complex including the residence, garage, boat house, and chicken coop (CLR 2.103).
AD 2002	Established	In 2002 the 20th century Grant-Kohrs Ranch/Warren Ranch historic district was nominated by the NPS to the National Register for its significance to the state of Montana under Criteria A and C in the areas of agriculture and architecture. It was listed on July 11, 2003 (CLR 1.2).

PaleoIndian Period (ca. 9000 – 6000 BC)

Archaic Period (ca. 6000 BC – 500 AD)

Late Prehistoric Period (ca. 500 AD – 1700 AD)

The Pend d'Oreille, Flathead, and early European occupation of Western Montana, ac. 1700-1860

The Establishment of the Johnny Grant Ranch, the Settlement of Cottonwood, and Incipient Stock Raising, 1860-1867

The Conrad Kohrs Home Ranch and the Growth and Development of the Ranching Industry on the Northern Plains, 1866-1887

The Decline of the Open Range and Dissolution of the Kohrs-Bielenberg Ranch, 1887-1922

The Conrad K. Warren Era: Rebuilding the Ranch and the Application of Scientific Advances in Veterinary Medicine, Breeding, Feed, Crops, and Mechanical Systems, 1922-1940

The Warren Hereford Ranch, 1940-1958

The National Park Service and Early Conservation Efforts, 1972-1988

Acquisition of the Con Warren Ranch, 1988-2002

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

The Grant-Kohrs Ranch National Historic Site retains historic integrity.

This CLI is adapted from the Grant-Kohrs Ranch National Historic Site Cultural Landscape Report (CLR), Part I, prepared by John Milner Associates, Inc. in 2004. The CLR contains a thorough discussion of historic and existing conditions by landscape characteristic. These discussions are contained in this CLI Analysis and Evaluation section in abridged form under the various headings for landscape characteristics. Based upon the comparison of existing versus historic conditions, the landscape was evaluated according to the seven qualities of integrity recognized by the National Register: location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property will always possess several, and usually most, of these qualities. Additionally, the landscape was examined according to three criteria that apply to biotic resources: species composition, community organization, and land management techniques. This CLI finds that the park retains historic integrity.

Integrity assessments follow for the overall landscape as well as for each of the component landscapes. Assessments of biotic resources are included, where appropriate. Recognizing the park's desire for identification of specific themes, or historic periods of time that each landscape represents, this section also includes discussion of each component landscape's period of association, or current physical conveyance of a particular period of history (CLR 4.71).

OVERALL - GRANT-KOHRS RANCH INTEGRITY

Location: Retains historic integrity.
Design: Retains historic integrity.
Setting: Retains historic integrity.
Materials: Retains historic integrity.
Workmanship: Retains historic integrity.
Feeling: Retains historic integrity.
Association: Retains historic integrity.

The Grant-Kohrs Ranch retains a relatively high degree of integrity to the recommended 1862-1982 period of significance. The landscape resources present on the ranch illustrate a 120 year continuum of cattle ranching operations that includes the Grant, Kohrs, Warren, and NPS periods of ownership, and represent their responses to the natural and cultural environment. Encompassing the core of the historic domestic and working landscape, the ranch clearly retains integrity of location and association. The rural character of the ranch, which also retains patterns of spatial organization, landform/topography, vegetation, and natural systems, survives and enhances the ranch's ability to convey the setting and feeling of the historic period. The integrity of setting and feeling is also strengthened by the active ranching practices that continue within the landscape.

Because the spatial relationships of buildings and structures, road systems, field patterns, fences, and irrigation ditches continue to reflect the functions of everyday ranching operations for which they were created, the ranch also retains a high degree of design. Although several buildings and structures have been removed over the years while others have been added, the remaining manmade features represent the majority of the constructed features present on the ranch throughout its 120 year period of significance. The log, wood frame, and board-and-batten structures retain a high degree of integrity of materials and workmanship, and continue to reflect a range of vernacular architectural styles and methods of construction typical of the region, and illustrate ranch function and use. Under NPS management, the extant buildings and structures have been maintained, restored, or reconstructed according to the Secretary of Interior's Standards for the Treatment of Historic Properties.

Overall, the Grant-Kohrs Ranch retains a moderate degree of integrity of native plant species composition. While some of the native bunchgrass prevalent throughout the Deer Lodge Valley when John Grant and Conrad Kohrs first settled in the region remains today, its species composition has been compromised by the spread of both the non-native cultivated grasses planted in the hay fields as well as the non-native weeds and invasive exotic species that have taken root in disturbed areas. The Upland Pasture area and the remnant prairie fenced near the railroad corridor are the best representative examples of the native plant community. Likewise, the integrity of the natural riparian plant community has been compromised by the metal toxins deposited from the mining operations upstream as well as from years of grazing, allowing non-native plant species to spread and dominate in these areas.

The integrity of cultural plant species composition, however, is relatively high. Although less diverse in the types of plants cultivated throughout the ranch's history, the almost exclusive cultivation of hay and the species of grasses in the hayfields generally reflect that found at the end of the period of significance and contain several plants that represent both Kohrs and Warren period cultivation. Due to NPS preservation and restoration efforts, the species of ornamental planting surrounding the Grant-Kohrs residence also reflects those found during the Grant-Kohrs period of significance.

Because the ranch continues to cultivate hay for harvest and grazing, it retains a relatively high degree of integrity of plant community organization. Although Kohrs and Bielenberg raised approximately 30,000 tons of hay at the close of their cattle operations, this number reflected the total amount needed to winter feed the cattle on their land (to include land other than the Home Ranch). This number dropped significantly during Warren's years of operation, reflecting the reduction in the size of the ranch, the size of his herd, and his feedlot operations. Before NPS acquisition of the ranch, Warren was harvesting between 500-1500 tons of hay from his fields. This number has fluctuated during the NPS operation of the ranch, ranging between 76 tons at the close of the period of significance, to over 900 tons in 1993, to 468 tons in 2001. In recent years, this number has been dependent upon the amount of hay leased for pasture versus harvest. Overall, the Park's seasonal hay production, to include irrigation, fertilization, cultivation, harrowing, and harvest--cutting, baling and stacking--supports the historic integrity of the ranch.

As mentioned earlier, the ranch currently maintains approximately 94 head of cattle, including several

breed yearlings born in the spring. Breeds include Hereford, English Shorthorn, Longhorn, and Angus, as well as cross-breeds of the four types. This number fluctuates annually, based upon resource availability and market conditions. Nine horses are also cared for on the ranch. These include three saddle horses (quarter horses), two Belgian draft horses, and five USFS horses that lease the pasture. During visitor season, the ranch also usually cares for a few chickens, ducks and turkeys.

During the Grant-Kohrs period, Conrad Kohrs and John Bielenberg raised longhorn cattle, shorthorn cattle, Hereford cattle, thoroughbred horses, Clydesdale horses, Percheron-Norman draft horses, Yorkshire hogs, Holstein cows, and chickens and turkeys. Documentation also suggests that Angus bulls, Ayrshire dairy cows, merino rams, and sheep were also kept on the ranch. Con Warren maintained this diversity until the 1950s, raising both registered and commercial Hereford cattle, Durham and Holstein dairy cows, Belgian horses, hogs, chickens, milch cows, and a mule. In the mid-1950s he expanded the Warren Hereford Ranch to the east of the railroad tracks and began raising primarily purebred and commercial Herefords.

Based upon this information, the integrity of animal species composition--or in this case livestock breeds--managed on the ranch is moderate. While the cattle breeds currently represented on the ranch reflect those present during the period of significance (particularly the breeding and commercial operations of the late Warren period), the diversity of other livestock species and breeds represented throughout the larger period of significance is lacking. These include dairy cows, hogs, oxen, sheep, rams, ducks, and mules, as well as a greater diversity of horse breeds, such as thoroughbreds, Clydesdales, Shire, and Percheron-Norman draft horses.

Although the diversity of livestock species and breeds may not necessarily be representative of the larger period of significance, historical research indicates that the numbers of livestock and diversity of breeds fluctuated considerably throughout the period of significance as both Kohrs and Warren adapted their herd to market conditions and resource availability. This is the case today, as NPS operations seek to balance interpretation with revenue flow needed to keep the program viable. AUMs and hay lease contracts are also determined by market conditions and resource availability; agricultural and ranching management practices are interwoven, as hay and pasture use is determined by park staff to prevent overgrazing and to protect resources. As a result of these traditional seasonal practices (which include field irrigation, ditch maintenance, fertilization, harrowing, and harvesting, as well as calving, feeding, vaccinating, branding, grazing, etc.) the integrity of community organization and land management techniques is considered high.

HOME RANCH INTEGRITY

The Home Ranch Complex component landscape retains a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association to the recommended 1862-1982 period of significance. Responses to natural features and systems, patterns of spatial organization, physical construction, and functional relationships of buildings, structures, fences, fields, corrals, views, roads, and constructed water features very well convey the organization and operation of the ranch to Park visitors. While the integrity of species composition, biotic community organization and land

management techniques is relatively moderate due to reduction in intensity of use and number of livestock within the Home Ranch Complex (this area would have housed the greatest diversity of livestock species--to include dairy cows, hogs, oxen, mules, chickens, etc., and a greater diversity of horse breeds), the landscape still conveys the character and use of the historic period.

Physically, the period of association most strongly represented by the Home Ranch Complex is ca. 1870-1954. This period reflects the early development of the Bunkhouse Yards, Lower Yards, Lower House Yards, and West Corrals, including construction of their associated buildings, development of spatial organization, and determination of function as initiated by Kohrs and Bielenberg. The end of this period of association is defined by Con Warren's 1930s infill construction of buildings, structures, feedlots, fences, and roads, and his operation of the ranch before moving cattle operations to the east feed lots in 1954.

On the contributing features lists that follow, the abbreviation "HR" signifies a feature that is part of the Home Ranch Complex component landscape.

EAST FEED LOT/WARREN HEREFORD RANCH INTEGRITY

The East Feed Lot/Warren Hereford Ranch component landscape retains a high degree of integrity of location, design, setting, association, materials and workmanship. Spatial organization, physical construction and functional relationships of buildings, structures, fences, fields, corrals, views, roads, and water troughs very well convey the organization and operation of the Warren Hereford Ranch to Park visitors. All feedlots, pastures, and alleys remain essentially as they were originally constructed. While some of the fencing is in poor condition, continual repair of these features was ongoing throughout the period of significance. While the NPS made some changes to the landscape (such as the construction of the NPS Service Entrance, the addition of the Resource Building/Office, and the removal of the pumphouse HS-85), these alterations are minor to the overall landscape and do not detract from the complex's ability to convey significance. The integrity of feeling, however, has been reduced within this component landscape. Once a working ranch with some equipment (aerials show this area to be very neat and tidy), a few hired hands, and Hereford and Holstein cows, the NPS presence (staff, maintenance shop, offices, vehicles, equipment, supplies, new buildings, etc.) has changed this area from a working ranch to a hustling and bustling administrative and management center for the Park. While the Warren Barn, which historically housed Warren's best bull calves, is no longer used for such a purpose, the integrity of species composition, biotic community organization and land management techniques is relatively high within this component landscape. Corrals continue to be used for calving in the early spring, temporary containment before sale, and some feed storage. All breed and breed mixes occupy this area, and the use of the bull barns has been continuous.

The period of association most strongly represented by the Warren Hereford Ranch Complex is 1952-1982. This period reflects the early development of the feedlots, corrals, and pastures under Con Warren, including construction and spatial relationships of their associated cow sheds, feed bunks, barns, fences, and gates. The end of this period of association is defined by Con Warren's sale of the ranch to the NPS, curtailment of his cattle operations on the site, and adaptation of some of the

buildings in response to changes in function.

On the contributing features lists that follow, the abbreviation "WHR" signifies a feature that is part of this component landscape.

GRANT-KOHRS RESIDENCE INTEGRITY

The Grant-Kohrs Residence component landscape retains a high degree of integrity of location, design, setting, feeling, association, materials and workmanship, as well as a moderate degree of integrity of species composition and biotic community organization. The spatial organization and relationships to topography/landform, natural features, circulation features, and surrounding buildings and structures has remained essentially the same since Con and Augusta Kohrs lived in the ranch home. The retaining walls and stairways built by Con Warren in 1934 also helped define new circulation patterns that were in place throughout the Warren period of significance.

In recent years the NPS has expended a great deal of energy and resources to research the domestic landscape surrounding the Grant-Kohrs Residence. This research has informed restoration and reconstruction efforts of the grounds to reflect the conditions present at the turn of the 20th-century. These efforts have included the planting of cottonwood trees in the front and along the sides of the house as well as restoring the lower garden based upon historic photographs and plant records. Reconstruction efforts have also included repair of the cobble wall and reconstruction of the stone terrace and the white picket fence that originally surrounded the domestic yard. Some circulation features have also been restored to reflect their historic materials, such as the wood plank walk in the front yard.

While some of these features are not original to the site, such as the flagstone paths built by the NPS, these features do not significantly detract from the landscape's ability to convey its significance. The immaturity of the cottonwood trees does minimize the integrity of feeling of the front lawn and entry sequence, but over time, this will improve. Although there are a few missing features, such as the irrigation system that provided water to the house and grounds and the historic service area on the north side, the overall integrity of this landscape is relatively high.

The period of association most strongly represented by the Grant-Kohrs Residence is 1890-1934. The beginning of this period reflects the major changes that occurred to the house and grounds—including the brick addition, conservatory, fence, and cottonwood grove. The end of this period of association is defined by the modifications made to the landscape by Con Warren.

On the contributing features lists that follow, the abbreviation "GKR" signifies a feature that is part of the Grant-Kohrs Residence component landscape.

WARREN RESIDENCE INTEGRITY

The Warren Residence component landscape retains a high degree of integrity of location, setting,

association, materials and workmanship. Overall, the spatial organization of the site and its relationships to natural features, circulation features, and the Warren Hereford Ranch has remained essentially the same since Con Warren retired from ranching in 1982. This is also true of the buildings and structures on the site, although their uses have changed since the NPS moved their administrative headquarters to the Warren Residence. Although the site generally retains integrity of design, the removal of several large trees within the domestic landscape, the loss of the cottonwood allee along Warren Lane, the removal of the vegetable garden, and clearing of ornamental plantings around the foundation of the residence, has diminished the integrity of species composition and biotic community organization. Likewise, as the use of this landscape is no longer residential, but rather administrative, the integrity of feeling associated with the site's residential use has been slightly reduced. This integrity is, however, still supported to some degree by those small scale features that are common to residential landscapes, such as the picket fence, birdbath, burn barrel, and clothesline, which still remain.

The period of association most strongly represented by the Warren Residence is 1952-1993. The beginning of this period reflects the completion of the major buildings and structures found within the Warren Residence landscape, as well as the development of the Warren Hereford Ranch to the north, which strongly influences the setting of the residential landscape. The end of this period of association is defined by the death of Con Warren and the end of the use of this property as a residence.

On the contributing features lists that follow, the abbreviation "WR" signifies a feature that is part of the Warren Residence component landscape.

PASTURE/HAYFIELD INTEGRITY

Overall, the pastures and hayfields within the Grant-Kohrs Ranch NHS have a high degree of integrity. The low lying lands on either side of the Clark Fork River, as well as drier lands found along the upper benches, have been used by Grant, Kohrs, Warren, and the NPS throughout the site's history for both hay and pasture to sustain the livestock of the ranch. As such, these lands clearly retain integrity of location and association. The buildings and structures of the Home Ranch Complex, the Warren Hereford Ranch, the natural features and systems, circulation features, and the complex irrigation system, also remain essentially the same today as they were at the end of the period of significance, and therefore enhance the pastures and hayfields ability to convey the setting and feeling of the historic period. The integrity of setting and feeling is also strengthened by the active ranching practices, such as hay harvesting and livestock grazing, that continue within this component landscape. To some extent, NPS subdivision of the Western Hay Fields and the Front Fields with cross-fencing has diminished the integrity of feeling slightly, as these lands were open and expansive during the period of significance.

The irrigated pastures and hayfields also retain a moderately high integrity of cultural plant species composition, biotic community organization, and land management techniques. The same hay species found to be predominant in the 1984 Rice/Ray study and likely present at the end of the Warren period, generally remain the predominant hay species today. Likewise, the cyclical pattern of irrigation and fertilization in the spring, grazing and hay cultivation throughout the spring and summer, and harvest-

-cutting, baling, and stacking--in the late summer also supports the integrity of community organization, as does the continued cultivation of hay averaging 500 tons per year. This number reflects the smaller hay harvests undertaken by Conrad Warren during the ranch's latter period of significance. The presence of smooth brome, common timothy, red clover, crested wheatgrass, and intermediate wheatgrass help convey both the Kohrs and Warren periods of significance, which were intentionally introduced during their care of the ranch. This integrity is reduced slightly by the presence of invasive exotic weeds, such as Canadian thistle, which has spread throughout the hayfields.

Although the grasses and forbs found in the non-irrigated pastures have not changed significantly since 1982, the species composition of the effluent-irrigated pastures, particularly the L-Barn Field and the Front Fields, are beginning to acquire non-native species that were not intentionally cultivated in this area, such as smooth brome, which is found in the other irrigated areas of the ranch. These fields were reseeded in 2000. The integrity of species composition of these irrigated pastures is also being diminished by invasive exotic weeds, such as spotted knapweed. These changes have diminished the integrity of species composition.

Within the pastures and hayfield, the integrity of livestock (breed) composition, community organization and land management techniques remains relatively high. Cattle pastured within this component landscape generally represent the major breeds found at the close of the period of significance. As mentioned earlier, pasturing occurs 12 months a year, and is based upon Best Management Practices (BMPs), the needs of the park, and the resources available. Cattle rotations between various pastures are based upon economic and natural resource conditions, as was done during the period of significance.

The period of association most strongly represented by the Pasture/Hayfield component landscape is the late 1950s-1972. The beginning of this period reflects Con Warren's abandonment of the cultivation of grains and his focus on hay as the predominant crop cultivated in the fields. It also encompasses the general design and organization of his contour irrigation system, which he began in the 1930s and worked toward refining over the next twenty years. The end of this period of association is defined by Con Warren's sale of the Home Ranch to the NPS.

On the contributing features lists that follow, the abbreviation "PHF" signifies a feature that is part of the Pasture/Hayfield component landscape.

UPLAND PASTURE INTEGRITY

Like the previous component landscape, the dry range pastures and irrigated hay fields found in the Upland Pasture area retain integrity of location, association, and setting. Purchased by Con Warren in the 1930s, this land and the irrigation ditches he sought control of have changed little since the end of the historic period. A few modern small scale features, such as electric fences, diminish the integrity of feeling slightly, as does the subdivision of the fields and ranges with cross fences. Overall, these features generally do not detract from the landscape's ability to convey its significance.

The Upland Pasture area also retains a moderately high integrity of species composition. Several of the same hay species planted by Con Warren, such as brome, timothy, and clover, are still found to be predominant in the irrigated gulches. With the exception of some invasive exotic species found in the dry range pastures, most grasses found here belong to the native bluebunch wheatgrass, western wheatgrass, and Sandberg's bluegrass communities. Like the Pasture/Hayfield component landscape, the integrity of livestock (breed) composition, community organization and land management techniques is relatively high.

The period of association most strongly represented by the Upland Pasture area is the 1930s-1972. The beginning of this period reflects Con Warren's acquisition of this land, the removal of the Kading and pig farm structures, and the regrading of the gulches to improve irrigation for hay production. The end of this period of association is defined by Con Warren's sale of the Home Ranch to the NPS.

On the contributing features lists that follow, the abbreviation "UP" signifies a feature that is part of the Upland Pasture component landscape.

RIPARIAN WOODLAND INTEGRITY

Overall the Riparian Woodland component landscape has moderate integrity. Because this area has long been defined by the Clark Fork River and its alluvial soils, its integrity of location is high. However, because of toxic metal contamination dating back to 1884, (which still remains on the site) the presence of exotic, noncontributing plant communities, such as those defined by smooth brome and redtop bentgrass, constitute the majority of vegetation within this component landscape. Research conducted in 2002 has determined that these non-native, non-desirable species would not be present under natural conditions, absent of toxic metal contamination. While native species and plant communities remain within the riparian woodland, they only account for approximately 40% of the vegetation found within this zone. As such, the integrity of species composition and biotic community organization of the riparian area can be considered moderate.
Because of impacts to species composition and community organization, the Riparian Woodland's integrity of feeling has also been somewhat reduced. Feeling is influenced by the composition and distribution of plant communities, as well as by manmade features such as fences. As the entire riparian woodland was not fenced until 1993 (particularly the area north of the Home Ranch Complex and along the southeast), these features have slightly diminished integrity of feeling. Likewise, as the riparian woodland was not entirely fenced during the historic period, livestock were free to roam throughout this area and within the river itself. Historic accounts discuss how livestock would take shelter along the river, which was afforded by the vegetation found there. As these conditions are no longer present due to health and safety concerns, the riparian woodland also has slightly diminished its integrity of association and land management techniques.

The period of association most strongly represented by the Riparian Woodland is 1972 to the present. The beginning of this period reflects the NPS management of this land, which was primarily focused on conservation. Fencing of the riparian woodland begins shortly after this time.

On the contributing features lists that follow, the abbreviation "RW" signifies a feature that is part of the Riparian Woodland component landscape.

RAILROAD CORRIDOR & BARROW PIT/WETLAND INTEGRITY

The Railroad Corridor and Barrow Pit/Wetland component landscape maintains a high degree of integrity of location and setting. The corridor remains in the same location as it was originally constructed, and its context remains essentially unchanged. As the corridor also maintains its historic spatial organization and construction, it has a high degree of integrity of design and materials. Since the tracks of the Old Milwaukee Railroad line are no longer in use (and no longer transport livestock to market), the landscape maintains a reduced integrity of association and feeling. While the integrity of plant community organization is high, integrity of plant species composition is considered moderate. While the barrow pits are comprised of mostly native wetland species and the ungrazed prairie remnant represents a native plant community that would have been present during the early period of significance, the species composition of the larger corridor has been impacted by disturbance and invasive species, such as spotted knapweed.

The period of association most strongly represented by the Railroad Corridor & Barrow pit/Wetland is 1908 to 1982. The beginning of this period reflects the construction of the Old Milwaukee Railroad line along side the Montana Western corridor and the excavation of the barrow pits. The end of the period reflects the removal of tracks and discontinuation of service along the Old Milwaukee line.

On the contributing features lists that follow, the abbreviation "RR" signifies a feature that is part of this component landscape.

DEVELOPMENT ZONE INTEGRITY

Aside from most of the natural features and views found within this component landscape, all of the resources associated with the Visitor Center Complex do not contribute to the historical significance of the ranch. As this component landscape was entirely developed by the NPS, it does not represent the historic uses associated with this landscape and therefore lacks historic integrity.

The period of association for this component landscape dates from 1975-present. The beginning of this period is associated with the NPS development of this site, to include relocation of historic structures serving as the visitor contact station and restroom, and development of the parking and circulation system.

On the contributing features lists that follow, the abbreviation "DZ" signifies a feature that is part of the Development Zone component landscape.

Aspects of Integrity:

Location

Design

Setting

Materials

Workmanship

Feeling

Association

Landscape Characteristic:

Archeological Sites

N/A

Buildings and Structures

There are 72 contributing, 20 noncontributing-compatible, and six noncontributing historic buildings and structures located within the Grant-Kohrs Ranch NHS. Together these buildings and structures represent all the structures necessary for the operation of a cattle ranch and the raising of horses. They include living quarters, barns, storage sheds, outhouses, stock shelters, feed bunks, and squeeze chutes, and illustrate the continuum of cattle ranching operations from the mid-19th-century through the latter part of the 20th-century. It is important to note that the list of contributing buildings and structures contains all the buildings, structures, and objects listed as contributing resources within the Grant-Kohrs Ranch/Warren Ranch National Register Historic District. It does not include landscape features, such as the railroad lines, domestic yard, or ditches that are evaluated separately under different landscape characteristics (i.e. constructed water features, circulation features, etc.). There are also some features that are considered structures within the CLR that are not listed in the National Register documentation (such as landscape retaining walls, railroad trestles, etc.).

Contributing, noncontributing, and noncontributing-compatible buildings and structures are summarized on the following table. Generally, noncontributing-compatible features are post-1982 reconstructions of historic structures that reflect the same or similar design characteristics as those features dating from the period of significance (CLR 4.32).

Character-defining Features:

Feature: HR Bunkhouse Row

Feature Identification Number: 118048

Type of Feature Contribution: Contributing

IDLCS Number: 10652

LCS Structure Name: Bunkhouse Row

LCS Structure Number: HS-02

Feature: HR Ice House

Feature Identification Number: 118050

Type of Feature Contribution: Contributing

IDLCS Number: 10655

LCS Structure Name: Ice House

LCS Structure Number: HS-05

Feature: HR Coal Shed

Feature Identification Number: 118052

Type of Feature Contribution: Contributing

IDLCS Number: 10654

LCS Structure Name: Coal Shed

LCS Structure Number: HS-04

Feature: HR Blacksmith Shop/Garage

Feature Identification Number: 118054

Type of Feature Contribution: Contributing

IDLCS Number: 10653

LCS Structure Name: Garage-Blacksmith Shop

LCS Structure Number: HS-03

Feature: HR Granary/Roller Mill

Feature Identification Number: 118056

Type of Feature Contribution: Contributing

IDLCS Number: 10656

LCS Structure Name: Granary/Roller Mill

LCS Structure Number: HS-06

Feature: HR Draft Horse Barn

Feature Identification Number: 118058

Type of Feature Contribution: Contributing

IDLCS Number: 10657

LCS Structure Name: Draft Horse Barn

LCS Structure Number: HS-07

Feature: HR Privy

Feature Identification Number: 118060

Type of Feature Contribution: Contributing

IDLCS Number: 10658

LCS Structure Name: Privy

LCS Structure Number: HS-08

Feature: HR Dairy HS-9

Feature Identification Number: 118062

Type of Feature Contribution: Contributing

IDLCS Number: 10659

LCS Structure Name: Dairy

LCS Structure Number: HS-09

Feature: HR Oxen Barn

Feature Identification Number: 118064

Type of Feature Contribution: Contributing

IDLCS Number: 10660

LCS Structure Name: Oxen Barn

LCS Structure Number: HS-10

Feature: HR Bielenberg Barn

Feature Identification Number: 118066

Type of Feature Contribution: Contributing

IDLCS Number: 10661

LCS Structure Name: Bielenberg Barn

LCS Structure Number: HS-11

Feature: HR Machine Shed

Feature Identification Number: 118068

Type of Feature Contribution: Contributing

IDLCS Number: 10662

LCS Structure Name: Machine Shed

LCS Structure Number: HS-12

Feature: HR Cow Shed

Feature Identification Number: 118070

Type of Feature Contribution: Contributing

IDLCS Number: 10663

LCS Structure Name: Cow Shed

LCS Structure Number: HS-13

Feature: HR Thoroughbred Barn

Feature Identification Number: 118072

Type of Feature Contribution: Contributing

IDLCS Number: 10665

LCS Structure Name: Thoroughbred Barn

LCS Structure Number: HS-15

Feature: HR Stallion Barn

Feature Identification Number: 118074

Type of Feature Contribution: Contributing

IDLCS Number: 10664

LCS Structure Name: Stallion Barn

LCS Structure Number: HS-14

Feature: HR Stallion Barn

Feature Identification Number: 118076

Type of Feature Contribution: Contributing

IDLCS Number: 10666

LCS Structure Name: Stallion Barn

LCS Structure Number: HS-16

Feature: HR Stallion Barn

Feature Identification Number: 118078

Type of Feature Contribution: Contributing

IDLCS Number: 10669

LCS Structure Name: Stallion Barn

LCS Structure Number: HS-19

Feature: HR Stallion Barn

Feature Identification Number: 118080

Type of Feature Contribution: Contributing

IDLCS Number: 10680

LCS Structure Name: Stallion Barn

LCS Structure Number: HS-30

Feature: HR Feed Storage House

Feature Identification Number: 118082

Type of Feature Contribution: Contributing

IDLCS Number: 10681

LCS Structure Name: Feed Storage House

LCS Structure Number: HS-31

Feature: HR Buggy Shed

Feature Identification Number: 118084

Type of Feature Contribution: Contributing

IDLCS Number: 10667

LCS Structure Name: Buggy Shed

LCS Structure Number: HS-17

Feature: HR Privy

Feature Identification Number: 118086

Type of Feature Contribution: Contributing

IDLCS Number: 10670

LCS Structure Name: Privy

LCS Structure Number: HS-20

Feature: HR Granary

Feature Identification Number: 118088

Type of Feature Contribution: Contributing

IDLCS Number: 10668

LCS Structure Name: Granary

LCS Structure Number: HS-18

Feature: HR Brooding House

Feature Identification Number: 118090

Type of Feature Contribution: Contributing

IDLCS Number: 100002

LCS Structure Name: Brooder House

LCS Structure Number: HS-21

Feature: HR Chicken House

Feature Identification Number: 118092

Type of Feature Contribution: Contributing

IDLCS Number: 10672

LCS Structure Name: Chicken House

LCS Structure Number: HS-22

Feature: HR Metal Granary

Feature Identification Number: 118094

Type of Feature Contribution: Contributing

IDLCS Number: 10673

LCS Structure Name: Metal Granary

LCS Structure Number: HS-23

Feature: HR Feed Storage House

Feature Identification Number: 118096

Type of Feature Contribution: Contributing

IDLCS Number: 10678

LCS Structure Name: Feed Storage House

LCS Structure Number: HS-28

Feature: HR West Feedlot Storage Shed

Feature Identification Number: 118098

Type of Feature Contribution: Contributing

IDLCS Number: 10684

LCS Structure Name: West Feedlots Storage Shed

LCS Structure Number: HS-34

Feature: WHR Warren Barn

Feature Identification Number: 118100

Type of Feature Contribution: Contributing

IDLCS Number: 100012

LCS Structure Name: Warren Barn

LCS Structure Number: HS-64

Feature: WHR Bull Barn

Feature Identification Number: 118102

Type of Feature Contribution: Contributing

IDLCS Number: 100010

LCS Structure Name: Bull Barn

LCS Structure Number: HS-62

Feature: WHR Bull Barn

Feature Identification Number: 118104

Type of Feature Contribution: Contributing

IDLCS Number: 100011

LCS Structure Name: Bull Barn

LCS Structure Number: HS-63

Feature: WHR Sales Barn

Feature Identification Number: 118106

Type of Feature Contribution: Contributing

IDLCS Number: 100013

LCS Structure Name: Sales Barn

LCS Structure Number: HS-65

Feature: WHR Resource Building/Office BLDG 003

Feature Identification Number: 118108

Type of Feature Contribution: Non Contributing

Feature: WHR Scale House

Feature Identification Number: 118110

Type of Feature Contribution: Contributing

IDLCS Number: 100014

LCS Structure Name: Scale House

LCS Structure Number: HS-66

Feature: WHR Cow Shed

Feature Identification Number: 118112

Type of Feature Contribution: Contributing

IDLCS Number: 100017

LCS Structure Name: Cow Shed

LCS Structure Number: HS-70

Feature: WHR Cow Shed

Feature Identification Number: 118114

Type of Feature Contribution: Contributing

IDLCS Number: 100018

LCS Structure Name: Cow Shed

LCS Structure Number: HS-71

Feature: WHR Cow Shed

Feature Identification Number: 118116

Type of Feature Contribution: Contributing

IDLCS Number: 100019

LCS Structure Name: Cow Shed

LCS Structure Number: HS-72

Feature: WHR Cow Shed

Feature Identification Number: 118118

Type of Feature Contribution: Contributing

IDLCS Number: 100020

LCS Structure Name: Cow Shed

LCS Structure Number: HS-73

Feature: WHR Cow Shed

Feature Identification Number: 118120

Type of Feature Contribution: Contributing

IDLCS Number: 100021

LCS Structure Name: Cow Shed

LCS Structure Number: HS-74

Feature: WHR Cow Shed

Feature Identification Number: 118122

Type of Feature Contribution: Contributing

IDLCS Number: 100022

LCS Structure Name: Cow Shed

LCS Structure Number: HS-75

Feature: WHR Cow Shed

Feature Identification Number: 118124

Type of Feature Contribution: Contributing

IDLCS Number: 100023

LCS Structure Name: Cow Shed

LCS Structure Number: HS-76

Feature: WHR Cow Shed

Feature Identification Number: 118126

Type of Feature Contribution: Contributing

IDLCS Number: 100024

LCS Structure Name: Cow Shed

LCS Structure Number: HS-77

Feature: GKR Grant-Kohrs Residence

Feature Identification Number: 118128

Type of Feature Contribution: Contributing

IDLCS Number: 10651

LCS Structure Name: Main House

LCS Structure Number: HS-01

Feature: WR Warren Residence

Feature Identification Number: 118130

Type of Feature Contribution: Contributing

IDLCS Number: 100006

LCS Structure Name: Warren Residence

LCS Structure Number: HS-58

Feature: WR Garage

Feature Identification Number: 118132

Type of Feature Contribution: Contributing

IDLCS Number: 100009

LCS Structure Name: Garage

LCS Structure Number: HS-61

Feature: WR Pump House

Feature Identification Number: 118134

Type of Feature Contribution: Contributing

IDLCS Number: 52797

LCS Structure Name: Warren Residence Pump House

LCS Structure Number: HS-88

Feature: WR Chicken Coop

Feature Identification Number: 118136

Type of Feature Contribution: Contributing

IDLCS Number: 100007

LCS Structure Name: Chicken Coop

LCS Structure Number: HS-59

Feature: WR Boat House

Feature Identification Number: 118138

Type of Feature Contribution: Contributing

IDLCS Number: 100008

LCS Structure Name: Boat House

LCS Structure Number: HS-60

Feature: RW Pump House South

Feature Identification Number: 118140

Type of Feature Contribution: Contributing

IDLCS Number: 52149

LCS Structure Name: Pump House

LCS Structure Number: HS-87

Feature: RR Warren Pump House

Feature Identification Number: 118142

Type of Feature Contribution: Contributing

IDLCS Number: 52796

LCS Structure Name: Pump House

LCS Structure Number: HS-86

Feature: DZ Curation Storage Facility (CSF) BLDG

Feature Identification Number: 118144

Type of Feature Contribution: Non Contributing

Feature: DZ Visitor Contact Station BLDG 002

Feature Identification Number: 118146

Type of Feature Contribution: Non Contributing

Feature: DZ Restroom BLDG 001

Feature Identification Number: 118148

Type of Feature Contribution: Non Contributing

Feature: WHR Hazmat Building BLDG 005

Feature Identification Number: 118150

Type of Feature Contribution: Non Contributing

Feature: HR Cattle Scale HS-35 LCS10685

Feature Identification Number: 118152

Type of Feature Contribution: Contributing

Feature: HR Feed Rack

Feature Identification Number: 118154

Type of Feature Contribution: Non Contributing

IDLCS Number: 10686

LCS Structure Name: Feed Rack

LCS Structure Number: HS-36

Feature: HR Feed Rack

Feature Identification Number: 118156

Type of Feature Contribution: Non Contributing

IDLCS Number: 10687

LCS Structure Name: Feed Rack

LCS Structure Number: HS-37

Feature: HR Feed Rack

Feature Identification Number: 118158

Type of Feature Contribution: Non Contributing

IDLCS Number: 10688

LCS Structure Name: Feed Rack

LCS Structure Number: HS-38

Feature: HR Manure Pit

Feature Identification Number: 118160

Type of Feature Contribution: Contributing

IDLCS Number: 10689

LCS Structure Name: Manure Pit

LCS Structure Number: HS-39

Feature: HR Beef Hoist

Feature Identification Number: 118162

Type of Feature Contribution: Contributing

IDLCS Number: 10690

LCS Structure Name: Beef Hoist

LCS Structure Number: HS-40

Feature: HR Squeeze Chute

Feature Identification Number: 118164

Type of Feature Contribution: Non Contributing

IDLCS Number: 10691

LCS Structure Name: Squeeze Chute

LCS Structure Number: HS-41

Feature: HR Feed Rack

Feature Identification Number: 118166

Type of Feature Contribution: Non Contributing

IDLCS Number: 10692

LCS Structure Name: Feed Rack

LCS Structure Number: HS-42

Feature: HR Feed Rack

Feature Identification Number: 118168

Type of Feature Contribution: Contributing

IDLCS Number: 10693

LCS Structure Name: Feed Rack

LCS Structure Number: HS-43

Feature: HR Feed Rack

Feature Identification Number: 118170

Type of Feature Contribution: Contributing

IDLCS Number: 23052

LCS Structure Name: Feed Rack

LCS Structure Number: HS-44

Feature: HR Feed Bunk

Feature Identification Number: 118174

Type of Feature Contribution: Non Contributing

IDLCS Number: 100003

LCS Structure Name: Feed Bunk

LCS Structure Number: HS-45

Feature: HR Feed Bunk

Feature Identification Number: 118176

Type of Feature Contribution: Contributing

IDLCS Number: 10694

LCS Structure Name: Feed Bunk

LCS Structure Number: HS-46

Feature: HR W. Corrals Squeeze Chute

Feature Identification Number: 118178

Type of Feature Contribution: Contributing

IDLCS Number: 10695

LCS Structure Name: Squeeze Chute

LCS Structure Number: HS-47

Feature: HR Stock Shelter

Feature Identification Number: 118180

Type of Feature Contribution: Contributing

IDLCS Number: 10674

LCS Structure Name: West Corrals Stock Shelter

LCS Structure Number: HS-24

Feature: HR Stock Shelter

Feature Identification Number: 118182

Type of Feature Contribution: Contributing

IDLCS Number: 10677

LCS Structure Name: West Corrals Stock Shelter

LCS Structure Number: HS-27

Feature: HR Stock Shelter

Feature Identification Number: 118184

Type of Feature Contribution: Contributing

IDLCS Number: 10679

LCS Structure Name: West Corrals Stock Shelter

LCS Structure Number: HS-29

Feature: HR Stock Shelter HS-25 LCS10675 compat

Feature Identification Number: 118186

Type of Feature Contribution: Non Contributing

Feature: HR Hay Storage

Feature Identification Number: 118188

Type of Feature Contribution: Non Contributing

IDLCS Number: 10676

LCS Structure Name: Hay Storage

LCS Structure Number: HS-26

Feature: HR Feed Bunk

Feature Identification Number: 118190

Type of Feature Contribution: Non Contributing

IDLCS Number: 10696

LCS Structure Name: Feed Bunk

LCS Structure Number: HS-48

Feature: HR Feed Bunk

Feature Identification Number: 118192

Type of Feature Contribution: Non Contributing

IDLCS Number: 23053

LCS Structure Name: Feed Bunk

LCS Structure Number: HS-49

Feature: HR Active/Irrigation Flume

Feature Identification Number: 118194

Type of Feature Contribution: Contributing

IDLCS Number: 50415

LCS Structure Name: Irrigation Flume

LCS Structure Number: HS-50

Feature: HR Kohrs-Manning Ditch Bridge

Feature Identification Number: 118196

Type of Feature Contribution: Non Contributing

IDLCS Number: 10700

LCS Structure Name: Bridge

LCS Structure Number: HS-55

Feature: HR W. Feedlot Stock Shelter

Feature Identification Number: 118198

Type of Feature Contribution: Contributing

IDLCS Number: 10682

LCS Structure Name: West Feedlots Stock Shelter

LCS Structure Number: HS-32

Feature: HR W. Feedlot Stock Shelter

Feature Identification Number: 118200

Type of Feature Contribution: Contributing

IDLCS Number: 10683

LCS Structure Name: West Feedlots Stock Shelter

LCS Structure Number: HS-33

Feature: HR W. Feedlots Squeeze Chute

Feature Identification Number: 118202

Type of Feature Contribution: Non Contributing

IDLCS Number: 10698

LCS Structure Name: Squeeze Chute

LCS Structure Number: HS-53

Feature: HR W. Feedlots Feed Bunk

Feature Identification Number: 118204

Type of Feature Contribution: Non Contributing

IDLCS Number: 10697

LCS Structure Name: Feed Bunk

LCS Structure Number: HS-52

Feature: RW Slough Bridge

Feature Identification Number: 118206

Type of Feature Contribution: Contributing

IDLCS Number: 100033

LCS Structure Name: Slough Bridge

LCS Structure Number: HS-90

Feature: HR Feed Rack

Feature Identification Number: 118208

Type of Feature Contribution: Undetermined

Feature: WHR Loading Chute

Feature Identification Number: 118210

Type of Feature Contribution: Contributing

IDLCS Number: 100016

LCS Structure Name: Loading Chute

LCS Structure Number: HS-69

Feature: WHR Squeeze Chute

Feature Identification Number: 118212

Type of Feature Contribution: Non Contributing

IDLCS Number: 100015

LCS Structure Name: Squeeze Chute

LCS Structure Number: HS-67

Feature: WHR Feed Rack

Feature Identification Number: 118214

Type of Feature Contribution: Non Contributing

IDLCS Number: 52794

LCS Structure Name: Feed Rack

LCS Structure Number: HS-68

Feature: WHR Feed House

Feature Identification Number: 118172

Type of Feature Contribution: Contributing

IDLCS Number: 100025

LCS Structure Name: Feed House

LCS Structure Number: HS-78

Feature: WHR Feed House

Feature Identification Number: 118216

Type of Feature Contribution: Contributing

IDLCS Number: 100026

LCS Structure Name: Feed House

LCS Structure Number: HS-79

Feature: WHR Feed House

Feature Identification Number: 118218

Type of Feature Contribution: Contributing

IDLCS Number: 100027

LCS Structure Name: Feed House

LCS Structure Number: HS-80

Feature: WHR Feed House

Feature Identification Number: 118220

Type of Feature Contribution: Contributing

IDLCS Number: 100028

LCS Structure Name: Feed House

LCS Structure Number: HS-81

Feature: WHR Feed House

Feature Identification Number: 118222

Type of Feature Contribution: Contributing

IDLCS Number: 100029

LCS Structure Name: Feed House

LCS Structure Number: HS-82

Feature: WHR Feed House

Feature Identification Number: 118224

Type of Feature Contribution: Contributing

IDLCS Number: 100030

LCS Structure Name: Feed House

LCS Structure Number: HS-83

Feature: WHR Feed House

Feature Identification Number: 118226

Type of Feature Contribution: Contributing

IDLCS Number: 100031

LCS Structure Name: Feed House

LCS Structure Number: HS-84

Feature: GKR River Cobble Wall

Feature Identification Number: 118228

Type of Feature Contribution: Contributing

Feature: GKR Stone Terraces compatible

Feature Identification Number: 118230

Type of Feature Contribution: Non Contributing

Feature: GKR Cut Stone Retaining Wall

Feature Identification Number: 118232

Type of Feature Contribution: Contributing

Feature: PHF Jensen Hay Stacker compatible

Feature Identification Number: 118234

Type of Feature Contribution: Non Contributing

Feature: RW Clark Fork Bridge

Feature Identification Number: 118236

Type of Feature Contribution: Contributing

IDLCS Number: 100032

LCS Structure Name: Clark Fork Bridge

LCS Structure Number: HS-89

Feature: RR Siphon

Feature Identification Number: 118238

Type of Feature Contribution: Contributing

IDLCS Number: 100005

LCS Structure Name: Siphon

LCS Structure Number: HS-57

Feature: RR Cattle Car ca. 1923

Feature Identification Number: 118240

Type of Feature Contribution: Non Contributing

IDLCS Number: 451884

LCS Structure Name: Railroad Boxcar (BN 950632)

LCS Structure Number: GRKO-970

Feature: RR Cattle Car ca. 1929

Feature Identification Number: 118242

Type of Feature Contribution: Non Contributing

IDLCS Number: 451888

LCS Structure Name: Railroad Cattle Car (Standard Steel Car Company)

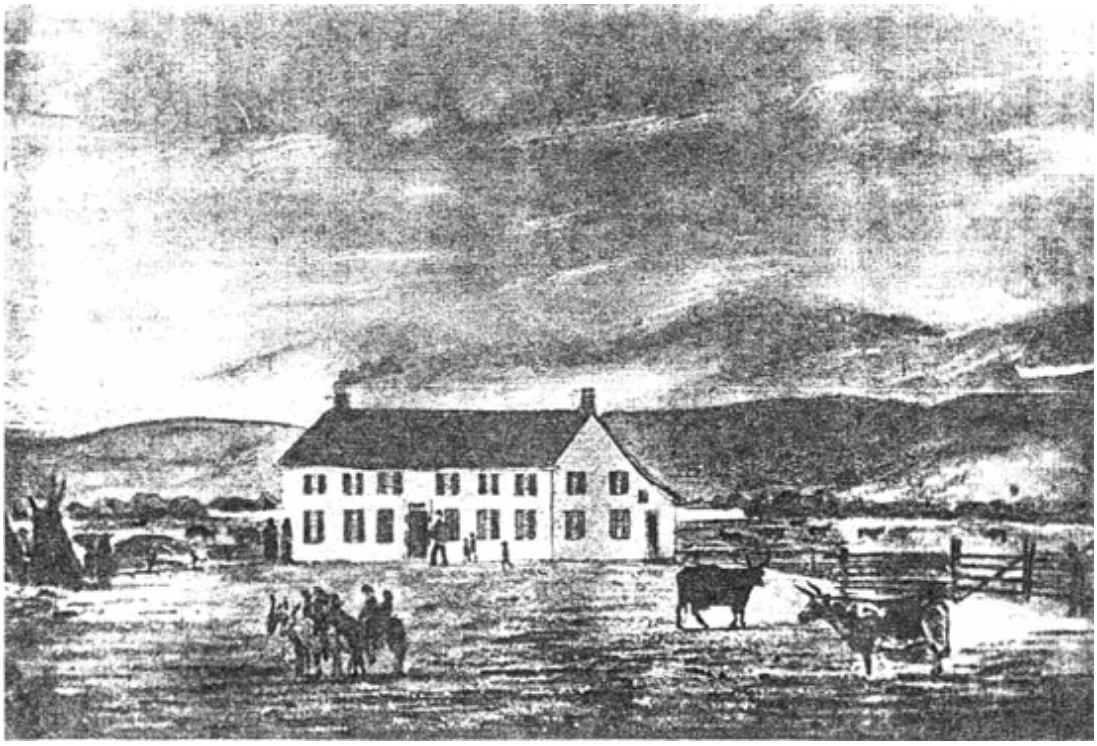
LCS Structure Number: GRKO-862

Feature: RR Railroad trestles

Feature Identification Number: 118244

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Residence of John F. Grant, purchased by Hon. Conrad Kohrs in 1866."Source: Anonymous, Grant-Kohrs Ranch NHS archives; original image located at the MT Historical Society.

Warren Ranch House, circa 1945 (Source: Grant-Kohrs Ranch NHS Archives)

Circulation

Circulation features within the Grant-Kohrs Ranch NHS have evolved along with the expansion of ranching operations. Two of the earliest roads still extant within, or adjacent to, the ranch are Business Loop 90 (formally US Highway 10 and the Road to Hell Gate), and the entry road referred to as Kohrs-Warren Lane. Both these features appear on the 1869 Government Land Office (GLO) survey and contribute to the historic significance of the landscape. The western segment of the Kohrs-Warren Lane, west of the railroad tracks, was removed shortly after the new NPS Service Entry road was constructed ca. 1973 for safety reasons. This segment connected the lane with the road passing between the bunkhouse and the ranch home, and is considered missing.

Other early roads that were likely constructed ca. 1862-1880 were those associated with the complex of barns located north of the bunkhouse complex. It is likely that these roads connected to the entry lane to each of the structures located here and were subsequently reconfigured as new buildings, fences, and gates were added to the complex. The roads currently existing within this area--Bunkhouse Road and Dairy Loop Road--appear to reflect conditions present in the 1947 aerial photograph, and therefore contribute to the historic significance of the site. It appears as though Bunkhouse Road traversed behind the coal shed ca. 1900, and then was closed off sometime around 1937-1938. The current conditions reflect those of the earlier period.

Other Grant-Kohrs period roads that remain essentially the same today include the Lower House Yard Road and parking area for the Buggy Shed (HS-17) and the extension of this road (Johnson Creek Road), which continues past the Throughbred Barn (HS-15) and over Johnson Creek. Both of these roads likely date to ca. 1870s when Kohrs began developing structures to house his horses. They are considered contributing features.

A shorter and earlier version of the current Warren Pumphouse Road was likely constructed ca. 1890, connecting the bunkhouse area to the Machine Shed (HS-12). It was likely lengthened and realigned in 1960 to service the pumphouse. This road contributes to the period of significance. The ca. 1879 Utah Northern Railroad corridor and the ca. 1908 Milwaukee Railroad corridor are also considered contributing features.

Soon after Con Warren took over ranch operations in 1929, he extended the Johnson Creek Road west, past the West Corrals and Stuart Field. This road remains essentially the same today and is considered a contributing feature. In the late 1930s Warren also moved the county road located along the Clark Fork River approximately 1000 feet further to the west. Over time, this county road became obliterated and incorporated into the Western Hay Fields. The new road (now referred to as the Kohrs "Big Ditch" Road) has remained essentially the same since its construction and therefore contributes to the Warren Period. It is assumed that the South Park Entry Road, connecting to MTSR 4691, was also constructed at this time, if not earlier.

Little information is known about the unimproved roads located within the Upper Pasture area, to include Ridge Road, Little Gulch Road, Big Gulch Road, and Upland Pasture Road, although they likely date to the Kading and D'Alton time periods (ca. 1890). These roads are considered contributing features. The South Warren Pumphouse Road dates to 1960; it too contributes to the period of significance.

In the late 1950s, the City of Deer Lodge began excavating gravel in the southwest portion of the ranch. A road was constructed off of the Kohrs "Big Ditch" Road to access this area. Although the gravel operations have ceased, this road remains today and is considered a contributing feature.

All the circulation features associated with the Warren Residence and Warren Hereford Ranch are considered contributing features. These include both the driveway and sidewalk leading to the house (ca.. 1934), the alleys associated with the corrals (ca. 1952), the gravel parking area located near the Sales Barn and Warren Barn (ca. 1954), and the Stuart Pasture Road (accessing the pasture area south of the Warren Residence). One exception is the new NPS gravel parking area located in the historic Whiskey field. This is considered a noncontributing feature.

Several new circulation features were constructed by the NPS in the mid-1970s. The Kohrs-Manning Ditch Road was also constructed during this time. These roads are not

considered contributing features. Other noncontributing features include the NPS parking areas in the Visitor Center area (ca. 1975 and 2002), the access trail and underpass (ca. 1978), and Cottonwood Trail (1993).

Missing circulation features include several unimproved roads that appear on the 1947 aerial photograph. These access the Lower Yard Fields and the North Meadows. The date of origin of these roads is unknown. Both were obliterated before 1960.

Within the Grant-Kohrs Residence landscape, several historic circulation features have been maintained by the NPS. These include the historic drop off area in the front of the house, as well as the road leading between the ranch house and the bunkhouse. These circulation features contribute to the period of significance. The historic approach road from Business Loop 90 was removed ca. 1973 when the park built the NPS Service Entrance through the Warren Hereford Ranch. This historic axial access road is considered a missing feature. The service area historically located to the northwest of the residence was also removed in the 1930s by Con Warren. This too is considered a missing feature.

The original pathway system, established shortly after Kohrs purchased the Ranch, consisted of three-foot wide wooden planks set flush in the ground. The early boardwalks led guests from the gate in the picket fence to the front door. Additional paths extended north and south along the house providing connections to both the service area and the southern portion of the property. The boardwalks were later replaced with brick pavers dry-laid in sand (ca. 1905). The NPS has since replaced the brick pavers on the front yard with a reproduction of the wooden boardwalks in 1975 and 1986 (Shapins 2006, 38). These changes support the historic significance of the landscape.

Access to the garden has changed significantly over time. Originally, a stone path led from the porch east across the slope to the garden. The path gradually descended through the open lawn, into a grove of junipers before emerging in Augusta's garden. This circulation pattern changed in the 1930s when Warren built a set of stone stairs in the middle of the lilac rows. The stairs descended to the flower beds, providing a more direct route from the house to the lower garden (Shapins 2003, 38-39). This stairway was rehabilitated by the NPS in 1987 and supports the historic significance of the landscape. Additional stone stairs were constructed by Warren in 1934 to connect the access drive with the pathway leading to the kitchen vestibule (Shapins 2003, 39). These stairs remain and contribute to the period of significance.

Modifications to the then-existing dirt pathways were made between 1997 and 1998 with the construction of a new flagstone pathway leading south from the southwest porch stairs. Another path was constructed to link the new garden paths to the blacksmith garage. These new garden paths replaced an earlier path that had become a safety hazard. Another pathway was rebuilt by the NPS to connect the Kohrs addition to the top of the stone stairs in the service area. All these paths are considered supporting features.

The asphalt sidewalk built in the 1970s to connect the visitor center complex with the home ranch is considered a noncontributing feature, as it does not reflect the historical significance of the site (CLR 4.28-30).

Character-defining Features:

Feature: HR Clark Fork River Bridge Road

Feature Identification Number: 118764

Type of Feature Contribution: Contributing

Feature: HR Kohrs-Manning Ditch Road

Feature Identification Number: 118766

Type of Feature Contribution: Non Contributing

Feature: HR Bunkhouse Road

Feature Identification Number: 118768

Type of Feature Contribution: Contributing

Feature: HR Dairy Loop Road

Feature Identification Number: 118770

Type of Feature Contribution: Contributing

Feature: HR Warren Pumphouse Road

Feature Identification Number: 118772

Type of Feature Contribution: Contributing

Feature: HR Lower House Yard Road

Feature Identification Number: 118776

Type of Feature Contribution: Contributing

Feature: HR Johnson Creek Road

Feature Identification Number: 118778

Type of Feature Contribution: Contributing

Feature: WHR Bull Barn Rd./NPS Service Entrance

Feature Identification Number: 118780

Type of Feature Contribution: Contributing

Feature: WHR Bull Barn Rd./NPS Serv. Entr. mods.

Feature Identification Number: 118786

Type of Feature Contribution: Non Contributing

Feature: WHR Kohrs-Warren lane

Feature Identification Number: 118802

Type of Feature Contribution: Contributing

Feature: WHR Gravel parking areas

Feature Identification Number: 118808

Type of Feature Contribution: Contributing

Feature: WHR Gravel parking areas - pasture park.

Feature Identification Number: 118810

Type of Feature Contribution: Non Contributing

Feature: WHR Alleys

Feature Identification Number: 118816

Type of Feature Contribution: Contributing

Feature: WHR Business Loop 90

Feature Identification Number: 118818

Type of Feature Contribution: Contributing

Feature: GKR Asphalt Sidewalk

Feature Identification Number: 118824

Type of Feature Contribution: Non Contributing

Feature: GKR Wood Plank Walk - supporting

Feature Identification Number: 118826

Type of Feature Contribution: Non Contributing

Feature: GKR Brick Walk - supporting

Feature Identification Number: 118830

Type of Feature Contribution: Non Contributing

Feature: GKR Flagstone Walk - supporting

Feature Identification Number: 118834

Type of Feature Contribution: Non Contributing

Feature: GKR Wide Stone Staircase

Feature Identification Number: 118838

Type of Feature Contribution: Contributing

Feature: GKR Narrow Stone Staircase - supporting

Feature Identification Number: 118842

Type of Feature Contribution: Non Contributing

Feature: GKR Wooden Stairs - supporting

Feature Identification Number: 118844

Type of Feature Contribution: Non Contributing

Feature: GKR Remnant Stone Steps

Feature Identification Number: 118848

Type of Feature Contribution: Contributing

Feature: GKR Bunkhouse Row Loop Road

Feature Identification Number: 118852

Type of Feature Contribution: Contributing

Feature: GKR Kitchen Stairs

Feature Identification Number: 118854

Type of Feature Contribution: Undetermined

Feature: GKR Stone Path

Feature Identification Number: 118828

Type of Feature Contribution: Undetermined

Feature: WR Kohrs-Warren lane

Feature Identification Number: 118882

Type of Feature Contribution: Contributing

Feature: WR Driveway

Feature Identification Number: 118884

Type of Feature Contribution: Contributing

Feature: WR Sidewalk

Feature Identification Number: 118886

Type of Feature Contribution: Contributing

Feature: WR Stuart pasture road

Feature Identification Number: 118888

Type of Feature Contribution: Contributing

Feature: WR Steps

Feature Identification Number: 118890

Type of Feature Contribution: Contributing

Feature: WR Patio

Feature Identification Number: 118892

Type of Feature Contribution: Contributing

Feature: WR Remnant stone path

Feature Identification Number: 118894

Type of Feature Contribution: Contributing

Feature: WR Chicken Coop road

Feature Identification Number: 118896

Type of Feature Contribution: Contributing

Feature: PHF Kohrs Ditch Road

Feature Identification Number: 118898

Type of Feature Contribution: Contributing

Feature: PHF Kohrs-Manning Ditch Road

Feature Identification Number: 118900

Type of Feature Contribution: Non Contributing

Feature: PHF Warren Pumphouse Road

Feature Identification Number: 118902

Type of Feature Contribution: Contributing

Feature: PHF Clark-Fork River Bridge Road

Feature Identification Number: 118904

Type of Feature Contribution: Contributing

Feature: PHF Sewage treatment service road

Feature Identification Number: 118906

Type of Feature Contribution: Contributing

Feature: PHF South park entry road

Feature Identification Number: 118908

Type of Feature Contribution: Contributing

Feature: PHF Cottonwood Trail

Feature Identification Number: 118910

Type of Feature Contribution: Non Contributing

Feature: UP Kohrs Ditch Road

Feature Identification Number: 118912

Type of Feature Contribution: Contributing

Feature: UP Upland Pasture Road

Feature Identification Number: 118914

Type of Feature Contribution: Contributing

Feature: UP Ridge Road

Feature Identification Number: 118916

Type of Feature Contribution: Contributing

Feature: UP MTSR-4691

Feature Identification Number: 118920

Type of Feature Contribution: Contributing

Feature: UP Gravel Pit Road

Feature Identification Number: 118922

Type of Feature Contribution: Contributing

Feature: UP Little Gulch Road

Feature Identification Number: 118936

Type of Feature Contribution: Contributing

Feature: UP Big Gulch Road

Feature Identification Number: 118940

Type of Feature Contribution: Contributing

Feature: RW Cottonwood Trail

Feature Identification Number: 118944

Type of Feature Contribution: Non Contributing

Feature: RW Clark Fork River Bridge Road

Feature Identification Number: 118946

Type of Feature Contribution: Contributing

Feature: RR Burlington Northern Railroad line

Feature Identification Number: 118950

Type of Feature Contribution: Contributing

Feature: RR Old Milwaukee Railroad road

Feature Identification Number: 118952

Type of Feature Contribution: Contributing

Feature: RR NPS Service Road/at-grade crossing

Feature Identification Number: 118954

Type of Feature Contribution: Contributing

Feature: RR Sewage treat. ser. rd./at-grade cross

Feature Identification Number: 118956

Type of Feature Contribution: Contributing

Feature: DZ Visitor Entry Drive

Feature Identification Number: 118962

Type of Feature Contribution: Non Contributing

Feature: DZ Parking areas

Feature Identification Number: 118934

Type of Feature Contribution: Non Contributing

Feature: DZ Asphalt sidewalk/trail

Feature Identification Number: 118970

Type of Feature Contribution: Non Contributing

Feature: DZ Traffic islands

Feature Identification Number: 118972

Type of Feature Contribution: Non Contributing

Feature: DZ Pedestrian underpass

Feature Identification Number: 118976

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:

William Lohrs Memorial Library Dedication. Men with long coats, trees, and front yard of Grant Kohrs Ranch House, 1903. Source: Grant-Kohrs Ranch NHS Archives.

Cluster Arrangement

N/A

Constructed Water Features

The beginning of the elaborate irrigation system found within the Grant-Kohrs Ranch NHS dates back to Johnny Grant's efforts to improve the land for the cultivation of crops. These efforts included the construction of irrigation ditches sometime between 1862 and 1866. Although the extent and location of these ditches is unknown, it is believed that these features were incorporated into the Kohrs-Manning Ditch in 1872.

Water rights to Johnson Creek date to 1874. It is assumed that the Johnson Ditch (which feeds into the Kohrs-Manning Ditch) was constructed around this time. Likewise, the West Deer Lodge Ditch (known as the Westside Ditch) was excavated ca. 1889-1891 by CA. J. Kading. These ditches are believed to have remained in use throughout both the Grant-Kohrs and Warren periods. As they are believed to remain essentially the same today, they contribute to the site's period of significance.

Historical research conducted to date has not established dates of construction for the Kohrs "Big Ditch" located along the edge of the western benchland. However, water rights to Taylor Creek were appropriated for the "Kohrs-Manning" Ditch in 1885. It may be assumed that since the Kohrs Ditch is sourced by Taylor Creek, it was this ditch, rather than the "Kohrs-Manning Ditch," that was constructed sometime shortly after this date. While the date of construction of the Hartz/Kading Ditch is also unknown, it can be also be assumed that this ditch was constructed around the same time as the Westside Ditch (ca. 1890), as it too is associated with C.J. Kading and his property. As both ditches have remained in use through both the Grant-Kohrs and Warren periods, they contribute to the site's historic significance.

In the 1930s Con Warren acquired the Kading and D'Alton properties contained within the Upland Pasture area, which included the ditches and water rights located there. Shortly after he began regrading the fields and contouring the lands to improve irrigation. This process included the construction of the many lateral ditches contained in this area, as well as the filling in of old ditches. Current ditch alignments generally reflect those visible in the 1947 aerial photos, though the precise location of laterals may have been changed since that time as they are traditionally repaired or rebuilt after a number of harvests. The Warren Ditch, located along the far northwestern edge of the NHS boundary is also believed to date to this period. All these ditches contribute to the site's historic significance, as do both water pumps constructed by Warren in 1960, which are housed within historic structures HS-86 and HS-87.

Ditches that have an undetermined date of origin include the Salmonson Waste Ditch along the southern edge of the NHS boundary, the Taylor Ditches found in lower Taylor Field, and other abandoned ditches dispersed throughout the site.

Aside from the Kohrs-Manning Ditch Flume (HS-51), which was constructed in 1974 to replace the original flume (HS-50, no longer extant), the date of origin of most all other

associated irrigation structures--diversion dams, pipes, headgates, culverts, pumps, and flumes--is undetermined. However, it can be assumed that the majority of these features have been repaired or replaced over the years with features of same or similar function (most of the headgates were replaced by the NPS ca. 1990), and thus support the historic significance of the site.

The hand line system that provides irrigation to the effluent fields was installed by the NPS in the mid-1990s. It was intended to improve water quality of the Clark Fork River, as well as to re-irrigate pastures that had been historically irrigated by Con Warren. This historic system, installed by Warren in 1954, consisted of a diversion point out of the Kohrs-Manning Ditch, a 40 horsepower Connel pump, a wooden pump house (HS-86), buried 6-inch and 8-inch mainline, 4-inch risers, 4-inch hand line sets, and various valves and hardware. Water was diverted from the Kohrs-Manning Ditch with a gate. From there, it flowed through an underground pipe to a hole, and was lifted from the hole by the pump into the mainline. Lateral hand line sets ran out from mainline risers. Although the modern water source (effluent ponds) differs from the historic source (Kohrs-Manning Ditch), the NPS irrigation system is considered a supporting feature because it provides water to two pastures (Front Field and North Field) that were historically irrigated by hand-line for livestock grazing in the 1950s. The blue water troughs are considered noncontributing features.

The historic irrigation system serving the ranch house (HS-1) and garden is no longer extant—it was abandoned in 1934 and the land regraded. The only known surviving contributing feature associated with this system is the siphon (HS-57), which passes under the railroad corridor (4.26-28).

Character-defining Features:

Feature: HR Kohrs-Manning Ditch LCS451880

Feature Identification Number: 118696

Type of Feature Contribution: Contributing

Feature: WHR Heated water troughs

Feature Identification Number: 118698

Type of Feature Contribution: Contributing

Feature: WHR Heated water troughs – second trough

Feature Identification Number: 118700

Type of Feature Contribution: Non Contributing

Feature: WR Well

Feature Identification Number: 118702

Type of Feature Contribution: Contributing

Feature: WR Culvert

Feature Identification Number: 118704

Type of Feature Contribution: Contributing

Feature: WR Old Ditch

Feature Identification Number: 118706

Type of Feature Contribution: Contributing

Feature: PHF Kohrs-Manning Ditch LCS451880

Feature Identification Number: 118708

Type of Feature Contribution: Contributing

Feature: PHF Kohrs "Big" Ditch

Feature Identification Number: 118710

Type of Feature Contribution: Contributing

Feature: PHF Johnson Ditch

Feature Identification Number: 118712

Type of Feature Contribution: Contributing

Feature: PHF Lateral ditches

Feature Identification Number: 118714

Type of Feature Contribution: Contributing

Feature: PHF Old/abandoned ditches

Feature Identification Number: 118716

Type of Feature Contribution: Contributing

Feature: PHF Irrigation Risers - supporting

Feature Identification Number: 118718

Type of Feature Contribution: Non Contributing

Feature: PHF Irrigation Headgates - supporting

Feature Identification Number: 118720

Type of Feature Contribution: Non Contributing

Feature: PHF Effluent Wells

Feature Identification Number: 118722

Type of Feature Contribution: Non Contributing

Feature: PHF Irrigation Mainline - supporting

Feature Identification Number: 118724

Type of Feature Contribution: Non Contributing

Feature: PHF Test Wells

Feature Identification Number: 118726

Type of Feature Contribution: Non Contributing

Feature: PHF Culverts

Feature Identification Number: 118728

Type of Feature Contribution: Undetermined

Feature: PHF Warren Ditch LCS451882

Feature Identification Number: 118730

Type of Feature Contribution: Contributing

Feature: UP Kohrs "Big" Ditch

Feature Identification Number: 118732

Type of Feature Contribution: Contributing

Feature: UP Lateral ditches

Feature Identification Number: 118734

Type of Feature Contribution: Contributing

Feature: UP Old/abandoned ditches

Feature Identification Number: 118736

Type of Feature Contribution: Contributing

Feature: UP Irrigation Mainline

Feature Identification Number: 118738

Type of Feature Contribution: Non Contributing

Feature: UP West-side Ditch

Feature Identification Number: 118740

Type of Feature Contribution: Contributing

Feature: UP Hartz Ditch

Feature Identification Number: 118742

Type of Feature Contribution: Contributing

Feature: UP Talyor Ditches

Feature Identification Number: 118744

Type of Feature Contribution: Contributing

Feature: UP Salmonson Waste Ditch

Feature Identification Number: 118746

Type of Feature Contribution: Undetermined

Feature: UP Irrigation Headgates - supporting

Feature Identification Number: 118748

Type of Feature Contribution: Non Contributing

Feature: UP Earthen Dam

Feature Identification Number: 118750

Type of Feature Contribution: Undetermined

Feature: RW Kohrs-Manning Ditch LCS451880

Feature Identification Number: 118752

Type of Feature Contribution: Contributing

Feature: RW Johnson Ditch

Feature Identification Number: 118754

Type of Feature Contribution: Contributing

Feature: RW Old/abandoned ditches

Feature Identification Number: 118756

Type of Feature Contribution: Contributing

Feature: RR Effluent Wells

Feature Identification Number: 118758

Type of Feature Contribution: Non Contributing

Feature: RR Irrigation Mainline

Feature Identification Number: 118760

Type of Feature Contribution: Non Contributing

Feature: DZ Old/abandoned ditches

Feature Identification Number: 118762

Type of Feature Contribution: Contributing

Cultural Traditions

N/A

Land Use

Land uses within the Grant-Kohrs Ranch have changed little over time. Originally begun as a ranch sustaining both cattle and horses, the NPS actively continues these operations, although on a much smaller scale. Use of the low-lying lands along the east side of the Clark Fork River for the production of hay and pasture has continued since the Grant-Kohrs period. Likewise, the bench lands above the Kohrs Ditch and Kohrs-Manning Ditch continue to be used for pasture. As these lands are used for the same purposes today, they contribute to the site's historic significance.

The lands directly to the west of the Clark Fork River were not fully irrigated and cultivated for hay until the Warren period. During the 1940s, Warren began plowing, fertilizing, and rotating his crops to increase yields. As these lands have continued to be used for hay production or pasture since the close of the historic period, they contribute to the significance of the site.

The hay and pasture lands of the Upland Pasture area are believed to reflect the uses during both the Grant-Kohrs and Warren periods. These fields, as well as the Western Hay Fields, were improved for hay production by Warren in the 1930s when he regraded the lands for contour irrigation. Although the NPS does not typically plow or rotate crops today, some fields (such as Upper Taylor Field) have been re-established by plowing, tilling, and planting of hay. The irrigation and use of these fields contribute to the period of significance.

In the early 1980s, the park began to address the problem of pests and exotic and invasive weeds found in the fields and pastures. Studies also began to identify invasive exotic weeds, such as spotted knapweed and leafy spurge. Natural treatment methods were tested, but chemical treatment has proved more effective in managing the species composition of the hayfields and grassland plant communities. As historical evidence indicates that Warren sprayed the ranch for noxious weeds as early as 1955, this management practice contributes to the period of significance.

Historical evidence also suggests that beaver dams and lodges that interfered with ranching operations--such as those impeding irrigation--were removed by hand and dynamite. Currently, the NPS authorizes trapping by special use permits authorized to control beaver populations. Other management practices have also been employed by the NPS (such as culvert installation, elevation of roadways, fencing of important trees, etc.). Although it is not known if live trapping and relocation of beaver reflects historic land management traditions, control of beaver populations certainly reflects historic management needs.

During the period of significance, there was much diversity in livestock maintained on the ranch. During the Grant-Kohrs period, Conrad Kohrs and John Bielenberg raised longhorn cattle, shorthorn cattle, Hereford cattle, thoroughbred horses, Clydesdale horses, Percheron-Norman draft horses, Yorkshire hogs, Holstein cows, and chickens and turkeys. Documentation also suggests that Angus bulls, Ayrshire dairy cows, merino rams, and sheep may also have been kept on the ranch. Con Warren maintained this diversity until the 1950s, raising both registered and commercial Hereford cattle, Durham and Holstein dairy cows, Belgian horses, hogs, chickens, milch cows, and a mule. In the mid-1950s he expanded the Warren Hereford Ranch to the east of the railroad tracks and began raising primarily purebred and commercial Herefords.

After the NPS took over operations of the ranch in 1972, the Park permitted Warren to lease portions of the home ranch for grazing his cattle, and for general ranching activities. In 1989 the NPS began an Agricultural Use lease program. Special use permits for grazing privileges are issued by the ranch to private individuals on a competitive basis for a fee, based upon Animal Unit Months (AUMs) allocations. Although the numbers of livestock fluctuate from year to year, the ranch currently maintains approximately 94 head of cattle (or animal units, based upon an allocation of 1128 AUMs for the calendar year), including the breed yearlings born each spring. Breeds include Hereford, English Shorthorn, Longhorn, and Angus, as well as cross-breeds of the four types. These livestock breeds and land uses contribute to the historical significance of the landscape.

The NPS also maintains nine horses on the ranch, to include Quarter horses and Belgian draft horses (NPS), as well as five USFS horses that lease pasture from the Park. The NPS horses are pastured within the Home Ranch complex, and the USFS horses are pastured in the Warren Hereford Ranch complex. The care of cattle and horses on the ranch contribute to the historic significance of the landscape.

Although NPS interpretative and administrative uses of the Grant-Kohrs Ranch began in the mid-1970s (shortly after the creation of the NHS), these uses of the site do not contribute to the landscape's historic significance. Missing uses associated with the Grant-Kohrs and Warren periods include residential occupation of the Kohrs and Warren homes, as well as the use and occupation of the bunkhouse by ranch hands (CLR 4.24-4.26).

Character-defining Features:

Feature: HR Interpretation

Feature Identification Number: 118494

Type of Feature Contribution: Non Contributing

Feature: HR Visitor services

Feature Identification Number: 118496

Type of Feature Contribution: Non Contributing

Feature: HR Livestock grazing

Feature Identification Number: 118498

Type of Feature Contribution: Contributing

Feature: HR Ranching operations

Feature Identification Number: 118500

Type of Feature Contribution: Contributing

Feature: WHR NPS admin./storage/maintenance

Feature Identification Number: 118502

Type of Feature Contribution: Non Contributing

Feature: WHR Livestock grazing

Feature Identification Number: 118504

Type of Feature Contribution: Contributing

Feature: WHR Ranching operations

Feature Identification Number: 118506

Type of Feature Contribution: Contributing

Feature: WHR Water Treatment/Effluent Irrigation

Feature Identification Number: 118508

Type of Feature Contribution: Non Contributing

Feature: GKR Interpretation

Feature Identification Number: 118510

Type of Feature Contribution: Non Contributing

Feature: GKR NPS Admin/Storage

Feature Identification Number: 118512

Type of Feature Contribution: Non Contributing

Feature: WR NPS administration/storage

Feature Identification Number: 118514

Type of Feature Contribution: Non Contributing

Feature: WR Livestock grazing

Feature Identification Number: 118516

Type of Feature Contribution: Contributing

Feature: WR Interpretation

Feature Identification Number: 118518

Type of Feature Contribution: Non Contributing

Feature: PHF Livestock grazing

Feature Identification Number: 118520

Type of Feature Contribution: Contributing

Feature: PHF Hay production

Feature Identification Number: 118522

Type of Feature Contribution: Contributing

Feature: PHF Water treatment/Effluent irrigation

Feature Identification Number: 118524

Type of Feature Contribution: Non Contributing

Feature: UP Livestock Grazing

Feature Identification Number: 118526

Type of Feature Contribution: Contributing

Feature: UP Hay production

Feature Identification Number: 118528

Type of Feature Contribution: Contributing

Feature: RW Conservation

Feature Identification Number: 118530

Type of Feature Contribution: Non Contributing

Feature: RW Interpretation

Feature Identification Number: 118532

Type of Feature Contribution: Non Contributing

Feature: RW Recreation

Feature Identification Number: 118534

Type of Feature Contribution: Non Contributing

Feature: RR Conservation

Feature Identification Number: 118536

Type of Feature Contribution: Non Contributing

Feature: RR Transportation

Feature Identification Number: 118538

Type of Feature Contribution: Contributing

Feature: RR Utilities

Feature Identification Number: 118540

Type of Feature Contribution: Contributing

Feature: RR Interpretation

Feature Identification Number: 118542

Type of Feature Contribution: Non Contributing

Feature: DZ Visitor services

Feature Identification Number: 118544

Type of Feature Contribution: Non Contributing

Feature: DZ Interpretation

Feature Identification Number: 118546

Type of Feature Contribution: Non Contributing

Feature: DZ NPS administration/storage

Feature Identification Number: 118548

Type of Feature Contribution: Non Contributing

Feature: DZ Conservation

Feature Identification Number: 118550

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:

Con Warren putting up hay with a beaver slide, circa 1910. Source: Grant Kohrs Ranch NHS Archives.

Natural Systems and Features

At a large scale, the general location and character of major natural systems, such as the Clark Fork River, Cottonwood Creek, Johnson Creek, Taylor Creek, and other creeks, gulches, springs, and sloughs appear much the same as they were at during both periods of significance and are considered contributing features. While the alignment of the Clark Fork River has shifted slightly over time, due to the inherently dynamic nature of this hydrologic feature, as well as accelerated bank erosion and channel migration due to heavy metal contamination, the river has remained in its floodplain throughout the ranch's history.

The most significant difference in the river's channel alignment is the area directly to the north of the Clark Fork River Bridge. In an 1869 survey of this area, the river is depicted as two distinct channels, one on either side of the river's floodplain. These channels came together over time, sometime before 1947. Small sloughs remain in the floodplain that likely depict the historic location of the forked riverbed. The channel of Cottonwood Creek has also appeared

to shift approximately 1000' further to the north since the 1869 survey. It is not known if this is the result of natural processes, urbanization, or inaccurate mapping.

Other changes to the floodplain are the result of the large sewage treatment pond that was constructed in 1958-1960 after this land was purchased by the City of Deer Lodge. This feature does not contribute to the historic significance of the landscape. Around 1982 this treatment pond was replaced by four smaller cells further to the north. These latter features are also considered noncontributing.

At a large scale, topography within the Grant-Kohrs Ranch NHS also remains much the same as it was during both periods of significance and serves as a character defining feature for the NHS. The 1869 survey depicts the western foothills as well as the benches which delineate the upland and lowland areas. This topography played a significant role in influencing land use and settlement on the ranch. Smaller scale topographical changes were made to the western hayfields during the 1930s when Con Warren regraded the land to improve contour irrigation in this area. While these changes do not contribute to the Grant-Kohrs period of 1862-1919, they do contribute to the Warren-Hereford Ranch period of 1929-1982.

Topographical changes brought on by the construction of the railroad, such as grading of the railroad beds and excavation of the barrow pits, also altered the landscape. As these changes occurred before 1919 and influenced the development of the ranch, they contribute to both periods. The wetlands that are found there also contribute to the historic significance of the site.

Soils throughout most of the ranch have remained essentially the same throughout both periods of significance. Exceptions to this are the heavy metal deposits along the Clark Fork floodplain and the historically-irrigated fields and ditch system, which have changed the composition of soils in this area. These changes are considered noncontributing.

Although beaver are considered pests and negatively impact ranching operations, they are believed to have been present throughout the ranch's history. As J.H. Gerhmann reflects back to 1904, "Now back in here around these creeks, or in the creek, there was a beaver dam. And we had to go back there every so often and break it up. Otherwise, it would flood these fields" (Eckberg 4). In general, evidence of beaver inhabitation contributes to the historic significance of both periods, as does beaver trapping and control (CLR 4.18-4.19).

Character-defining Features:

Feature: HR Bench

Feature Identification Number: 118282

Type of Feature Contribution: Contributing

Feature: HR Johnson Creek

Feature Identification Number: 118284

Type of Feature Contribution: Contributing

Feature: HR North Fork of Johnson Creek

Feature Identification Number: 118286

Type of Feature Contribution: Contributing

Feature: HR Springs

Feature Identification Number: 118290

Type of Feature Contribution: Contributing

Feature: WHR Drainage swale

Feature Identification Number: 118292

Type of Feature Contribution: Contributing

Feature: GKR Bench

Feature Identification Number: 118296

Type of Feature Contribution: Contributing

Feature: WR North Fork of Johnson Creek

Feature Identification Number: 118298

Type of Feature Contribution: Contributing

Feature: WR Bench

Feature Identification Number: 118302

Type of Feature Contribution: Contributing

Feature: PHF Bench

Feature Identification Number: 118304

Type of Feature Contribution: Contributing

Feature: PHF Springs

Feature Identification Number: 118306

Type of Feature Contribution: Contributing

Feature: PHF No-name Creek

Feature Identification Number: 118308

Type of Feature Contribution: Contributing

Feature: PHF Spring Gulch

Feature Identification Number: 118310

Type of Feature Contribution: Contributing

Feature: PHF West Gulch

Feature Identification Number: 118312

Type of Feature Contribution: Contributing

Feature: PHF East Gulch

Feature Identification Number: 118314

Type of Feature Contribution: Contributing

Feature: PHF Beaver Lodges

Feature Identification Number: 118316

Type of Feature Contribution: Contributing

Feature: UP Bench

Feature Identification Number: 118318

Type of Feature Contribution: Contributing

Feature: UP Hilltops

Feature Identification Number: 118322

Type of Feature Contribution: Contributing

Feature: UP Taylor Creek

Feature Identification Number: 118324

Type of Feature Contribution: Contributing

Feature: RW Johnson Creek

Feature Identification Number: 118326

Type of Feature Contribution: Contributing

Feature: RW Springs

Feature Identification Number: 118328

Type of Feature Contribution: Contributing

Feature: RW Clark Fork River

Feature Identification Number: 118330

Type of Feature Contribution: Contributing

Feature: RW Cottonwood Creek

Feature Identification Number: 118332

Type of Feature Contribution: Contributing

Feature: RW Sloughs

Feature Identification Number: 118334

Type of Feature Contribution: Contributing

Feature: RW Beaver Lodges

Feature Identification Number: 118336

Type of Feature Contribution: Contributing

Feature: RR Johnson Creek

Feature Identification Number: 118338

Type of Feature Contribution: Contributing

Feature: RR East Gulch

Feature Identification Number: 118340

Type of Feature Contribution: Contributing

Feature: RR Beaver Lodges

Feature Identification Number: 118342

Type of Feature Contribution: Contributing

Feature: DZ Bench

Feature Identification Number: 118344

Type of Feature Contribution: Contributing

Feature: DZ Johnson Creek

Feature Identification Number: 118346

Type of Feature Contribution: Contributing

Small Scale Features

For the most part, fences and gates found within the Grant-Kohrs Ranch NHS contribute to or support the historic significance of the site, particularly within the Home Ranch Complex. As fence and gate materials deteriorate relatively quickly, routine maintenance and replacement of these features has been common throughout the ranch's history.

Based upon analysis of 1983 aerial photographs, it appears as though some fence patterns within the ranch reflect the conditions present at the end of the period of significance. This is certainly true along the outer boundaries of Front Field, the western edge of the Western Hay Fields, and around the Railroad Corridor and Barrow pits. While the historic fencing materials for these areas is not known, it is assumed that these fences were constructed of split cedar wood posts and barbed wire. Some of the metal posts used on the ranch date back to the 1940s—these may have replaced older wooden posts (see CLR 4.36). Since both wood and metal barbed wire fencing were used on the ranch during the historic period, contemporary fencing materials used by the NPS would be considered supporting to the Warren period.

Current post and wire cross-fences subdividing the Western Hay Fields and Front Fields, and fencing surrounding the North Meadows, L-Barn North Field, and the Riparian Woodland (north of the L-Barn Field) do not appear in the 1983 aerial photos. Jack-leg fencing found along the eastern side of the riparian woodland also appears to post-date the period of significance. These fences are considered noncontributing features. The metal post and wire fences (cross-fences) and electrical fence subdividing the Upland Pasture area post-date the period of significance and are considered noncontributing features. As the entire park boundary was fenced by the NPS, it can be assumed the outer fence boundary currently existing on the perimeter of the NHS does not contribute to the period of significance.

Jack-leg fences found along both sides of the Kohrs-Manning Ditch (along the western boundary of Stuart Field), along the northern edge of the Cottonwood Creek riparian woodland, and along the western edge of the Kohrs-Manning Ditch Road do not appear in the 1983 aerial photo. As such, they are considered noncontributing features.

Most of the fence types found within the Home Ranch Complex are either jack-leg or 5-rail stacked-end fence. These fence types are prominent within and around the smaller fields, corrals, and feedlots. Several other fence types, such as the vertical board fence and stacked log fence, are also found in this area, although to a lesser degree. In the 1977 Historic Resource Study, four prominent fence types were described. These included the jack-leg (historically the most prominent), and standard post and pole fences. The latter fence type was described as "vertical poles sunk into the ground with horizontal members nailed on them." It is assumed that this description is interchangeable with the simple post and rail fence described in this report. Other fence types mentioned in the HRS include a very small number of wood post and barbed wire, as well as sheep wire fences. Today, virtually no wood post and wire, nor sheep wire fences, are found within the Home Ranch Complex. It is not known if these changes were made by Warren prior to 1982.

Based upon comparison of existing conditions with the 1983 aerial photograph, it appears as though most of the fence lines present within the Home Ranch Complex at the end of the period of significance appear in the same location today, and are contributing features. Some new fences have been added since that time, particularly within the West Corrals along Johnson Creek in 1996, and the Lower Yards, around the chicken coop field, in 1981. A few others have been removed--such as those near HS-30, and in between HS-7 and HS-9.

When comparing current fence types with those documented in the 1977 HRS, and historic photographs dating from 1985, several changes have been made. In some cases, such as on the north and west edges of the Lower House Yard, and the east edge of the West Feedlot, jack-leg fencing has been replaced with other fence types. Likewise, vertical plank fencing has replaced post and pole along the south edge of the west feedlot, the east edge of the bunkhouse yards, and the north edges of the West Corrals. Jack-leg fencing has also replaced the post and pole fencing along the eastern edge of Johnson Creek Field. Specific dates of these changes are not known.

Based upon review of historic photographs, fences within the 1950s Warren Hereford Ranch Complex were historically constructed of milled-lumber (assumed to be representative of the flat rail and post fence described in this report), as well as the 5-rail locked end fence (see description in Chapter Three). It appears as though these fences and gates remain essentially the same today (both location and type), and are considered contributing features.

The white picket fence surrounding the yard at the main house (HS-1) has been reconstructed by the NPS to reflect conditions present during the Grant-Kohrs period. As such, it supports the historic significance of the landscape. The picket fence surrounding the Warren house (HS-58), also reconstructed by the NPS in 2001, is considered a supporting feature. The electrical fence surrounding the perimeter of the yard is not considered a contributing feature.

Fences and gates located within the Visitor Center area were constructed in 1975 and 1978. Although these features reflect the historic fences and gates found elsewhere throughout the ranch, they are considered noncontributing features (CLR 4.36-4.37).

Character-defining Features:

Feature: HR Jack-Leg Fence

Feature Identification Number: 119172

Type of Feature Contribution: Contributing

Feature: HR Vertical Board Fence

Feature Identification Number: 119174

Type of Feature Contribution: Contributing

Feature: HR 5-Rail Stacked-end Fence

Feature Identification Number: 119176

Type of Feature Contribution: Contributing

Feature: HR Simple Post and Rail Fence

Feature Identification Number: 119178

Type of Feature Contribution: Contributing

Feature: HR Chicken Wire Fence

Feature Identification Number: 119180

Type of Feature Contribution: Non Contributing

Feature: HR Chicken Wire Gates

Feature Identification Number: 119182

Type of Feature Contribution: Non Contributing

Feature: HR Stacked Log Fence

Feature Identification Number: 119184

Type of Feature Contribution: Contributing

Feature: HR Overhead Gate

Feature Identification Number: 119186

Type of Feature Contribution: Contributing

Feature: HR Red Wood Gate

Feature Identification Number: 119188

Type of Feature Contribution: Contributing

Feature: HR 5-Rail Braced Gate

Feature Identification Number: 119190

Type of Feature Contribution: Contributing

Feature: HR Vertical Board Gate

Feature Identification Number: 119192

Type of Feature Contribution: Undetermined

Feature: HR Water trough

Feature Identification Number: 119194

Type of Feature Contribution: Non Contributing

Feature: HR Water bar

Feature Identification Number: 119196

Type of Feature Contribution: Non Contributing

Feature: HR Fire Hydrants

Feature Identification Number: 119198

Type of Feature Contribution: Non Contributing

Feature: HR Fire Box

Feature Identification Number: 119200

Type of Feature Contribution: Non Contributing

Feature: WHR 5-Rail Stacked-end Fence

Feature Identification Number: 119202

Type of Feature Contribution: Contributing

Feature: WHR Overhead Gate

Feature Identification Number: 119204

Type of Feature Contribution: Contributing

Feature: WHR Red Wood Gate

Feature Identification Number: 119206

Type of Feature Contribution: Contributing

Feature: WHR 5-Rail Braced Gate

Feature Identification Number: 119208

Type of Feature Contribution: Contributing

Feature: WHR Concrete slabs/blocks

Feature Identification Number: 119210

Type of Feature Contribution: Undetermined

Feature: WHR Plank and Post Fence

Feature Identification Number: 119212

Type of Feature Contribution: Contributing

Feature: WHR Flat Rail and Post Fence

Feature Identification Number: 119214

Type of Feature Contribution: Contributing

Feature: WHR Woven Wire Fence

Feature Identification Number: 119216

Type of Feature Contribution: Contributing

Feature: WHR Metal Pipe Fence

Feature Identification Number: 119218

Type of Feature Contribution: Non Contributing

Feature: WHR Metal Pipe Gates

Feature Identification Number: 119220

Type of Feature Contribution: Non Contributing

Feature: WHR Lumber Stack

Feature Identification Number: 119222

Type of Feature Contribution: Non Contributing

Feature: WHR Hitching Post

Feature Identification Number: 119224

Type of Feature Contribution: Non Contributing

Feature: WHR Stop sign/RR crossing sign

Feature Identification Number: 119226

Type of Feature Contribution: Non Contributing

Feature: WHR Wood Trough

Feature Identification Number: 119228

Type of Feature Contribution: Contributing

Feature: WHR Material piles - NW corner pile

Feature Identification Number: 119230

Type of Feature Contribution: Contributing

Feature: WHR Material piles

Feature Identification Number: 119232

Type of Feature Contribution: Non Contributing

Feature: WHR Wood Chutes and Gates

Feature Identification Number: 119234

Type of Feature Contribution: Contributing

Feature: WHR Fire Hydrants

Feature Identification Number: 119236

Type of Feature Contribution: Non Contributing

Feature: GKR White Picket Fence - supporting

Feature Identification Number: 119238

Type of Feature Contribution: Non Contributing

Feature: GKR Wire Mesh Gate

Feature Identification Number: 119240

Type of Feature Contribution: Contributing

Feature: GKR Manhole Cover

Feature Identification Number: 119242

Type of Feature Contribution: Non Contributing

Feature: GKR Wood Benches - supporting

Feature Identification Number: 119244

Type of Feature Contribution: Non Contributing

Feature: GKR Stanchion Pipe

Feature Identification Number: 119248

Type of Feature Contribution: Non Contributing

Feature: GKR Trash Barrel - Small

Feature Identification Number: 119250

Type of Feature Contribution: Non Contributing

Feature: GKR Wooden Raised-Bed Frames -supporting

Feature Identification Number: 119252

Type of Feature Contribution: Non Contributing

Feature: GKR Wooden Trellises - supporting

Feature Identification Number: 119254

Type of Feature Contribution: Non Contributing

Feature: GKR Capped Pipes

Feature Identification Number: 119256

Type of Feature Contribution: Non Contributing

Feature: GKR Utility Meters

Feature Identification Number: 119258

Type of Feature Contribution: Non Contributing

Feature: GKR Yellow Stand-pipe

Feature Identification Number: 119260

Type of Feature Contribution: Non Contributing

Feature: GKR Sign

Feature Identification Number: 119262

Type of Feature Contribution: Non Contributing

Feature: GKR Wood Cellar Covers - supporting

Feature Identification Number: 119264

Type of Feature Contribution: Non Contributing

Feature: GKR Wood hand rail - supporting

Feature Identification Number: 119246

Type of Feature Contribution: Non Contributing

Feature: GKR Fire Hydrant

Feature Identification Number: 119266

Type of Feature Contribution: Non Contributing

Feature: GKR Fire Box

Feature Identification Number: 119268

Type of Feature Contribution: Non Contributing

Feature: GKR Utility Cover

Feature Identification Number: 119270

Type of Feature Contribution: Non Contributing

Feature: GKR Wheelbarrow

Feature Identification Number: 119272

Type of Feature Contribution: Non Contributing

Feature: WR Picket Fence - supporting

Feature Identification Number: 119274

Type of Feature Contribution: Non Contributing

Feature: WR Electric Fence

Feature Identification Number: 119276

Type of Feature Contribution: Non Contributing

Feature: WR Picket Double Gate

Feature Identification Number: 119278

Type of Feature Contribution: Contributing

Feature: WR Picket Single Gate

Feature Identification Number: 119280

Type of Feature Contribution: Contributing

Feature: WR Wire Mesh Gate

Feature Identification Number: 119282

Type of Feature Contribution: Contributing

Feature: WR Wood Post and Woven Wire Fence

Feature Identification Number: 119284

Type of Feature Contribution: Contributing

Feature: WR Red Wood Gate

Feature Identification Number: 119286

Type of Feature Contribution: Contributing

Feature: WR Jack-Leg Fence

Feature Identification Number: 119288

Type of Feature Contribution: Non Contributing

Feature: WR 5-Rail Braced Gate

Feature Identification Number: 119290

Type of Feature Contribution: Contributing

Feature: WR Stepping Stones

Feature Identification Number: 119292

Type of Feature Contribution: Non Contributing

Feature: WR NPS Mailbox

Feature Identification Number: 119294

Type of Feature Contribution: Non Contributing

Feature: WR BBQ foundation/burn barrel

Feature Identification Number: 119296

Type of Feature Contribution: Contributing

Feature: WR Clothesline

Feature Identification Number: 119298

Type of Feature Contribution: Contributing

Feature: WR Concrete trough

Feature Identification Number: 119300

Type of Feature Contribution: Undetermined

Feature: WR Magpie trap

Feature Identification Number: 119302

Type of Feature Contribution: Undetermined

Feature: WR Birdbath

Feature Identification Number: 119304

Type of Feature Contribution: Contributing

Feature: WR Fire hydrant

Feature Identification Number: 119306

Type of Feature Contribution: Non Contributing

Feature: WR Antenna

Feature Identification Number: 119308

Type of Feature Contribution: Non Contributing

Feature: WR Meter

Feature Identification Number: 119310

Type of Feature Contribution: Non Contributing

Feature: PHF Jack-Leg Fence - ref. park GIS db

Feature Identification Number: 119312

Type of Feature Contribution: Contributing

Feature: PHF Jack-Leg Fence - ref. park GIS d.b.

Feature Identification Number: 119314

Type of Feature Contribution: Non Contributing

Feature: PHF Metal Post & Wire Fence ref park GIS

Feature Identification Number: 119316

Type of Feature Contribution: Contributing

Feature: PHF Metal Post & Wire Fence ref park GIS

Feature Identification Number: 119318

Type of Feature Contribution: Non Contributing

Feature: PHF Wood Post & Wire Fence ref. park GIS

Feature Identification Number: 119320

Type of Feature Contribution: Contributing

Feature: PHF Wood Post & Wire Fence ref. park GIS

Feature Identification Number: 119322

Type of Feature Contribution: Non Contributing

Feature: PHF Overhead Gates

Feature Identification Number: 119324

Type of Feature Contribution: Undetermined

Feature: PHF Double 5-Rail Braced Gate

Feature Identification Number: 119326

Type of Feature Contribution: Undetermined

Feature: PHF Metal Pipe Gate

Feature Identification Number: 119328

Type of Feature Contribution: Non Contributing

Feature: PHF Metal Pipe and Mesh Gates

Feature Identification Number: 119330

Type of Feature Contribution: Non Contributing

Feature: PHF Wood Post and Woven Wire Fence

Feature Identification Number: 119332

Type of Feature Contribution: Contributing

Feature: PHF Blue water troughs

Feature Identification Number: 119334

Type of Feature Contribution: Non Contributing

Feature: UP Metal Post & Barbed Wire Fence

Feature Identification Number: 119336

Type of Feature Contribution: Non Contributing

Feature: UP Wood Post & Barbed Wire

Feature Identification Number: 119338

Type of Feature Contribution: Contributing

Feature: UP Electric Fence

Feature Identification Number: 119340

Type of Feature Contribution: Non Contributing

Feature: UP 5-Rail Stacked-End Fence

Feature Identification Number: 119342

Type of Feature Contribution: Contributing

Feature: UP Wire Gates

Feature Identification Number: 119344

Type of Feature Contribution: Undetermined

Feature: RW 4-rail stacked end fence

Feature Identification Number: 119346

Type of Feature Contribution: Undetermined

Feature: RW Jack-Leg Fence

Feature Identification Number: 119348

Type of Feature Contribution: Contributing

Feature: RW Jack-Leg Fence SE/N river & KM ditch

Feature Identification Number: 119350

Type of Feature Contribution: Non Contributing

Feature: RW Metal Post and Barbed Wire fence

Feature Identification Number: 119352

Type of Feature Contribution: Non Contributing

Feature: RW Wood Post and Woven Wire Fence

Feature Identification Number: 119354

Type of Feature Contribution: Undetermined

Feature: RW Metal Post and Hog Panel Fence

Feature Identification Number: 119356

Type of Feature Contribution: Undetermined

Feature: RW Double-Rail and Post Fence

Feature Identification Number: 119358

Type of Feature Contribution: Undetermined

Feature: RW 5-rail braced gate

Feature Identification Number: 119360

Type of Feature Contribution: Undetermined

Feature: RW Old Fence Remnants

Feature Identification Number: 119362

Type of Feature Contribution: Contributing

Feature: RW Health warning signs

Feature Identification Number: 119364

Type of Feature Contribution: Non Contributing

Feature: RW Wooden sign

Feature Identification Number: 119366

Type of Feature Contribution: Non Contributing

Feature: RW Wooden interpretive markers

Feature Identification Number: 119368

Type of Feature Contribution: Non Contributing

Feature: RW Wooden bench

Feature Identification Number: 119370

Type of Feature Contribution: Non Contributing

Feature: RW Metal pump drum

Feature Identification Number: 119372

Type of Feature Contribution: Undetermined

Feature: RR Metal Post and Wire Fence

Feature Identification Number: 119374

Type of Feature Contribution: Non Contributing

Feature: RR Jack-Leg Fence - supporting

Feature Identification Number: 119376

Type of Feature Contribution: Non Contributing

Feature: RR 4-Rail Stacked-end Fence

Feature Identification Number: 119378

Type of Feature Contribution: Undetermined

Feature: RR 5-Rail Braced Gate

Feature Identification Number: 119380

Type of Feature Contribution: Undetermined

Feature: RR Galvanized Metal Gate

Feature Identification Number: 119382

Type of Feature Contribution: Undetermined

Feature: RR Metal Pipe Gate

Feature Identification Number: 119384

Type of Feature Contribution: Undetermined

Feature: RR Wood & Metal Post & Wire Fence compat

Feature Identification Number: 119386

Type of Feature Contribution: Non Contributing

Feature: RR Wheel flange detector system

Feature Identification Number: 119388

Type of Feature Contribution: Undetermined

Feature: DZ Entrance Sign

Feature Identification Number: 119390

Type of Feature Contribution: Non Contributing

Feature: DZ Jack-Leg Fence

Feature Identification Number: 119392

Type of Feature Contribution: Non Contributing

Feature: DZ Overhead Gate

Feature Identification Number: 119394

Type of Feature Contribution: Non Contributing

Feature: DZ 5-Rail Braced Gate

Feature Identification Number: 119396

Type of Feature Contribution: Non Contributing

Feature: DZ Typical Ranch Gate

Feature Identification Number: 119398

Type of Feature Contribution: Non Contributing

Feature: DZ Entrance Bollards

Feature Identification Number: 119400

Type of Feature Contribution: Non Contributing

Feature: DZ Wayfinding Signage

Feature Identification Number: 119402

Type of Feature Contribution: Non Contributing

Feature: DZ Large Interpretive Sign

Feature Identification Number: 119404

Type of Feature Contribution: Non Contributing

Feature: DZ Information Kiosk

Feature Identification Number: 119406

Type of Feature Contribution: Non Contributing

Feature: DZ Deer Lodge Valley Sign

Feature Identification Number: 119408

Type of Feature Contribution: Non Contributing

Feature: DZ Flagpole/Flag

Feature Identification Number: 119410

Type of Feature Contribution: Non Contributing

Feature: DZ Concrete Curb

Feature Identification Number: 119412

Type of Feature Contribution: Non Contributing

Feature: DZ Interpretive Grain Wagon

Feature Identification Number: 119414

Type of Feature Contribution: Non Contributing

Feature: DZ Trash Cans

Feature Identification Number: 119416

Type of Feature Contribution: Non Contributing

Feature: DZ Trash Barrels (Large)

Feature Identification Number: 119418

Type of Feature Contribution: Non Contributing

Feature: DZ Trash Barrels (Small)

Feature Identification Number: 119420

Type of Feature Contribution: Non Contributing

Feature: DZ Fire Hydrant

Feature Identification Number: 119422

Type of Feature Contribution: Non Contributing

Feature: DZ Manhole Cover

Feature Identification Number: 119424

Type of Feature Contribution: Non Contributing

Feature: DZ TIS Pole

Feature Identification Number: 119426

Type of Feature Contribution: Non Contributing

Feature: DZ Fire Box

Feature Identification Number: 119428

Type of Feature Contribution: Non Contributing

Feature: DZ Picnic Table

Feature Identification Number: 119430

Type of Feature Contribution: Non Contributing

Feature: DZ Transformer

Feature Identification Number: 119432

Type of Feature Contribution: Non Contributing

Feature: DZ Cord wood

Feature Identification Number: 119434

Type of Feature Contribution: Non Contributing

Feature: DZ Storage Shed

Feature Identification Number: 119436

Type of Feature Contribution: Non Contributing

Feature: DZ Interpretive Trail waysides

Feature Identification Number: 119438

Type of Feature Contribution: Non Contributing

Feature: DZ Wooden Bench

Feature Identification Number: 119440

Type of Feature Contribution: Non Contributing

Feature: DZ Small informational signs

Feature Identification Number: 119442

Type of Feature Contribution: Non Contributing

Feature: DZ Metal plaque

Feature Identification Number: 119444

Type of Feature Contribution: Non Contributing

Feature: DZ Electric Fence

Feature Identification Number: 119446

Type of Feature Contribution: Non Contributing

Spatial Organization

The spatial organization of the landscape has evolved substantially since the ranch was first settled by Johnny Grant in 1862. Defined by only a few roads, buildings, and fences, this landscape is now a complex system of spaces defined by building complexes, irrigation ditches, railroad corridors, paved and unpaved ranch roads, pastures, and most importantly, fences.

By the end of the Grant-Kohrs Ranch operations in 1919 the bunkhouse yards (spaces defined by the buildings and fences located north of the bunkhouse) were already well established. Although a few structures were added, some removed, and fences likely rearranged, this space has remained much the same since the close of the Grant-Kohrs period. Other spaces that

have remained essentially the same throughout the latter part of the Grant-Kohrs period and throughout the Warren period are the Lower House Yard, defined by the buggy shed, stallion barns (HS-19 and HS-16) and the thoroughbred barn (HS-15); and Johnson Creek Field, (defined by fencing, riparian vegetation, and Johnson Creek road on the south side). As these spaces have changed little--except for the addition of a few buildings on the perimeter of the Lower House Yard, which include the Blacksmith Shop (HS-3), Coal Shed (HS-4), Chicken Coop (HS-22), and Brooding House (HS-21), they contribute to the historic periods. The fencing and gates surrounding the Chicken Coop Field were first built by the NPS in 1976, and rebuilt in 1981. Originally this field was surrounded by an all board fence.

As little information is available regarding the location and type of historic fencing throughout the remainder of the home ranch area at the close of the Grant-Kohrs period, it is not known what other fields may have been well-defined by fences during this time. Based upon analysis of the 1907 drawing of the Deer Lodge Townsite, it is likely that the Lower Yard area was enclosed by fencing and defined by ranch structures, the bench, and the Kohrs-Manning Ditch. It is likely that the L-Barn South Field was also enclosed during this period, as HS-13 dates to 1908.

It is also likely that the West Corrals were historically defined by fencing, Johnson Creek, and the Kohrs-Manning Ditch, and enclosed an area serving the stallion and thoroughbred barns. These corrals became more developed during the Warren period. The conditions currently present within this area more closely reflect the historic conditions found at the end of the Warren period, and as such, contribute to the historic significance of the site.

Additional changes to these spaces during the Warren period include the construction of the Clark Fork River Bridge Road and the Kohrs-Manning Ditch Road—both of which further enclosed and defined the West Corrals and the Lower Yards. Since these changes occurred before the close of the 1982 period of significance and little changes in spatial organization have occurred since, the Lower Yards and the West Corrals contribute to the period of significance. While the West Feedlot was not present during the Grant-Kohrs period, it was constructed by Warren and has changed little since 1982. It too contributes to the significance of the ranch.

The ranch house domestic yard and garden was enclosed by the picket fence, and the lower garden, front yard, and side yards were well defined by the close of the Grant-Kohrs period. A significant change occurred in the front and side yards in early 1950s when the grid of cottonwood trees had been removed and the spaces became less enclosed by their dense overhead canopies. As the NPS has actively pursued restoration of the domestic yard in recent years, current spatial organization of the ranch home reflects the landscape conditions found in 1919, rather than those of 1982. Current conditions support the significance of this earlier period.

Little has changed regarding the spatial organization of the Warren Hereford Ranch since 1982. The spaces defined by the corrals, alleys, and circulation systems, to include the railroad

corridor and its associated barrow pits, all contribute to the period of significance. Likewise, the domestic yard and fields surrounding the Warren residence reflect 1982 conditions and are considered contributing features.

Pastures and hay fields located on the east side of the Clark Fork River, particularly the Lower Yard Fields, L-Barn Fields, Stuart Field, and North Meadows have remained essentially the same in terms of use and configuration through both the Grant-Kohrs and Warren periods (though there have been some changes including later fencing). These spaces are considered contributing features.

The spatial organization of pastures and hay fields on the west and north sides of the ranch have evolved since the time Con Warren took over operations of the ranch in 1929. The Western Hay Fields were expanded in 1930s when Con Warren realigned the country road approximately 1000 feet to the west. However, as these conditions remain the same today, they are considered contributing features. The cross-fencing that currently subdivides the western hay fields was installed by the NPS in 1997 to control cattle grazing. This field subdivison does not contribute to the historic significance of the landscape.

Between 1958 and 1960, the City of Deer Lodge constructed the sewage treatment pond located along the Clark Fork River. This pond was abandoned sometime around 1983 when four smaller effluent ponds were built on the northern edge of this feature. As these newer ponds were constructed within the boundaries of the older pond, they did not alter the spatial organization of the fields surrounding them. Therefore, the organization of Olson Field East, Olson Field West, and Treatment Pond Field contributes to the historic significance of the landscape.

Although little information is available regarding the spatial organization of the fields and ranges located within the Upper Pasture area, the current organization is most directly influenced by the historic topography and irrigation ditches which were regraded in the 1930s when Con Warren acquired the lands associated with this area. As such, the spatial organization of these fields and ranges have likely changed little since the close of the period of significance. Some of the fencing that surrounds these sub-spaces, however, was installed by the NPS much later.

The spatial organization of the riparian zone has changed slightly over time. Although it is not known for certain if the riparian woodland was fenced during the Grant-Kohrs period, it is assumed that cattle had been allowed to freely access this area. Complete fencing of the riparian area, north of the L-Barn and Lower Yard Fields, occurred in 1994 due to contamination concerns for staff, visitors, and livestock. This eastern and northern fencing of the riparian area altered the spatial organization of the riparian zone, and does not contribute to the landscape's historic significance (CLR 4.22-24).

Character-defining Features:

Feature: HR Lower yards

Feature Identification Number: 118560

Type of Feature Contribution: Contributing

Feature: HR Lower house yards

Feature Identification Number: 118562

Type of Feature Contribution: Contributing

Feature: HR Bunkhouse yards

Feature Identification Number: 118564

Type of Feature Contribution: Contributing

Feature: HR L-Barn South

Feature Identification Number: 118566

Type of Feature Contribution: Contributing

Feature: HR West Corrals

Feature Identification Number: 118568

Type of Feature Contribution: Contributing

Feature: HR Johnson Creek Field

Feature Identification Number: 118570

Type of Feature Contribution: Contributing

Feature: HR West feedlot

Feature Identification Number: 118572

Type of Feature Contribution: Contributing

Feature: HR Clark Fork Bridge Road

Feature Identification Number: 118574

Type of Feature Contribution: Contributing

Feature: HR Kohrs-Manning Ditch Road

Feature Identification Number: 118576

Type of Feature Contribution: Non Contributing

Feature: WHR Alleys

Feature Identification Number: 118578

Type of Feature Contribution: Contributing

Feature: WHR Square Corrals

Feature Identification Number: 118580

Type of Feature Contribution: Contributing

Feature: WHR Chute area

Feature Identification Number: 118582

Type of Feature Contribution: Contributing

Feature: WHR Chute area - metal chute system

Feature Identification Number: 118584

Type of Feature Contribution: Non Contributing

Feature: WHR Shop/barn yards

Feature Identification Number: 118586

Type of Feature Contribution: Contributing

Feature: WHR West pasture

Feature Identification Number: 118588

Type of Feature Contribution: Contributing

Feature: WHR Bull barn corrals

Feature Identification Number: 118590

Type of Feature Contribution: Contributing

Feature: WHR Whiskey pasture

Feature Identification Number: 118592

Type of Feature Contribution: Contributing

Feature: WHR Kohrs-Warren lane

Feature Identification Number: 118594

Type of Feature Contribution: Contributing

Feature: WHR Bull Barn Rd./NPS Service Entrance

Feature Identification Number: 118596

Type of Feature Contribution: Contributing

Feature: WHR Bull Barn Rd./NPS Serv. Entr. mods.

Feature Identification Number: 118598

Type of Feature Contribution: Non Contributing

Feature: GKR Front lawn

Feature Identification Number: 118600

Type of Feature Contribution: Contributing

Feature: GKR Side yards

Feature Identification Number: 118602

Type of Feature Contribution: Contributing

Feature: GKR Lower garden

Feature Identification Number: 118604

Type of Feature Contribution: Contributing

Feature: GKR Bunkhouse Road Corridor

Feature Identification Number: 118606

Type of Feature Contribution: Contributing

Feature: WR Domestic yard

Feature Identification Number: 118608

Type of Feature Contribution: Contributing

Feature: WR Chicken coop field

Feature Identification Number: 118610

Type of Feature Contribution: Contributing

Feature: WR East field

Feature Identification Number: 118612

Type of Feature Contribution: Contributing

Feature: WR West field

Feature Identification Number: 118614

Type of Feature Contribution: Contributing

Feature: WR Stuart pasture

Feature Identification Number: 118616

Type of Feature Contribution: Contributing

Feature: WR Kohrs-Warren lane

Feature Identification Number: 118618

Type of Feature Contribution: Contributing

Feature: WR Riparian zone (N. Fork Johnson Cr.)

Feature Identification Number: 118620

Type of Feature Contribution: Contributing

Feature: PHF Stuart Field

Feature Identification Number: 118622

Type of Feature Contribution: Contributing

Feature: PHF Lower Yard Fields

Feature Identification Number: 118624

Type of Feature Contribution: Contributing

Feature: PHF North Meadows

Feature Identification Number: 118626

Type of Feature Contribution: Contributing

Feature: PHF L-Barn Field North

Feature Identification Number: 118628

Type of Feature Contribution: Contributing

Feature: PHF Western Hay Fields

Feature Identification Number: 118630

Type of Feature Contribution: Contributing

Feature: PHF Front Field

Feature Identification Number: 118632

Type of Feature Contribution: Contributing

Feature: PHF Olson Field, East

Feature Identification Number: 118634

Type of Feature Contribution: Contributing

Feature: PHF Olson Field, West

Feature Identification Number: 118636

Type of Feature Contribution: Contributing

Feature: PHF Treatment Pond Field

Feature Identification Number: 118638

Type of Feature Contribution: Contributing

Feature: PHF L-Barn Field

Feature Identification Number: 118640

Type of Feature Contribution: Contributing

Feature: PHF Kohrs "Big" Ditch Road

Feature Identification Number: 118642

Type of Feature Contribution: Contributing

Feature: PHF Kohrs-Manning Ditch Road

Feature Identification Number: 118644

Type of Feature Contribution: Non Contributing

Feature: PHF Warren Pumphouse Road

Feature Identification Number: 118646

Type of Feature Contribution: Contributing

Feature: PHF Clark-Fork River Bridge Road

Feature Identification Number: 118648

Type of Feature Contribution: Contributing

Feature: PHF Sewage treatment service road

Feature Identification Number: 118650

Type of Feature Contribution: Contributing

Feature: PHF South park entry road

Feature Identification Number: 118652

Type of Feature Contribution: Contributing

Feature: UP Big Gulch

Feature Identification Number: 118654

Type of Feature Contribution: Contributing

Feature: UP Little Gulch

Feature Identification Number: 118656

Type of Feature Contribution: Contributing

Feature: UP Lower Taylor Field

Feature Identification Number: 118658

Type of Feature Contribution: Contributing

Feature: UP Upper Northwest Range

Feature Identification Number: 118660

Type of Feature Contribution: Contributing

Feature: UP Taylor Ridge Range

Feature Identification Number: 118662

Type of Feature Contribution: Contributing

Feature: UP Gravel Pit Range

Feature Identification Number: 118664

Type of Feature Contribution: Contributing

Feature: UP Ridge Road Range

Feature Identification Number: 118666

Type of Feature Contribution: Contributing

Feature: UP Upper Taylor Field

Feature Identification Number: 118668

Type of Feature Contribution: Contributing

Feature: RW Clark Fork River Riparian Zone

Feature Identification Number: 118670

Type of Feature Contribution: Contributing

Feature: RW Cottonwood Creek Riparian Zone

Feature Identification Number: 118672

Type of Feature Contribution: Contributing

Feature: RW Johnson Creek Riparian Zone

Feature Identification Number: 118674

Type of Feature Contribution: Contributing

Feature: RW Slickens

Feature Identification Number: 118676

Type of Feature Contribution: Non Contributing

Feature: RW Cottonwood Trail

Feature Identification Number: 118678

Type of Feature Contribution: Non Contributing

Feature: RW Clark Fork River Bridge Road

Feature Identification Number: 118682

Type of Feature Contribution: Contributing

Feature: RR Railroad corridor

Feature Identification Number: 118684

Type of Feature Contribution: Contributing

Feature: RR Barrow pit

Feature Identification Number: 118686

Type of Feature Contribution: Contributing

Feature: RR Ungrazed prairie

Feature Identification Number: 118688

Type of Feature Contribution: Contributing

Feature: DZ Developed area

Feature Identification Number: 118690

Type of Feature Contribution: Non Contributing

Feature: DZ Johnson Creek riparian area

Feature Identification Number: 118692

Type of Feature Contribution: Contributing

Feature: DZ Visitor center field

Feature Identification Number: 118694

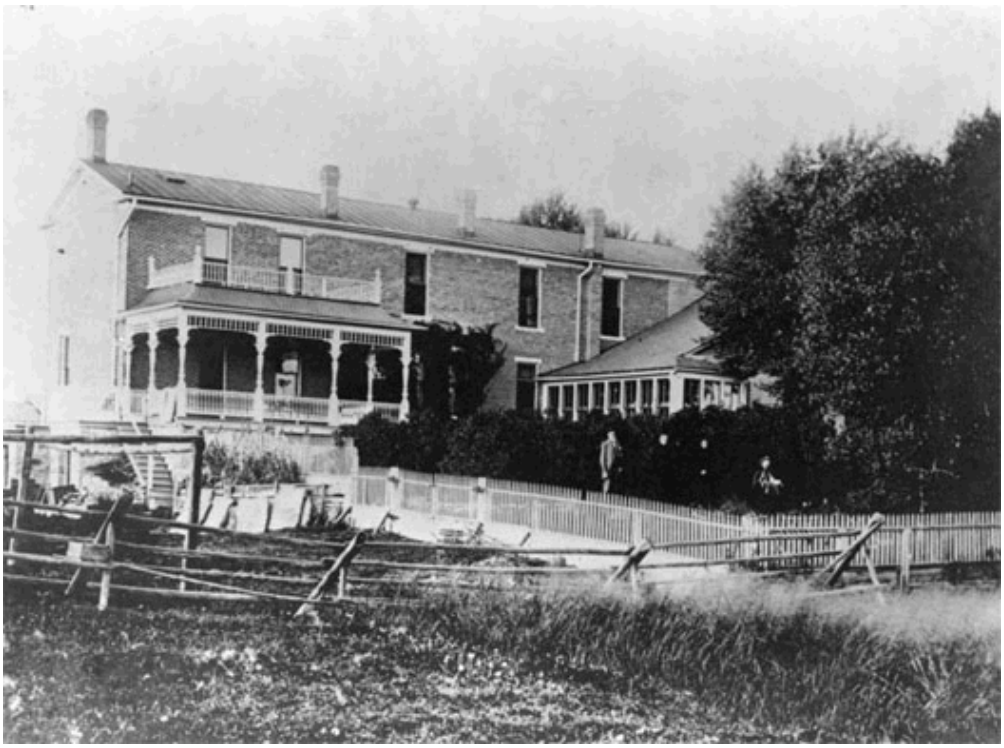
Type of Feature Contribution: Non Contributing

Feature: DZ Asphalt sidewalk/Interpretive trail

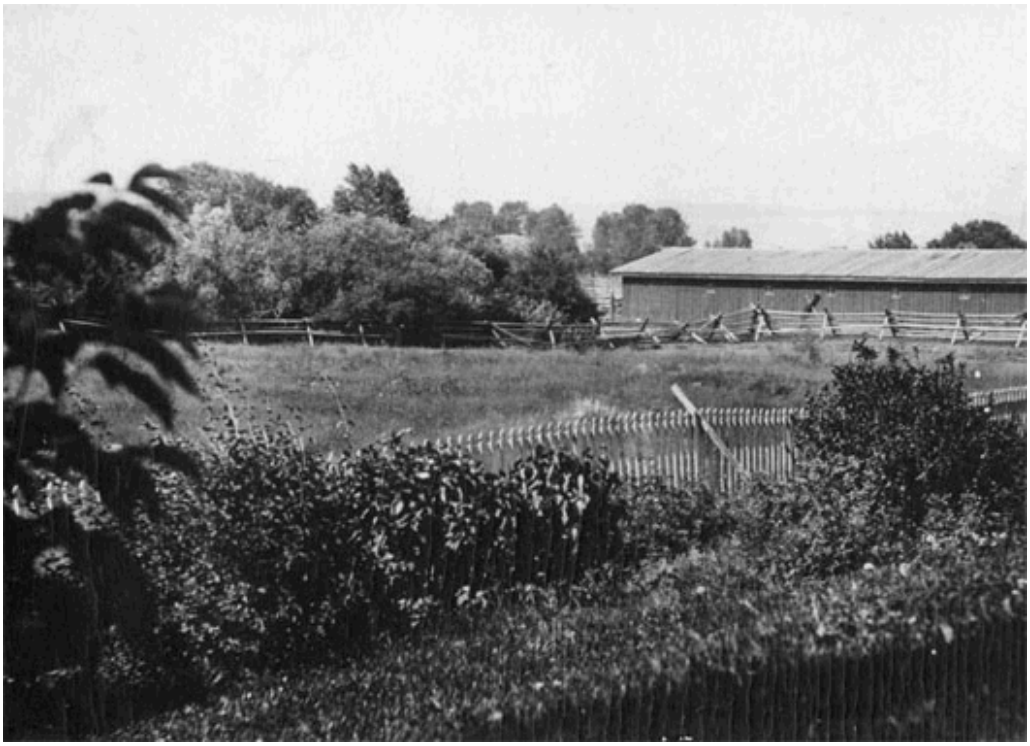
Feature Identification Number: 118680

Type of Feature Contribution: Non Contributing

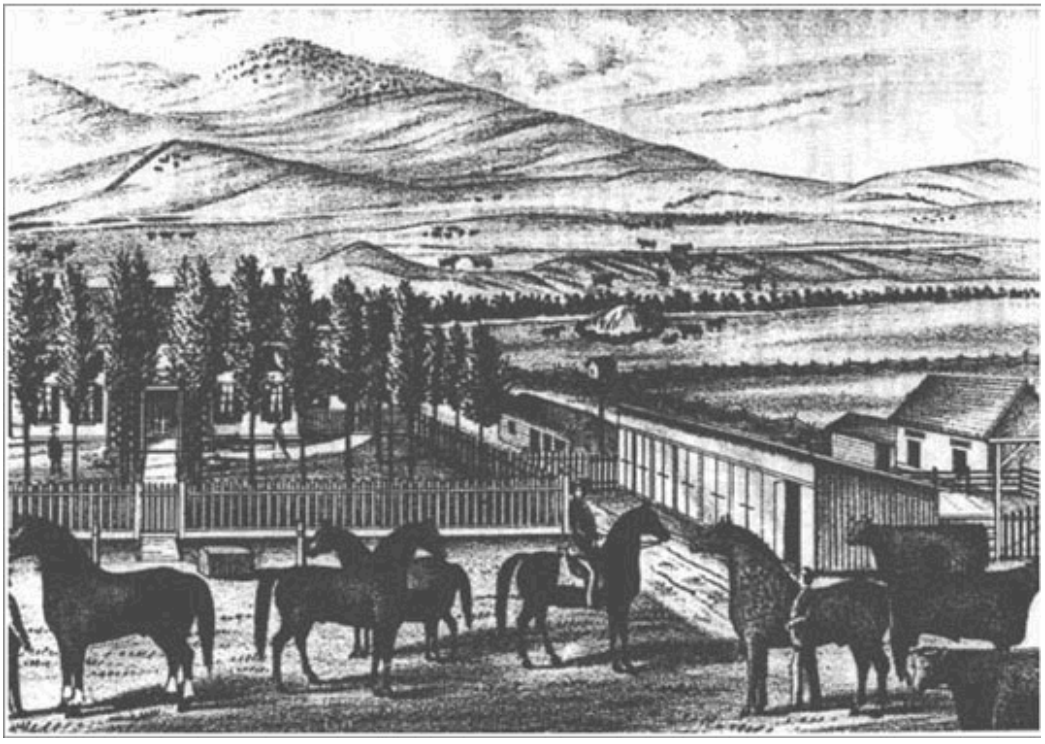
Landscape Characteristic Graphics:



Rear yard of Grant Kohrs Ranch House with Conrad and Augusta, circa 1890. Source: Grant Kohrs Ranch NHS Archives.



Flower garden and shrubs, south side of Grant Kohrs Ranch House, possibly 1935.
Source: Grant Kohrs Ranch NHS Archives.



Grant-Kohrs ranch house published in History of Montana (M.A. Leeson), 1884.
Grant-Kohrs Ranch NHS archives, Catalog no. GRKO 15668.

Topography

N/A

Vegetation

At a park-wide scale, the natural vegetation found within the Grant-Kohrs Ranch NHS generally reflects the patterns of vegetation found during both historic periods. The riparian zone along the Clark Fork River and other natural waterbodies are more heavily vegetated than the rest of the ranch, and contain native shrubs, trees, and grasses that would have been present during the ranch's early development. Drier upland areas are devoid of shrubs and trees, and contain only grasses. However, species composition of these areas has changed over time as land has been placed in cultivation, heavy metals have been introduced to the floodplain, and non-native plants have out-competed native species.

References dating to the early and mid-19th century note that riparian areas were vegetated with willow, aspen, birch, alder, and wild rye grasses, as well as occasional clusters of currant and gooseberry bushes (Eckberg 4). Assuming that cottonwoods may have been identified as aspen (which shares the same genus), all these species (except wild rye grass) were present within the riparian zone during the 2002 Rice/Hardin inventory. However, the native plant communities associated with these species no longer compose the majority of the riparian woodland.

A great deal of research has been conducted in order to gain a better understanding of what type of vegetation may have been present within the riparian zone before toxic metal contamination began in 1884. This is summarized in the CLR (CLR 4.19).

The low-lying areas along the river have been deliberately altered by cultivation of grains and hay. References indicate that as early as 1863, Grant was cultivating "a couple of acres of oats" on his ranch. In 1868 Conrad Kohrs was raising hay in the bottomland area between the ranch home and the river, and plowing the adjoining benchland for grain (Eckberg 2). Following the winter of 1872-1873, Kohrs also planted excelsior oats to stock more winter feed for the cattle.

In the 1890s and early 1900s, Kohrs was cultivating non-native hay crops, including timothy, red clover, wheat, alfalfa, and potatoes, as well as oats. Except for timothy, red clover, and alfalfa, which are still present in the hay fields and contribute to the Grant-Kohrs period, the remainder of these crops are no longer cultivated on the ranch.

When Con Warren took over the ranch, he increased the diversity of these crops. Throughout the 1930s and 1940s he cultivated potatoes, barley, peas, oats, wheat, mangels, alfalfa, and intermediate wheatgrass, in addition to native hay, timothy, and clover. By the late 1950s, however, Warren abandoned the cultivation of grains, and hay became the predominant crop cultivated in the fields. This remains the case today.

In the 1984 Rice/Ray study, smooth brome, meadow foxtail, redtop bentgrass, Kentucky bluegrass, and white clover were the primary species observed in the hayfields. It is highly likely that these species were present at the end of the period of significance. They contribute to the Warren period of significance.

Dry upland grass species in the upland pasture area have changed slightly from the time Johnny Grant first began ranching the land and therefore contribute to the historical significance of the site. Con Kohrs commented that when he first saw Deer Lodge Valley, bunchgrass was abundant throughout the upland area.(Eckberg 1-2). Since much of the upland pasture area has been primarily used for grazing, it retains much of the character of natural grassland communities (Hardin 2003).

Vegetation surrounding the Warren residential complex has changed since Con Warren retired from ranching in 1982. The cottonwoods that historically lined the entry lane were removed sometime between 1983 and 1990. The following vegetation is missing from the Warren period: additional spruce trees, cottonwood trees, Siberian peas, ponderosa pine, juniper shrub, weeping birch, lilac shrubs, currants, mountain alder, maple, lodgepole pine, bishop's weed, clematis, and peonies. Also missing is the small flower and vegetable garden that was located somewhere to the west of the house. The vegetation that remains on the site contributes to the period of significance.

Based upon research conducted for the Cultural Landscape Inventory (CLI), the primary vegetation features within the Grant-Kohrs Residence landscape include a formal arrangement of cottonwood trees, specimen tree and shrubs, turf grass and ornamental garden plantings. These plantings have evolved over the years. Due to NPS preservation and restoration efforts there are many contributing and non-contributing, compatible features within this landscape.

Although none of the original black cottonwoods (Populus trichocarpa) found in the front lawn of the ranch home survive from the period of significance, the NPS planted the same species of trees in the historic grid pattern (approximately 15 feet on center) to reflect the original pattern that dates back to the 1870s. A single row of trees edges each side of the walkway and side yard. A double row edges the front. Three green ash (Fraxinus pennsylvanica) were also planted just east of the fence, as part of the 2002-2003 restoration efforts. These trees support the historic significance of the landscape.

In addition to the geometric patterning of cottonwoods in the front lawn, plantings of specimen tree and shrub species were interspersed throughout the Ranch House landscape during the period of significance. Stumps of honeysuckle (Lonicera spp.), reportedly planted during the Grant years, as well as a weeping birch stump (Betula pendula) in the northeast corner of the property offer clues as to the types of ornamental vegetation cultivated.

Two specimen trees of note include the large black willow (Salix scoulerana) and a blue spruce

(Picea pungens) north of the main house. The willow was planted by Conrad Warren for his grandmother, Augusta Kohrs, in 1935. The spruce tree was reportedly planted by John Bielenberg, who "dug it up and brought it back from afar in the "California cart'. " (Shapins 2003, 33). Both these trees contribute to the historic significance of the landscape.

The cluster of junipers (Juniperus occidentalis) in the southeastern corner of the property are considered contributing features because they historically framed a path leading from the lawn to the planting beds within the lower garden. The double row of lilacs and other specimen plantings contained within the lower garden also date from the period of significance and are considered contributing features. The barberry shrubs flanking the steps leading to the lower garden were planted in 1934 by Con Warren. These plants are also considered contributing features.

Although a variety of flowers and vegetables were grown within the lower garden, it is not known if all of the species currently represented there contribute to the historic significance of the landscape. Those that have been documented as being cultivated by Augusta Kohrs during the period of significance, and which are currently found in the garden, include peonies, sweet peas, monkshood, daffodils, hyacinths, tulips, crocuses, and roses. As these plants are known to date to the historic period, they are considered contributing features. Some ornamental plants, such as Granny's Bonnet (Aquilegia), Johnny Jump Ups (Viola tricolor), Heart's Ease (Viola x wittrockiana), and several varieties of roses are known to be missing, as are the vegetables that were planted west of the sweet pea trellis. Other plants currently found in the garden have an undetermined association (CLR 4.19-4.22).

Key to Landscape Features Description Abbreviations :

Riparian vegetation = rv
Ornamental vegetation = ov
Perrenial garden = pg
Riparian zone vegetation = rzv
Non-irrigated pasture grasses = nipg
Irrigated hay grasses = ihg
Irrigated pasture grasses (effluent fields) = ipg
Dry range/pasture grassed = dr/pg
Riparian vegetation communities = rvc
Railroad bed grasses = rbg
Barrow pit vegetation = bpv
Ungrazed prairie = up

Character-defining Features:

Feature: HR Riparian vegetation (rv)

Feature Identification Number: 119452

Type of Feature Contribution: Contributing

Feature: HR willow sp. rv

Feature Identification Number: 119454

Type of Feature Contribution: Contributing

Feature: HR smooth brome rv

Feature Identification Number: 119456

Type of Feature Contribution: Contributing

Feature: HR black cottonwood rv

Feature Identification Number: 119458

Type of Feature Contribution: Contributing

Feature: HR cattail rv

Feature Identification Number: 119460

Type of Feature Contribution: Contributing

Feature: HR Lower Yard Garden

Feature Identification Number: 119462

Type of Feature Contribution: Non Contributing

Feature: HR Row of cottonwoods

Feature Identification Number: 119464

Type of Feature Contribution: Contributing

Feature: HR Mix of native/non-native grasses/forb

Feature Identification Number: 119466

Type of Feature Contribution: Non Contributing

Feature: WHR Mix of nat./non-nat. pasture grasses

Feature Identification Number: 119468

Type of Feature Contribution: Contributing

Feature: GKR Grid of cottonwood trees - compat.

Feature Identification Number: 119470

Type of Feature Contribution: Non Contributing

Feature: GKR black willow ov

Feature Identification Number: 119472

Type of Feature Contribution: Contributing

Feature: GKR green ash ov - compatible

Feature Identification Number: 119474

Type of Feature Contribution: Non Contributing

Feature: GKR juniper ov

Feature Identification Number: 119476

Type of Feature Contribution: Contributing

Feature: GKR blue spruce ov

Feature Identification Number: 119478

Type of Feature Contribution: Contributing

Feature: GKR boxelders ov

Feature Identification Number: 119480

Type of Feature Contribution: Contributing

Feature: GKR lilac shrubs ov

Feature Identification Number: 119482

Type of Feature Contribution: Contributing

Feature: GKR twinberry honeysuckle ov

Feature Identification Number: 119484

Type of Feature Contribution: Contributing

Feature: GKR lanceleaf cottonwoods ov

Feature Identification Number: 119486

Type of Feature Contribution: Contributing

Feature: GKR barberry shrubs ov

Feature Identification Number: 119488

Type of Feature Contribution: Contributing

Feature: GKR gooseberry shrubs ov

Feature Identification Number: 119490

Type of Feature Contribution: Contributing

Feature: GKR cotoneaster shrub ov

Feature Identification Number: 119492

Type of Feature Contribution: Contributing

Feature: GKR babies breath pg

Feature Identification Number: 119496

Type of Feature Contribution: Undetermined

Feature: GKR bachelor buttons pg

Feature Identification Number: 119498

Type of Feature Contribution: Undetermined

Feature: GKR columbines pg

Feature Identification Number: 119500

Type of Feature Contribution: Undetermined

Feature: GKR crocuses pg

Feature Identification Number: 119504

Type of Feature Contribution: Contributing

Feature: GKR daffodils pg

Feature Identification Number: 119506

Type of Feature Contribution: Contributing

Feature: GKR daisies pg

Feature Identification Number: 119508

Type of Feature Contribution: Undetermined

Feature: GKR delphiniums pg

Feature Identification Number: 119510

Type of Feature Contribution: Undetermined

Feature: GKR flox pg

Feature Identification Number: 119512

Type of Feature Contribution: Undetermined

Feature: GKR forget-me-nots pg

Feature Identification Number: 119514

Type of Feature Contribution: Undetermined

Feature: GKR geraniums pg

Feature Identification Number: 119516

Type of Feature Contribution: Undetermined

Feature: GKR goldenrods pg

Feature Identification Number: 119518

Type of Feature Contribution: Undetermined

Feature: GKR hairbells pg

Feature Identification Number: 119520

Type of Feature Contribution: Undetermined

Feature: GKR hemerocalis pg

Feature Identification Number: 119522

Type of Feature Contribution: Undetermined

Feature: GKR hens and chicks pg

Feature Identification Number: 119524

Type of Feature Contribution: Undetermined

Feature: GKR hyacinths pg

Feature Identification Number: 119526

Type of Feature Contribution: Contributing

Feature: GKR irises pg

Feature Identification Number: 119528

Type of Feature Contribution: Undetermined

Feature: GKR dwarf irises pg

Feature Identification Number: 119530

Type of Feature Contribution: Undetermined

Feature: GKR lilies pg

Feature Identification Number: 119532

Type of Feature Contribution: Contributing

Feature: GKR monk's hood pg

Feature Identification Number: 119534

Type of Feature Contribution: Contributing

Feature: GKR peonies pg

Feature Identification Number: 119536

Type of Feature Contribution: Contributing

Feature: GKR pink poppies pg

Feature Identification Number: 119538

Type of Feature Contribution: Undetermined

Feature: GKR yellow raniculus pg

Feature Identification Number: 119540

Type of Feature Contribution: Undetermined

Feature: GKR rhubarb, soapwoods pg

Feature Identification Number: 119542

Type of Feature Contribution: Undetermined

Feature: GKR sweet peas pg

Feature Identification Number: 119544

Type of Feature Contribution: Contributing

Feature: GKR sweet williams pg

Feature Identification Number: 119546

Type of Feature Contribution: Undetermined

Feature: GKR tea roses pg

Feature Identification Number: 119548

Type of Feature Contribution: Contributing

Feature: GKR orange poppies pg

Feature Identification Number: 119550

Type of Feature Contribution: Undetermined

Feature: GKR tulips pg

Feature Identification Number: 119552

Type of Feature Contribution: Contributing

Feature: GKR Lawn

Feature Identification Number: 119554

Type of Feature Contribution: Contributing

Feature: WR Ornamental vegetation (ov)

Feature Identification Number: 119556

Type of Feature Contribution: Contributing

Feature: WR Black cottonwood ov

Feature Identification Number: 119558

Type of Feature Contribution: Contributing

Feature: WR Spruce ov

Feature Identification Number: 119586

Type of Feature Contribution: Contributing

Feature: WR Mountain alder ov

Feature Identification Number: 119588

Type of Feature Contribution: Contributing

Feature: WR Mountain ash ov

Feature Identification Number: 119590

Type of Feature Contribution: Contributing

Feature: WR Maple ov

Feature Identification Number: 119592

Type of Feature Contribution: Contributing

Feature: WR Green ash ov

Feature Identification Number: 119594

Type of Feature Contribution: Contributing

Feature: WR Juniper tree ov

Feature Identification Number: 119596

Type of Feature Contribution: Contributing

Feature: WR Juniper shrub ov

Feature Identification Number: 119598

Type of Feature Contribution: Contributing

Feature: WR Cotoneaster ov

Feature Identification Number: 119600

Type of Feature Contribution: Contributing

Feature: WR Riparian zone vegetation (rzv)

Feature Identification Number: 119602

Type of Feature Contribution: Contributing

Feature: WR willow sp. rzv

Feature Identification Number: 119604

Type of Feature Contribution: Contributing

Feature: WR smooth brome rzv

Feature Identification Number: 119606

Type of Feature Contribution: Contributing

Feature: WR black cottonwood rzv

Feature Identification Number: 119608

Type of Feature Contribution: Contributing

Feature: WR Non-irrigated pasture grasses

Feature Identification Number: 119610

Type of Feature Contribution: Contributing

Feature: WR bluebunch wheatgrass nipg

Feature Identification Number: 119612

Type of Feature Contribution: Contributing

Feature: WR moss phlox nipg

Feature Identification Number: 119614

Type of Feature Contribution: Contributing

Feature: WR needle-and-thread grass nipg

Feature Identification Number: 119616

Type of Feature Contribution: Contributing

Feature: WR Missouri goldenrod nipg

Feature Identification Number: 119618

Type of Feature Contribution: Contributing

Feature: WR hairy goldenaster nipg

Feature Identification Number: 119620

Type of Feature Contribution: Contributing

Feature: WR desert alyssum nipg

Feature Identification Number: 119622

Type of Feature Contribution: Contributing

Feature: WR blue grama nipg

Feature Identification Number: 119624

Type of Feature Contribution: Contributing

Feature: WR Lawn

Feature Identification Number: 119626

Feature: PHF smooth brome ihg

Feature Identification Number: 119628

Type of Feature Contribution: Contributing

Feature: PHF common timothy ihg

Feature Identification Number: 119630

Type of Feature Contribution: Contributing

Feature: PHF Kentucky bluegrass ihg

Feature Identification Number: 119632

Type of Feature Contribution: Contributing

Feature: PHF red clover ihg

Feature Identification Number: 119634

Type of Feature Contribution: Contributing

Feature: PHF Canada thistle ihg

Feature Identification Number: 119636

Type of Feature Contribution: Non Contributing

Feature: PHF crested wheatgrass ihg

Feature Identification Number: 119638

Type of Feature Contribution: Contributing

Feature: PHF white clover ihg

Feature Identification Number: 119640

Type of Feature Contribution: Undetermined

Feature: PHF redtop bentgrass ihg

Feature Identification Number: 119642

Type of Feature Contribution: Contributing

Feature: PHF intermediate wheatgrass ihg

Feature Identification Number: 119644

Type of Feature Contribution: Contributing

Feature: PHF bluebunch wheatgrass ihg

Feature Identification Number: 119646

Type of Feature Contribution: Contributing

Feature: PHF moss phlox ihg

Feature Identification Number: 119648

Type of Feature Contribution: Contributing

Feature: PHF needle-and-thread grass ihg

Feature Identification Number: 119650

Type of Feature Contribution: Contributing

Feature: PHF Missouri goldenrod ihg

Feature Identification Number: 119652

Type of Feature Contribution: Contributing

Feature: PHF hairy goldenaster ihg

Feature Identification Number: 119654

Type of Feature Contribution: Contributing

Feature: PHF desert alyssum ihg

Feature Identification Number: 119656

Type of Feature Contribution: Non Contributing

Feature: PHF blue grama ihg

Feature Identification Number: 119658

Type of Feature Contribution: Contributing

Feature: PHF smooth brome ipg

Feature Identification Number: 119660

Type of Feature Contribution: Contributing

Feature: PHF spotted knapweed ipg

Feature Identification Number: 119662

Type of Feature Contribution: Non Contributing

Feature: PHF bluebunch wheatgrass ipg

Feature Identification Number: 119664

Type of Feature Contribution: Contributing

Feature: PHF moss phlox ipg

Feature Identification Number: 119666

Type of Feature Contribution: Contributing

Feature: PHF needle-and-thread grass ipg

Feature Identification Number: 119668

Type of Feature Contribution: Contributing

Feature: PHF Missouri goldenrod ipg

Feature Identification Number: 119670

Type of Feature Contribution: Contributing

Feature: PHF hairy goldenaster ipg

Feature Identification Number: 119672

Type of Feature Contribution: Contributing

Feature: PHF desert alyssum ipg

Feature Identification Number: 119674

Type of Feature Contribution: Non Contributing

Feature: PHF blue grama ipg

Feature Identification Number: 119676

Type of Feature Contribution: Contributing

Feature: PHF orchard grass ipg

Feature Identification Number: 119678

Type of Feature Contribution: Non Contributing

Feature: PHF western sticktight ipg

Feature Identification Number: 119680

Type of Feature Contribution: Contributing

Feature: UP smooth brome ihg

Feature Identification Number: 119682

Type of Feature Contribution: Contributing

Feature: UP common timothy ihg

Feature Identification Number: 119684

Type of Feature Contribution: Contributing

Feature: UP Kentucky bluegrass ihg

Feature Identification Number: 119686

Type of Feature Contribution: Undetermined

Feature: UP red clover ihg

Feature Identification Number: 119688

Type of Feature Contribution: Contributing

Feature: UP Canada thistle ihg

Feature Identification Number: 119690

Type of Feature Contribution: Non Contributing

Feature: UP crested wheatgrass ihg

Feature Identification Number: 119692

Type of Feature Contribution: Contributing

Feature: UP white clover ihg

Feature Identification Number: 119694

Type of Feature Contribution: Undetermined

Feature: UP redtop bentgrass ihg

Feature Identification Number: 119696

Type of Feature Contribution: Contributing

Feature: UP intermediate wheatgrass ihg

Feature Identification Number: 119698

Type of Feature Contribution: Contributing

Feature: UP common yarrow dr/pg

Feature Identification Number: 119700

Type of Feature Contribution: Contributing

Feature: UP crested wheatgrass dr/pg

Feature Identification Number: 119702

Type of Feature Contribution: Non Contributing

Feature: UP fringed sagebrush dr/pg

Feature Identification Number: 119704

Type of Feature Contribution: Contributing

Feature: UP standing milkvetch dr/pg

Feature Identification Number: 119706

Type of Feature Contribution: Contributing

Feature: UP blue grama dr/pg

Feature Identification Number: 119708

Type of Feature Contribution: Contributing

Feature: UP smooth brome dr/pg

Feature Identification Number: 119710

Type of Feature Contribution: Non Contributing

Feature: UP spotted knapweed dr/pg

Feature Identification Number: 119712

Type of Feature Contribution: Non Contributing

Feature: UP waveleaf thistle dr/pg

Feature Identification Number: 119714

Type of Feature Contribution: Contributing

Feature: UP rubber rabbitbush dr/pg

Feature Identification Number: 119716

Type of Feature Contribution: Contributing

Feature: UP shaggy fleabane dr/pg

Feature Identification Number: 119718

Type of Feature Contribution: Contributing

Feature: UP cultleaf daisy dr/pg

Feature Identification Number: 119720

Type of Feature Contribution: Contributing

Feature: UP rough fescue dr/pg

Feature Identification Number: 119722

Type of Feature Contribution: Contributing

Feature: UP scarlet gaura dr/pg

Feature Identification Number: 119724

Type of Feature Contribution: Contributing

Feature: UP prairie smoke dr/pg

Feature Identification Number: 119726

Type of Feature Contribution: Contributing

Feature: UP curly-cup gumweed dr/pg

Feature Identification Number: 119728

Type of Feature Contribution: Contributing

Feature: UP broom snakeweed dr/pg

Feature Identification Number: 119730

Type of Feature Contribution: Contributing

Feature: UP baby's breath dr/pg

Feature Identification Number: 119732

Type of Feature Contribution: Non Contributing

Feature: UP needle-and-thread dr/pg

Feature Identification Number: 119734

Type of Feature Contribution: Contributing

Feature: UP little-leaf alumroot dr/pg

Feature Identification Number: 119736

Type of Feature Contribution: Contributing

Feature: UP winterfat dr/pg

Feature Identification Number: 119738

Type of Feature Contribution: Contributing

Feature: UP bitterroot dr/pg

Feature Identification Number: 119740

Type of Feature Contribution: Contributing

Feature: UP yellow sweetclover dr/pg

Feature Identification Number: 119742

Type of Feature Contribution: Non Contributing

Feature: UP plains pricklypear dr/pg

Feature Identification Number: 119744

Type of Feature Contribution: Contributing

Feature: UP Bessey's locoweed dr/pg

Feature Identification Number: 119746

Type of Feature Contribution: Contributing

Feature: UP western wheatgrass dr/pg

Feature Identification Number: 119748

Type of Feature Contribution: Contributing

Feature: UP longleaf phlox dr/pg

Feature Identification Number: 119750

Type of Feature Contribution: Contributing

Feature: UP moss phlox dr/pg

Feature Identification Number: 119752

Type of Feature Contribution: Contributing

Feature: UP sandberg's bluegrass dr/pg

Feature Identification Number: 119754

Type of Feature Contribution: Contributing

Feature: UP bluebunch wheatgrass dr/pg

Feature Identification Number: 119756

Type of Feature Contribution: Contributing

Feature: UP tall tumblemustard dr/pg

Feature Identification Number: 119758

Type of Feature Contribution: Non Contributing

Feature: UP Missouri goldenrod dr/pg

Feature Identification Number: 119760

Type of Feature Contribution: Contributing

Feature: UP scarlet globemarrow dr/pg

Feature Identification Number: 119762

Type of Feature Contribution: Contributing

Feature: UP dandelion dr/pg

Feature Identification Number: 119764

Type of Feature Contribution: Non Contributing

Feature: UP spineless horsebrush dr/pg

Feature Identification Number: 119766

Type of Feature Contribution: Contributing

Feature: UP intermediate wheatgrass dr/pg

Feature Identification Number: 119768

Type of Feature Contribution: Non Contributing

Feature: UP Apple tree cluster

Feature Identification Number: 119770

Type of Feature Contribution: Contributing

Feature: UP Cottonwood tree cluster

Feature Identification Number: 119772

Type of Feature Contribution: Contributing

Feature: RW geyer willow rvc

Feature Identification Number: 119774

Type of Feature Contribution: Contributing

Feature: RW water birch rvc

Feature Identification Number: 119776

Type of Feature Contribution: Contributing

Feature: RW sandbar willow rvc

Feature Identification Number: 119778

Type of Feature Contribution: Contributing

Feature: RW western snowberry rvc

Feature Identification Number: 119780

Type of Feature Contribution: Contributing

Feature: RW Bebb willow rvc

Feature Identification Number: 119782

Type of Feature Contribution: Contributing

Feature: RW woods rose rvc

Feature Identification Number: 119784

Type of Feature Contribution: Contributing

Feature: RW smooth brome rvc

Feature Identification Number: 119786

Type of Feature Contribution: Non Contributing

Feature: RW Baltic rush rvc

Feature Identification Number: 119788

Type of Feature Contribution: Contributing

Feature: RW redtop bentgrass rvc

Feature Identification Number: 119790

Type of Feature Contribution: Non Contributing

Feature: RW beaked sedge rvc

Feature Identification Number: 119792

Type of Feature Contribution: Contributing

Feature: RW black cottonwood rvc

Feature Identification Number: 119794

Type of Feature Contribution: Contributing

Feature: RW Rocky Mountain juniper rvc

Feature Identification Number: 119796

Type of Feature Contribution: Contributing

Feature: RW cattail rvc

Feature Identification Number: 119802

Type of Feature Contribution: Contributing

Feature: RR bluebunch wheatgrass rbg

Feature Identification Number: 119804

Type of Feature Contribution: Contributing

Feature: RR moss phlox rbg

Feature Identification Number: 119806

Type of Feature Contribution: Contributing

Feature: RR needle-and-thread grass rbg

Feature Identification Number: 119808

Type of Feature Contribution: Contributing

Feature: RR Missouri goldenrod rbg

Feature Identification Number: 119810

Type of Feature Contribution: Contributing

Feature: RR hairy goldenaster rbg

Feature Identification Number: 119812

Type of Feature Contribution: Contributing

Feature: RR desert alyssum rbg

Feature Identification Number: 119814

Type of Feature Contribution: Contributing

Feature: RR blue grama rbg

Feature Identification Number: 119816

Type of Feature Contribution: Contributing

Feature: RR spring whitlow-grass rbg

Feature Identification Number: 119818

Type of Feature Contribution: Contributing

Feature: RR common sagewort rbg

Feature Identification Number: 119820

Type of Feature Contribution: Contributing

Feature: RR spotted knapweed rbg

Feature Identification Number: 119822

Type of Feature Contribution: Non Contributing

Feature: RR baby's breath rbg

Feature Identification Number: 119824

Type of Feature Contribution: Non Contributing

Feature: RR cattails bpv

Feature Identification Number: 119826

Type of Feature Contribution: Contributing

Feature: RR softstem bulrush bpv

Feature Identification Number: 119828

Type of Feature Contribution: Contributing

Feature: RR forget-me-nots bpv

Feature Identification Number: 119830

Type of Feature Contribution: Contributing

Feature: RR cottonwoods bpv

Feature Identification Number: 119832

Type of Feature Contribution: Contributing

Feature: RR willows bpv

Feature Identification Number: 119834

Type of Feature Contribution: Contributing

Feature: RR western serviceberry bpv

Feature Identification Number: 119836

Type of Feature Contribution: Contributing

Feature: RR yellow rocket bpv

Feature Identification Number: 119838

Type of Feature Contribution: Non Contributing

Feature: RR ballhead waterleaf bpv

Feature Identification Number: 119840

Type of Feature Contribution: Contributing

Feature: RR Utah honeysuckle bpv

Feature Identification Number: 119842

Type of Feature Contribution: Contributing

Feature: RR blunt-leaf yellowcress bpv

Feature Identification Number: 119844

Type of Feature Contribution: Contributing

Feature: RR redosier dogwood bpv

Feature Identification Number: 119846

Type of Feature Contribution: Contributing

Feature: RR chokecherry bpv

Feature Identification Number: 119848

Type of Feature Contribution: Contributing

Feature: RR violet bpv

Feature Identification Number: 119850

Type of Feature Contribution: Contributing

Feature: RR bluebunch wheatgrass up

Feature Identification Number: 119852

Type of Feature Contribution: Contributing

Feature: RR giant wildrye up

Feature Identification Number: 119854

Type of Feature Contribution: Contributing

Feature: RR needle-and-thread grass up

Feature Identification Number: 119856

Type of Feature Contribution: Contributing

Feature: RR Indian ricegrass up

Feature Identification Number: 119858

Type of Feature Contribution: Contributing

Feature: RR moss phlox up

Feature Identification Number: 119860

Type of Feature Contribution: Contributing

Feature: RR long-leaf phlox up

Feature Identification Number: 119862

Type of Feature Contribution: Contributing

Feature: RR land larkspur up

Feature Identification Number: 119864

Type of Feature Contribution: Contributing

Feature: RR woolypod milkvetch up

Feature Identification Number: 119866

Type of Feature Contribution: Contributing

Feature: RR plains prickleypear up

Feature Identification Number: 119868

Type of Feature Contribution: Contributing

Feature: DZ willow sp. rv

Feature Identification Number: 119870

Type of Feature Contribution: Contributing

Feature: DZ smooth brome rv

Feature Identification Number: 119872

Type of Feature Contribution: Non Contributing

Feature: DZ black cottonwood rv

Feature Identification Number: 119874

Type of Feature Contribution: Contributing

Feature: DZ bluebunch wheatgrass nipg

Feature Identification Number: 119876

Type of Feature Contribution: Contributing

Feature: DZ moss phlox nipg

Feature Identification Number: 119878

Type of Feature Contribution: Contributing

Feature: DZ needle-and-thread grass nipg

Feature Identification Number: 119880

Type of Feature Contribution: Contributing

Feature: DZ Missouri goldenrod nipg

Feature Identification Number: 119882

Type of Feature Contribution: Contributing

Feature: DZ hairy goldenaster nipg

Feature Identification Number: 119884

Type of Feature Contribution: Contributing

Feature: DZ desert alyssum nipg

Feature Identification Number: 119886

Type of Feature Contribution: Non Contributing

Feature: DZ blue grama nipg

Feature Identification Number: 119888

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:

Front yard of Grant Kohrs Ranch House, circa 1900. Source: Grant Kohrs Ranch NHS Archives.

Augusta Kohrs in the garden watering plants, circa 1930. Source: Grant Kohrs Ranch NHS Archives.

Views and Vistas

Information that exists regarding historic views and vistas is derived from drawings dating from latter part of the 19th-century. In the 1865 Granville Stuart drawing, the 1866 (anonymous) drawing of the ranch home, and the ca. 1880 Leeson drawing, the western foothills and Flint Creek Mountain ranges figure prominently, as does the vegetated riparian corridor. As this land remains open and undeveloped, these expansive views remain much the same today as they did throughout both the Grant-Kohrs and Warren periods. As a result, they play an important role in establishing the character of the Grant-Kohrs Ranch, and are considered contributing features. It is important to note that although some of middleground views characterized by the western viewshed are within the park boundary (the Upland Pasture Area), much of this viewshed is not in park ownership. The acquisition of scenic easements for this land has been recommended in several park planning documents (see CLR 4.30). Degradation of these views would have significant negative impacts on the park's visual resources and their ability to interpret the historic character of the ranch.

Of additional importance is the forested backdrop of Mount Powell and Deer Lodge Mountain. Park planning documents also acknowledge the importance of sustaining this forested mountain backdrop by establishing the need to work with the Montana State Prison and US Forest Service regarding timber harvest plans and silviculture practices to maintain this important landscape (see CLR 4.30).

Based upon historic drawings and photographs, other visual resources that contribute to historic views include the pastures and hayfields found along either side of the Clark Fork River, a variety of ranch structures, fencing types (defining corrals and pastures), as well as the livestock contained within these areas. While buildings and structures have been added to the landscape over time, and the location of fencing has changed over the years, all these features continue to figure prominently within contemporary views and help define the character of the ranch. Certainly the presence of livestock contributes to the historic significance of the landscape.

Views of the Hillcrest Cemetery located to the south of the ranch also contribute to the historic significance of the landscape. The grave sites of the Kohrs, Bielenberg, and Warren families are found here. White birch and fir trees are planted throughout the cemetery and are the dominant landscape features that can be seen from miles around (Amphion 27).

While views of modern commercial and residential development located to the west and east of the Ranch (along Business Loop 90), would not have been prevalent during the Grant-Kohrs period, much of this development (particularly the fairgrounds) was already constructed by the end of the Warren period and therefore contribute to the site's historic significance. An exception to this is the new commercial development located directly east of the Warren Hereford Ranch, along the curve of Business Loop 90, directly north of the fairgrounds. Based upon aerial photo analysis, this area was developed in the early 1990s and does not contribute to

the significance of the period (CLR 4.30-4.31).

Character-defining Features:

Feature: HR Views of western foothills

Feature Identification Number: 118984

Type of Feature Contribution: Contributing

Feature: HR Views of Deer Lodge Mt. & Mt. Powell

Feature Identification Number: 118986

Type of Feature Contribution: Contributing

Feature: HR Views of riparian corridor

Feature Identification Number: 118988

Type of Feature Contribution: Contributing

Feature: HR Views of Grant-Kohrs residence

Feature Identification Number: 118990

Type of Feature Contribution: Contributing

Feature: HR Views w/in fields, feedlots & corrals

Feature Identification Number: 118992

Type of Feature Contribution: Contributing

Feature: WHR Views to fairgrounds

Feature Identification Number: 118994

Type of Feature Contribution: Contributing

Feature: WHR Views of railroad corridor

Feature Identification Number: 118996

Type of Feature Contribution: Contributing

Feature: WHR Views to Warren Residence

Feature Identification Number: 119000

Type of Feature Contribution: Contributing

Feature: WHR Views to Home Ranch complex

Feature Identification Number: 119004

Type of Feature Contribution: Contributing

Feature: GKR Views of RR Corridor & Warren Res.

Feature Identification Number: 119008

Type of Feature Contribution: Contributing

Feature: GKR to low. ranch, rip. corr. & w. foot.

Feature Identification Number: 119012

Type of Feature Contribution: Contributing

Feature: GKR Views to Bunkhouse Row

Feature Identification Number: 119020

Type of Feature Contribution: Contributing

Feature: GKR Views from within lower garden

Feature Identification Number: 119022

Type of Feature Contribution: Contributing

Feature: GKR Views to Hillcrest Cemetery

Feature Identification Number: 119026

Type of Feature Contribution: Contributing

Feature: WR Views within yard

Feature Identification Number: 119030

Type of Feature Contribution: Contributing

Feature: WR Views of riparian zone

Feature Identification Number: 119032

Type of Feature Contribution: Contributing

Feature: WR Views to Grant-Kohrs Residence

Feature Identification Number: 119036

Type of Feature Contribution: Contributing

Feature: WR Views to Warren Hereford Ranch

Feature Identification Number: 119088

Type of Feature Contribution: Contributing

Feature: WR Views of railroad corridor

Feature Identification Number: 119090

Type of Feature Contribution: Contributing

Feature: WR Views of Visitor Center Complex

Feature Identification Number: 119092

Type of Feature Contribution: Non Contributing

Feature: PHF Views to riparian corridor

Feature Identification Number: 119094

Type of Feature Contribution: Contributing

Feature: PHF Views to western foothills

Feature Identification Number: 119096

Type of Feature Contribution: Contributing

Feature: PHF Views of Deer Lodge

Feature Identification Number: 119098

Type of Feature Contribution: Contributing

Feature: PHF Views of sewage treatment ponds

Feature Identification Number: 119100

Type of Feature Contribution: Contributing

Feature: PHF Views of Home Ranch Complex

Feature Identification Number: 119102

Type of Feature Contribution: Contributing

Feature: PHF Views of Business Loop 90 corridor

Feature Identification Number: 119104

Type of Feature Contribution: Contributing

Feature: PHF Views of Railroad Corridor

Feature Identification Number: 119106

Type of Feature Contribution: Contributing

Feature: PHF Views of Hillcrest Cemetery

Feature Identification Number: 119108

Type of Feature Contribution: Contributing

Feature: UP Views of the ranch and riparian zone

Feature Identification Number: 119110

Type of Feature Contribution: Contributing

Feature: UP Views of Deer Lodge/Hillcrest Cemeter

Feature Identification Number: 119112

Type of Feature Contribution: Contributing

Feature: UP Views to Deer Lodge Mntn./Mt. Powell

Feature Identification Number: 119114

Type of Feature Contribution: Contributing

Feature: RW Views of pastures and hay fields

Feature Identification Number: 119116

Type of Feature Contribution: Contributing

Feature: RW Views within riparian woodland

Feature Identification Number: 119118

Type of Feature Contribution: Contributing

Feature: RW Views to sewage treatment ponds

Feature Identification Number: 119120

Type of Feature Contribution: Contributing

Feature: RR Views to Ranch complexes

Feature Identification Number: 119122

Type of Feature Contribution: Contributing

Feature: RR Views to Visitor Center complex

Feature Identification Number: 119124

Type of Feature Contribution: Non Contributing

Feature: RR Views framed by vegetation

Feature Identification Number: 119126

Type of Feature Contribution: Contributing

Feature: RR Views to riparian corridor and mntns.

Feature Identification Number: 119128

Type of Feature Contribution: Contributing

Feature: DZ Views of riparian area

Feature Identification Number: 119130

Type of Feature Contribution: Contributing

Feature: DZ Views of railroad tressels/corridor

Feature Identification Number: 119132

Type of Feature Contribution: Non Contributing

Feature: DZ Views within developed area

Feature Identification Number: 119134

Type of Feature Contribution: Non Contributing

Feature: DZ Views of fairgrounds & Bus. Loop 90

Feature Identification Number: 119136

Type of Feature Contribution: Non Contributing

Feature: DZ Views of Grant-Kohrs Ranch

Feature Identification Number: 119138

Type of Feature Contribution: Contributing

Condition

Condition Assessment and Impacts

Condition Assessment: Good

Assessment Date: 07/31/2004

Condition Assessment Explanatory Narrative:

The landscape of Grant-Kohrs Ranch NHS was assessed in good condition as per the CLR.

Condition Assessment: Good

Assessment Date: 08/10/2007

Condition Assessment Explanatory Narrative:

Superintendent concurred with good condition rating, per memo dated August 10, 2007.

Stabilization Measures:

Stabilization cost is the cumulative cost of the following unfunded GRKO PMIS stabilization projects:
56900 (Control Noxious Weeds)
132930 (cattle scale repair)
123539 (beef hoist repair)
132940 (visitor access repair)
87028 (historic fence/corral repair)
82927 (stabilize feed bunks)
133126 (repair fencing)
60051 (Exotic plant control)
55626 (repair irrigation system)

Impacts

Type of Impact: Agriculture

External or Internal: Internal

Impact Description: Normal wear and tear from ranching operations.

Type of Impact: Consumptive Use

External or Internal: Internal

Impact Description: Normal wear from visitation.

Type of Impact: Pests/Diseases

External or Internal: Internal

Impact Description: Invasive exotic plants require control.

Stabilization Costs

Landscape Stabilization Cost: 198,964.00

Cost Date: 08/07/2007

Level of Estimate: C - Similar Facilities

Cost Estimator: Regional Office

Treatment

Treatment

Approved Treatment: Preservation

Approved Treatment Document: Cultural Landscape Report

Document Date: 02/01/2009

Approved Treatment Document Explanatory Narrative:
The overall landscape treatment for the entire Grant-Kohrs Ranch cultural landscape is preservation, with selected rehabilitation and restoration as needed, as outlined in the CLR Part 2, page 14.

Additionally, some treatment recommendatsions were identified in the General Management Plan, dated March 1993. Page 14 states, "Cultural resource management will emphasize the preservation and use of historic structures and grounds through preservation maintenance, rehabilitation, restoration, and adaptive use." Page 18 mentions maintaining historic scenes in the landscape, and a future plan for the Ranch House historic landscape which will include provisions for restoration of the landscape.

Approved Treatment Completed: No

Approved Treatment Costs

Cost Date: 02/01/2009

Bibliography and Supplemental Information

Bibliography

Citation Author:	John Milner Associates, Inc.
Citation Title:	Grant-Kohrs Ranch National Historic Site Cultural Landscape Report, Part I
Year of Publication:	2004
Citation Publisher:	NPS
Source Name:	CRBIB
Citation Type:	Both Graphic and Narrative
Citation Location:	CLI adapted from CLR. Please see bibliography for CLR for references in this CLI.

Citation Author:	Shapins Belt Collins
Citation Title:	Grant-Kohrs Ranch Cultural Landscape Report, Part Two, Treatment Recommendations for the Pasture / Hay Fields and Upland Pastures Component Landscapes
Year of Publication:	2009
Citation Publisher:	NPS
Citation Location:	Located in IMR Cultural Landscapes Program files