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**Environmental
Assessment
General
Management
and
Development
Concept Plans**

September 1985

Custer Battlefield National Monument

It's been one hundred and six long years ago,
That Custer and his men received their fatal blow;
Brave men who were fighting for a cause and glory,
But their opponents changed the script of the story.

As gentle breezes caress the white markers today,
They seem to whisper, we must find a better way;
Of settling our differences in a world filled with hate,
This must be done, 'cause the time is growing late.

No, we'll never forget the brave men who fought here,
On that hot Sunday in the 1876 year;
Red man and white - they battled bravely and long,
The world still remembers, in story and song.

Yes, there's a lesson to be learned from this tale,
A lesson we must heed - and heed without fail;
We must work together and give our all,
To preserve our freedoms - or we'll surely fall.


Fred H. Werner

June 25, 1982

ENVIRONMENTAL ASSESSMENT
FOR THE
GENERAL MANAGEMENT PLAN
AND
DEVELOPMENT CONCEPT PLAN
FOR
CUSTER BATTLEFIELD NATIONAL MONUMENT
MONTANA

Prepared by
Rocky Mountain Regional Office
and
Custer Battlefield National Monument
National Park Service
United States Department of the Interior

September 1985



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I. INTRODUCTION

A. Custer Battlefield National Monument

The famous Battle of the Little Bighorn between 12 companies of the 7th United States Cavalry and the Sioux and Northern Cheyenne Indians was fought here on June 25 and 26, 1876. Lieutenant Colonel George A. Custer and about 268 of his forces were killed.

The primary purpose of Custer Battlefield National Monument is to preserve and protect the historic and natural resources pertaining to the battle of the Little Bighorn and to provide visitors with a greater understanding of those events which lead up to the battle, the encounter itself, and the various effects the encounter had on the two cultures involved. A portion of the monument is administered and maintained as the Custer Battlefield National Cemetery.

B. General Management and Development Concept Plan

The general management plan presents the basic management philosophy for the national monument, provides strategies for addressing issues, and identifies management objectives for the next 5 to 10 years. Two types of strategies are presented in the general management plan: (1) those required to properly manage the park's resources and; (2) those required to provide appropriate visitor use and interpretation of the resources. Based on these strategies, programs, actions, and support facilities necessary for efficient park operation and visitor use are identified. Throughout the planning effort, the park is considered in the regional context.

The development concept plan presents a more detailed, long-range guideline for park development based on the general management plan.

C. Issues

The following issues have been addressed, the alternative solutions have been analyzed by the planning team, and they have been presented to the public for response and comment on two separate occasions:

1. Identify the historic resources including the historic setting (natural resources) as they relate to the Battle of the Little Bighorn at Custer Battlefield and the surrounding area. Set into motion methods of protecting and preserving these resources for future generations.

2. Reduce heavy visitor impact at "Last Stand Hill," a prime national cultural resource, and improve visitor facilities.
3. Provide the visitor with a better comprehension of the events and historical perspective of the Battle of the Little Bighorn.
4. Resolve oversized vehicle problems in the park.
5. Provide a picnic area.
6. Provide sanitary facilities to meet visitor needs in outlying areas of the park.
7. Provide additional maintenance storage.
8. Improve the national cemetery irrigation system.

CUSTER BATTLEFIELD NATIONAL MONUMENT

ISSUES	ALTERNATIVES			
	ALTERNATIVE "A" & COST ESTIMATES	ALTERNATIVE "B" & COST ESTIMATES	ALTERNATIVE "C" & COST ESTIMATES	ALTERNATIVE "D" & COST ESTIMATES
HISTORIC SETTING & RESOURCE PROTECTION	None. \$0 *\$0	-Add 11,800 acres. -Fence 1/3 new boundary. \$312 *\$6	-Add 9,700 acres. -Fence 1/3 new boundary. \$286 *\$6	Same as "B". \$312 *\$6
VISITOR ORIENTATION AND ADMINISTRATION FACILITIES	-New restrooms structure. -Relocate some offices into abandoned restroom space (rehabilitate). -Rehabilitate exist. museum and add museum into abandoned office space. -New outdoor amphitheater with a sun screen. \$382 *\$17	-New visitor/orientation ad- ministration facility. -New parking area and portion of the entrance road. -Obliterate old visitor center, parking, and restore site. \$2,352 *\$6	-Retain existing visitor center. -Relocate park administrative offices to old stone house (rehab. for office space). -New rest rooms structure. -Rehabilitate existing visitor center: 1) Expand museum 2) Rehab. existing museum. 3) Auditorium in abandoned office and rest room space. \$505 *\$0	Same as "C". \$505 *\$0
VISITOR HISTORIC COMPREHENSION IMPROVEMENTS	-Improve wayside exhibits. -New topo relief map. \$55 *\$6	-Develop loop interpretive road. -New unattended wayside exhibit structures at (1) Reno 1st skirmish site, & (2) Reno crossing site. -15 new wayside exhibits. -New topo relief map. -Trail to "Last Stand Hill." \$2,334 *\$6	-Same as "B" (without new trail). \$2,298 *\$6	-Same as "C" \$2,298 *\$6
OVERSIZE VEHICLES	-Park oversize vehicles near park entrance. -Shuttle to the visitor center (3 mo. per yr.). \$0 *\$6	-Shuttle from new parking area to "Last Stand Hill" and national cemetery (3 mo. per yr.). \$0 *\$6	-Same as "A" \$0 *\$6	-Same as "A" \$0 *\$6
PICNIC AREA	None. \$0 *\$0	-New outdoor picnic area. \$244 *3	-Same as "B" with new entrance road and utilities. \$492 *3	-Same as "C" \$494 \$3
SANITARY FACILITIES- OUTLYING AREAS	-New underground chemical sanitary facility at the Reno-Benteen Site. \$45 *\$0	-Same as "A" plus. -Chemical sanitary facilities at (1) Reno's skirmish site, & (2) Reno's crossing site. \$105 *\$0	-Same as "B" \$105 *\$0	-Same as "B" \$105 *\$0
MAINTENANCE STORAGE	-Double deck a portion of the existing maintenance building. -Add a freight elevator. \$40 *\$0	-Same as "A" \$40 *\$0	-Same as "A" \$40 *0	-Same as "A" \$40 \$0
NATIONAL CEMETERY IRRIGATION	-Quit irrigating the national cemetery. -Sow native grass seed, fertilize and mow as needed. \$0 *-\$45	-New nonspray irrigation system. \$88 *\$0	-Same as "B" \$88 *\$0	-Same as "B" \$88 *\$0
(fig's. - \$1,000 DEVELOPMENT				
NET AND GROSS	NET \$522 GROSS \$762	NET \$5,475 GROSS \$7,993	NET \$3,816 GROSS \$5,571	NET \$3,842 GROSS \$5,609
O & M ANNUAL	*-16	*21	*21	*21

*Annually recurring costs.

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III. LAND PROTECTION

The primary viewshed surrounding the park is subject to land use changes potentially detrimental to preserving the historic scene. Undiscovered artifacts outside the present boundary are subject to unscientific disturbance and removal. The primary viewshed is highly visible from the monument and susceptible to changes in land use; disturbance to this area could effect the visitor's enjoyment of the national monument. These lands must be protected from activities which would adversely affect their visual, cultural, and natural resources.

All forms of vegetation manipulation--such as conversion to crop land, overgrazing, chaining, and herbicide spraying--should be prohibited. The development of structures, roads, overhead utility lines, utilities, feed lots, corrals, and similar facilities on the undeveloped areas visible from within the existing monument boundary should not be allowed with the exception of the proposed interpretive roads and visitor facilities. Future park development will be intergrated into the landscape to eliminate or reduce to a minimum the visual effect by park visitors.

The Custer Battlefield Preservation Committee, Inc., a nonprofit corporation, has been established for the purpose of seeking contributions to acquire and donate lands to the National Park Service. The Secretary of the Interior gave his approval for this method of acquiring lands for the national monument.

The National Park Service will pursue innovative acquisition strategies through a variety of methods to assure protection of these lands, and their visual, cultural, and natural qualities. Some of these strategies may include donations, swap for other Federal lands, acquisition of scenic or conservation easements, and possibly some acquisition of fee title and acquisition of fee title with lease back. These alternative would eventually involve a boundary change and thus require congressional action.

IV. PURPOSE AND NEED FOR THE PLAN

The purpose of this document is to provide the necessary guidelines and strategies for management and use of Custer Battlefield National Monument for the next 5 to 10 years.

Many actions addressed in this plan present long-range strategies that extend far beyond the 5- to 10-year life of this plan. These strategies must be addressed at this time to provide continuity of long-range planning for the park due to external threats to park resources and increasing visitor use.

The existing Custer Battlefield National Monument Master Plan was produced in 1959. Since that time, a need has developed to respond to new issues and reoccurring problems.

A. Issues and Management Objectives

1. Issues

a. Identify and protect the historic resources including the historic setting (natural resources) as they relate to the Battle of the Little Bighorn at Custer Battlefield and the surrounding area. Set into motion methods of protecting and preserving these resources for future generations.

Many artifacts relating to the Battle of the Little Bighorn have been found outside of the existing monument boundary. Some of these have been lost, destroyed, and the sites disturbed to the extent that some site specific historical integrity has been diminished.

The present setting of the monument consists of rolling hills, valleys, bluffs, and a river; they provide a visual landscape character similar to that of June 25 and 26, 1876. Many trees still exist along the Little Bighorn River similar to those that screened views of the large Indian Villages from Custer's troops and offered both sides of the battle some cover. The river valley has received most changes since June 1876. It presently contains tilled fields, county roads, some farmsteads, a railroad, and an interstate highway.

Threats are mounting to destroy the historic setting and to disturb undiscovered artifacts as demands for more ranchsteads increase and pot hunters' interests in discovering battle artifacts increase. Development of additional farmsteads with accompanying tilled fields, access roads, overhead power lines, motor vehicles, and buildings will destroy the historic nearly undisturbed rolling grasslands landscape. Strict land use control is necessary if undiscovered and unidentified artifacts are to be protected and if the remaining historic setting is to retain its integrity for the enjoyment of future generations.

b. Reduce heavy visitor impact at "Last Stand Hill," a prime national cultural resource, and improve visitor facilities.

The visual impact from on top of "Last Stand Hill" is devastated by the presence of a major parking area at the base of the hill near the visitor center. This mass accumulation of gleaming motor vehicles creates an irritating visual blight on the historic setting of Custer's Last Stand.

Visitor comprehension of the chronological battle sequence is complicated by the existing visitor center location. The proximity of the visitor center to "Last Stand Hill" attracts most visitors directly to this battle site from the existing visitor center. Currently, most visitors depart from the park confused by the realization that several battles occurred; they do not understand the battle sequence, the setting of the Reno battle activities, or the magnitude of the Indian villages. To add to the confusion, a national cemetery becomes the dominant focal point for first-time visitors entering Custer Battlefield National Monument. Large evergreen trees stand out against the skyline creating a visual contrast to the natural prairie-grass landscape. When summer visitors arrive at the visitor center parking area, their attention is drawn to the national cemetery's lush, groomed grass lawn and the shade offered by trees in the cemetery. They often mistakenly assume that this cemetery is Custer's "Last Stand" site and that all buried here are his troops. After spending some time in the cemetery they are confused. They then proceed to the visitor center for orientation because they do not find Custer's grave within the cemetery.

Some visitor facilities are inadequate or nonexistent. Minimum display space precludes public display of many artifacts of public interest. The auditorium is too small to accommodate existing visitor use and it is nearly inaccessible by the handicapped. Rest room facilities are inadequate to accommodate the existing visitor need and handicap access is difficult.

c. Provide the visitor with a better comprehension of the events in historical perspective of the Battle of the Little Bighorn.

The first-time visitor finds the current circulation routes counter productive to sequential understanding of the events of June 25 and 26, 1876. Visitors are not oriented to the chronology of the battle unless they make a special effort to go to the Reno-Benteen Battle Site first and then return to "Last Stand Hill." These two battle sites are disjointed creating a cognitive void in the events relating to the battles at these two isolated sites. Also, visitor interpretation of the monument is incomplete. Few visitors ever venture to the area near Garryowen, where the Indians and Major Reno engaged in the first encounter of this famous battle. Thus, the visitors' only view from on top of the bluff is of the woods along the Little Bighorn River from which Major Reno's troops made their frantic retreat. Visitors cannot get the full appreciation of the Battle of the Little Bighorn if they do not see first hand the valley where the Indians were camped,

progress to Reno's first skirmish site, then to the Reno River crossing, on to the Reno-Benteen Battle site, and terminate their visit at the climatic "Last Stand Hill."

d. Resolve oversized vehicle problems in the park.

Oversized vehicles entering the monument consists of semitractors (some with their trailers attached), motor homes, pickup campers, buses, and camp trailers. The proximity of the monument to Interstate 90 is a major contributing factor for a large number of these oversized vehicles entering the monument. A great number of visitors complain that these vehicles look totally out of place in the natural prairie-grass landscape setting of the monument. The roads are narrow and the turning radii are often too tight to accommodate these vehicles. Multi-axle vehicles ruin road surfaces by sliding tires sideways on short radii turns. Many of these vehicles require several automobile parking spaces forcing other visitors to park on the entrance road shoulders.

e. Provide a picnic area.

Currently, many visitors carry a picnic lunch to the monument and eat their lunch on the national cemetery or the visitor center lawn in the welcome shade of large trees. This is the only outdoor area within the national monument that provides relief from the hot, summer midday sun.

f. Provide sanitary facilities to meet visitor needs in outlying areas of the park.

Only limited sanitary facilities exist at the visitor center. There is a demonstrated need to provide permanent sanitary facilities in the vicinity of the Reno Benteen Battle area approximately 4.1 miles from the visitor center. Other proposed developed areas will need these basic facilities also.

g. Provide additional maintenance storage.

Storage space is limited for equipment and supplies to maintain the national monument and national cemetery. The maintenance building is near the national cemetery requiring that the area around the building remain neat at all times.

h. Improve the national cemetery irrigation system.

Vegetation at the national cemetery consists of a green grass lawn surrounded by large spruce, Douglas fir, and juniper trees. A spray irrigation system is used to maintain this lush appearance. Water in the area contains iron and manganese that is deposited on the white marble headstones and monuments which

stain them brown. This brown coloration intensifies each year. Spray irrigation is also eroding inscriptions from the historic architectural monuments that depict graves moved from other military cemeteries to Custer Battlefield. Some monument inscription have become illegible due to this spray action erosion.

National cemetery maintenance including irrigation at Custer Battlefield is very costly, approximately \$65,000 each year. The National Park Service funds the entire cost of maintaining the national cemetery.

2. Management Objectives

Decisions concerning the management, use, and development of the national monument are directed toward achieving these objectives and fulfilling the monument's purpose. Management objectives provide a framework for conserving resources, intergrating the national monument to its regional environment, and accommodating environmentally compatible public use in accordance with the existing National Park Service management policies.

Essentially, management objectives are a list of desired conditions. Because they spell out ends rather than means, they do not preclude alternative planning strategies. Rather, they provide a framework toward fulfilling the park's purpose while applying Park Service policy.

Management objectives for Custer Battlefield National Monument are:

- a. Preserve, protect, and interpret cultural and historic resources within and, to the extent possible, around Custer Battlefield National Monument.
- b. Reduce impact on natural, historic, and interpretive resources of Custer Battlefield National Monument.
- c. Provide basic visitor services at Custer Battlefield National Monument.
- d. Improve administration at Custer Battlefield National Monument.
- e. Encourage protection and interpretation of the historic trail that Custer and his troops followed from the mouth of Rosebud Creek to Custer Battlefield incorporating the multifamous points of historic interests.

B. Legislative and Administrative Constraints

Legislation and official actions that lead to and established Custer Battlefield National Monument are:

On August 1, 1879, the battlefield was officially recognized and designated as a national cemetery of the fourth class by General Order Number 78, Headquarters of the Army.

On December 7, 1886, Executive Order Number 337443 established the boundary, approximately 1 mile square, for the national cemetery of Custer's Battlefield Reservation.

In the Act of April 14, 1926, the Reno-Benteen Unit was acquired; the Army was ordered to take charge of this site in August 1930. (44 Stat. 251.)

In the Act of April 15, 1930, all rights, title, and interests of Crow Indians, from whose reservation the battlefield was carved, were granted to the United States. (46 Stat. 168.)

On August 10, 1939, a public, historical museum was authorized to be erected. (53 Stat. 1337.)

On June 3, 1940, Executive Order Number 8428 transferred the management of the area to the National Park Service, effective July 1, 1940.

In the Act of March 22, 1946, (P.L. 79-332), Custer Battlefield National Cemetery was redesignated as Custer Battlefield National Monument. This change to the status formulized the national monument and signaled the gradual shift of emphasis from the cemetery to the total historic significance of the battlefield, of which the cemetery is but one element.

The following list of constraints are utilized in the management, operations, and future planning of the national monument.

Custer Battlefield Deed Number 8, June 28, 1938, granted the United States Government a right-of-way extending from Custer Battlefield to Reno-Benteen Battlefield through Crow Indian (tribal and allotted) land.

Custer Battlefield National Monument is on the National Register of Historic Places. Preservation of the areas cultural resources fall under the 1906 Antiquities Act, the 1935 Historic Sites Act, the 1966 National Historic Preservation Act as amended, Executive Order 11593, and the 1979 Archeological Resources Protection Act as well as the Park Service Historic Preservation Program.

Custer Battlefield Historical and Museum Association, Inc., operates the bookstore at the visitor center and bus tours to the Reno-Benteen Battle Site. The association is a nonprofit organization.

V. BRIEF DESCRIPTION OF CUSTER BATTLEFIELD NATIONAL MONUMENT

Custer Battlefield National Monument is in South-Central Montana. The landscape consists of prairie grasses, sage-covered rolling hills, ridges, and ravines dotted with short juniper trees, and a steep bluff overlooking the Little Bighorn River which is lined with dense stands of large cottonwood trees. The area within the existing boundary provides a rare example of near-virgin prairie vegetation in Montana as a result of protection from domestic livestock grazing since shortly after the Battle of the Little Bighorn.

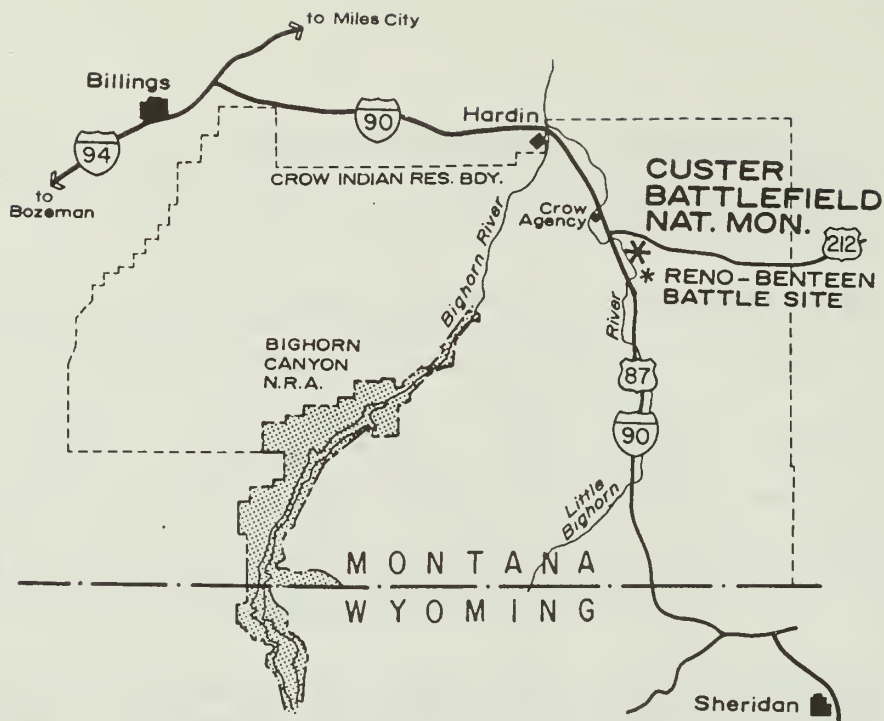
The national monument contains 765.34 acres (all Federal) in two separate parcels. The main parcel contains the ridge where Custer made his last stand against the Indians, markers on the hillside where his men fell, and a granite monument inscribed with the names of those killed in the battle on "Last Stand Hill." This parcel also includes the national cemetery where soldiers killed in other Indian battles have been reinterred and honorably discharged veterans of the armed forces from more recent wars were buried. The other parcel, connected to the first by 4.1 miles of national monument road, contains the site of the Reno-Benteen defense perimeter.

The national monument is off Interstate 90, 15 miles south of Harden, Montana; 65 miles southeast of Billings, Montana; and 71 miles north of Sheridan, Wyoming. Many of its out-of-State visitors are among those traveling to and from other national parks farther west. However, it is the destination of "Custer buffs" and history enthusiasts.

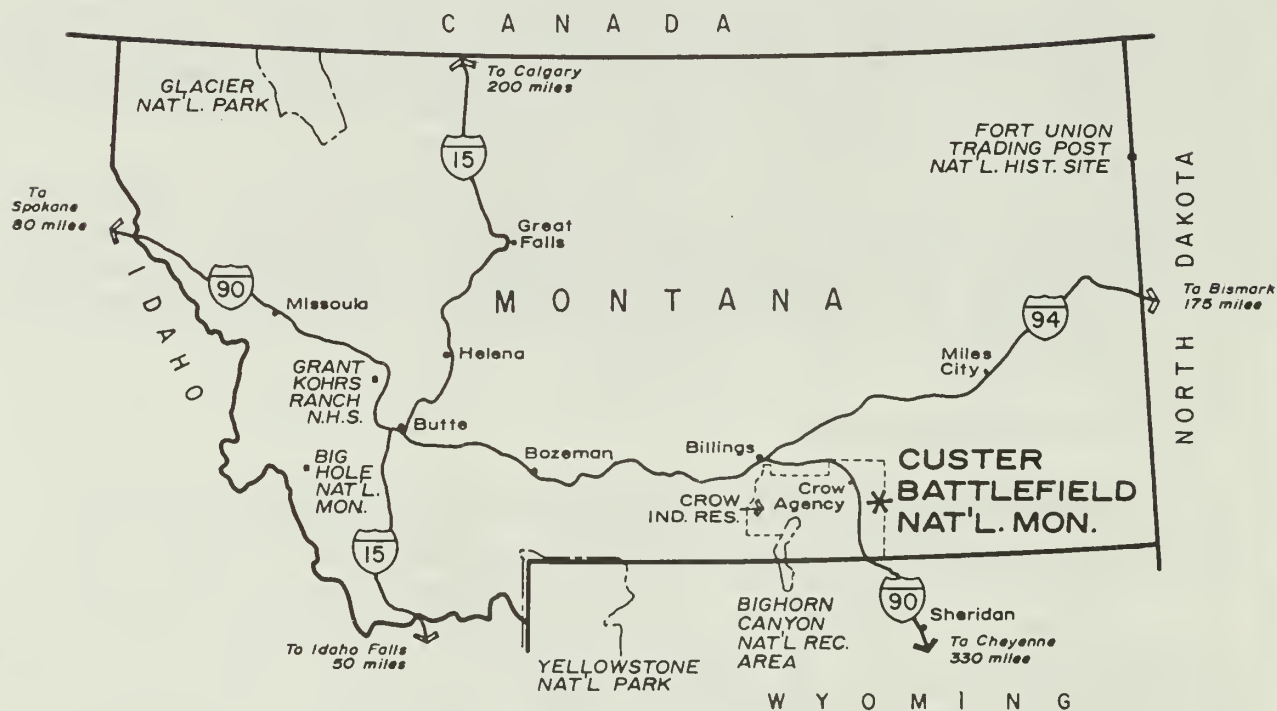
VI. ALTERNATIVES

A. Alternative "A" - Continuation of Existing Conditions

The existing development consists of a 2/3 mile access road from U.S. Highway 212 into the "Last Stand Hill" area of the monument. The "Last Stand Hill" area consists of the national cemetery, visitor center, parking area, historical monument marking the mass grave of 200 of Custer's men, historical markers, and a stone house built in 1894. A 4-1/10-mile, hard surfaced, access road connects "Last Stand Hill" to the Reno-Benteen Site. The Reno-Benteen Site includes a parking area, historical marker, and an interpretive trail.



Vicinity Map



Location Map

CUSTER BATTLEFIELD NATIONAL MONUMENT - MONTANA

U.S. DEPT. OF THE INTERIOR - NATIONAL PARK SERVICE

This alternative represents continuation of the existing conditions with minimal change. Issues, solutions, and outcome of this alternative are:

1. Historic Setting and Resource Protection

Continuation of existing conditions could result in the loss of surrounding historic lands to agricultural development, mining, residential, or commercial enterprise. Additional intrusion on the historic scene would be observed from the battlefield's existing roadway and battle sites diminishing the visitors' appreciation for the nearly pristine, unspoiled view of the battlefield that is presently enjoyed.

2. Visitor Orientation and Administration Facilities

Under this alternative several steps could take place to better serve the immediate public need. A new sanitary facility with handicap access could be added that would meet the present visitor volume and handicap need. Administrative offices could be relocated into the present rest room space to provide additional visitor-use area in the existing structure. This could expand the museum into the existing administrative space. A 100-seat covered amphitheater could be developed near the visitor center.

This solution is temporary in nature and is undesirable since it would further impact an already heavy conflicting use of the prime resource, "Last Stand Hill." A dominant conflicting use consists of viewing a sea of motor vehicles glistening in the sun and listening to the engine noises from on top of "Last Stand Hill." The eventual removal of these existing uses from the site is paramount to restore the historic serenity of the natural setting and to provide the visitor with a quality experience. However, to increase these uses would further detract from the site.

3. Visitor Historical Comprehension Improvements

Under existing conditions it is difficult to orient visitors to the chronology of the battle unless visitors make a special effort to go to the Reno-Benteen Battle Site first and then return to Custer's "Last Stand Hill." Even if they proceed to the Reno-Benteen Battle Site, they still do not receive a complete story because the initial action of the battle took place in the valley at present-day Garryowen, Montana. Continuation of existing conditions would perpetuate the incomplete understanding of the battle's development.

Ten new wayside exhibits would be installed to provide the visitor with a better interpretation of the area.

A guided bus tour through the monument and to Garryowen could continue.

A new topographic relief map could be installed to provide visitors with an orientation of the overall picture of the Battle of the Little Bighorn.

4. Oversize Vehicles

Because the monument is in close proximity to Interstate 90 and U.S. Highway 212, it receives a large number of oversized vehicles of all caliber and type. Oversized vehicles create a safety hazard on the monument's narrow road; the turning radii are often too small in some areas of the monument causing damage to the road surface, curbs, signs, and roadside vegetation. The most incompatible vehicles are heavy semitractors that damage the road, cause more frequent and costly repairs, and take up a large portion of parking near the museum. As a result of oversized vehicles, the parking lot is frequently filled to capacity in the summer months creating a congested area and a potentially unsafe situation. Trucks would not be allowed in the monument during summer months. They are welcome to park in the parking area near the restaurant off Highway 212 near the junction of Interstate 90. A National Park Service shuttle bus would transport these visitor to and from the monument.

5. Picnic Area

Under existing conditions, no picnic facilities exist in the monument. Visitors are allowed to conduct tailgate picnics or throw a blanket under the shade of a tree on the lawn. They are not supposed to picnic in the national cemetery. Group picnics are permitted in front of the stone house which is out of the mainstream of visitor circulation.

6. Sanitary Facilities in Outlying Areas

Limited sanitary facilities exist at the visitor center and only temporary facilities exist at the Reno-Benteen site. Prior to these temporary facilities at the Reno-Benteen site, visitors had to seek out the few juniper trees in the area for accommodations. This situation caused unsanitary problems. An underground chemical toilet will meet the basic sanitary needs of this area.

7. Maintenance Storage

Storage facilities for maintenance operation is very limited. Supplies and equipment must, at times, be stored outside within site of visitors which invites theft. Additional maintenance storage would be accomplished by double-decking a portion of the interior of the existing maintenance structure and adding a freight elevator.

8. National Cemetery Irrigation

A spray irrigation system is used to maintain the lush appearance of the national cemetery. Iron and manganese from the water stains the marble headstones and eventually erodes the inscriptions. Some inscriptions have become illegible. National cemetery maintenance including irrigation is very costly, approximately \$65,000 a year. This alternative addresses eliminating the irrigation system and maintaining the national cemetery by mowing native grasses for a kept appearance. The area will be lightly fertilized to assure good root development.

9. Existing Land Management and Use - Alternative "A"

The National Register Nomination states, "All of the land in both sections of the monument are considered significant for the historic scene, resources, and archeology. Archeological resources are not addressed in this nomination. The modern intrusions are listed as noncontributing.



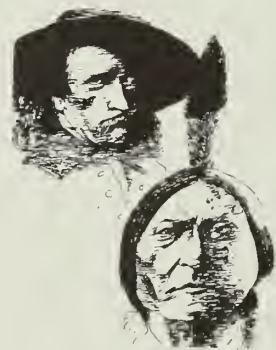
LEGEND

- EXISTING MONUMENT BOUNDARY
- CUSTER'S "LAST STAND HILL"
- CUSTER NATIONAL CEMETERY
- CONTOUR LINE
- INTERMITTENT STREAM
- EXISTING VISITOR CENTER-MUSEUM
- EXISTING ROAD
- EXISTING PRIMITIVE ROAD
- EXISTING PARKING
- EXISTING MAINTENANCE BUILDING
- PROPOSED UNDERGROUND SANITARY FACILITY
- PROPOSED PARKING



Interval 100 feet

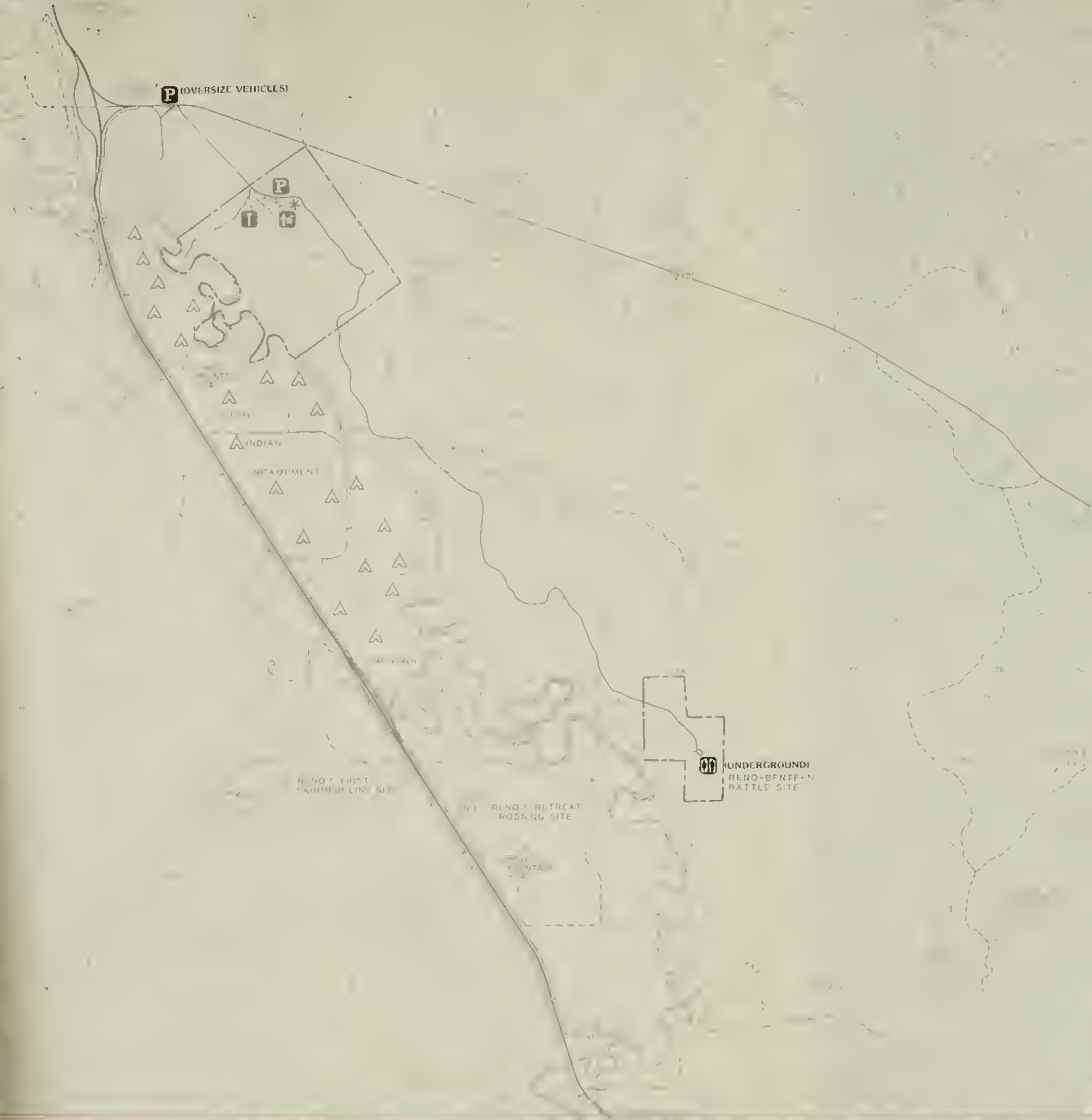
1/2 1 mile
2 1 kilometer



MANAGEMENT PLAN CONTINUATION OF EXISTING CONDITIONS - ALTERNATIVE "A" BATTLEFIELD NATIONAL MONUMENT

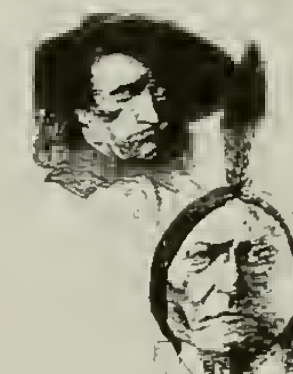
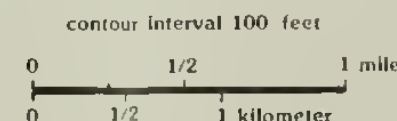
BIGHORN COUNTY, MONTANA

United States Department of the Interior - National Park Service



LEGEND

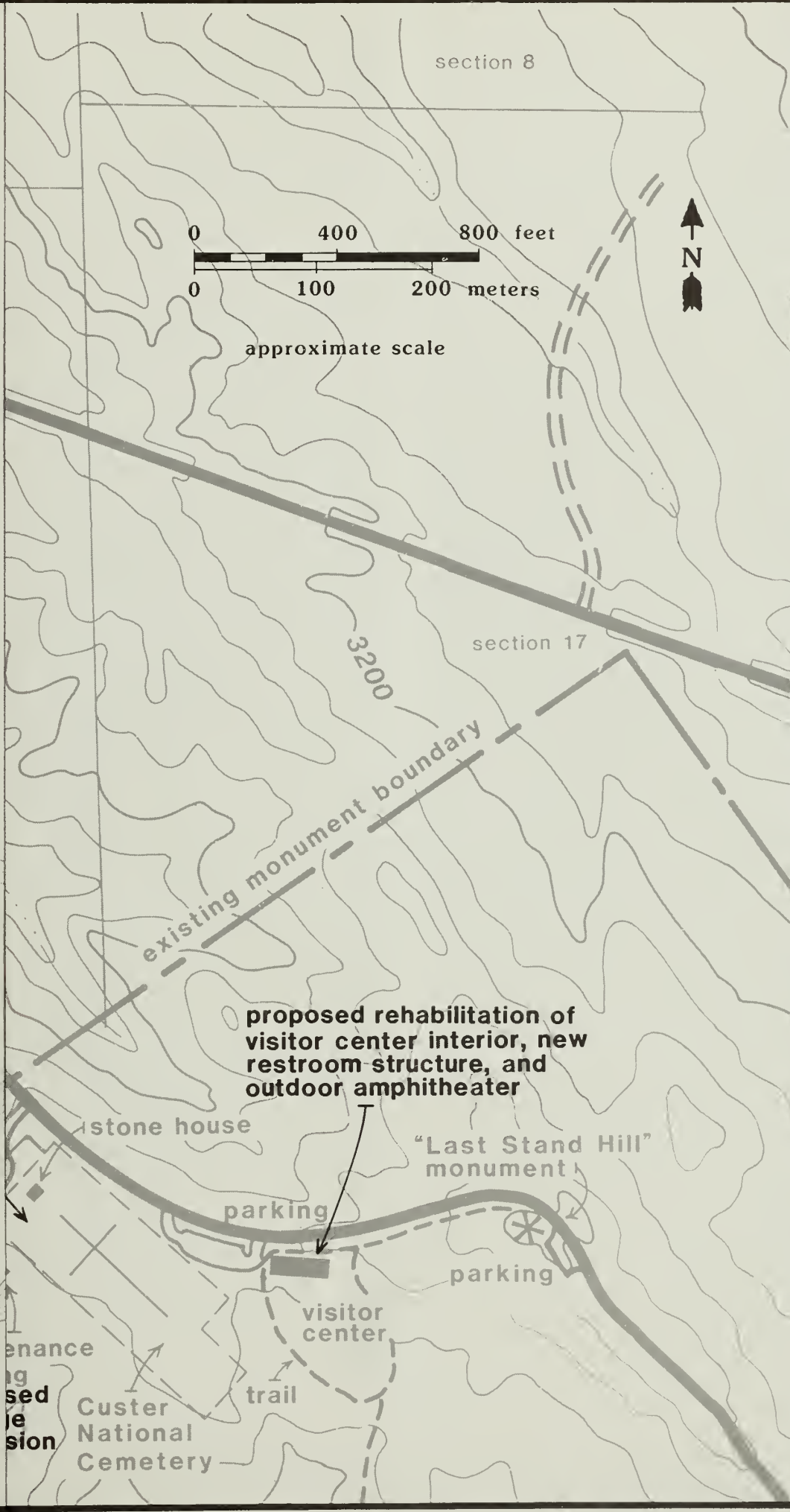
- EXISTING MONUMENT BOUNDARY
- * CUSTER'S "LAST STAND HILL"
- CUSTER NATIONAL CEMETERY
- CONTOUR LINE
- INTERMITTENT STREAM
- EXISTING VISITOR CENTER-MUSEUM
- EXISTING ROAD
- - - EXISTING PRIMITIVE ROAD
- P EXISTING PARKING
- I EXISTING MAINTENANCE BUILDING
- M PROPOSED UNDERGROUND SANITARY FACILITY
- P PROPOSED PARKING



GENERAL MANAGEMENT PLAN CONTINUATION OF EXISTING CONDITIONS - ALTERNATIVE "A" CUSTER BATTLEFIELD NATIONAL MONUMENT

BIGHORN COUNTY, MONTANA

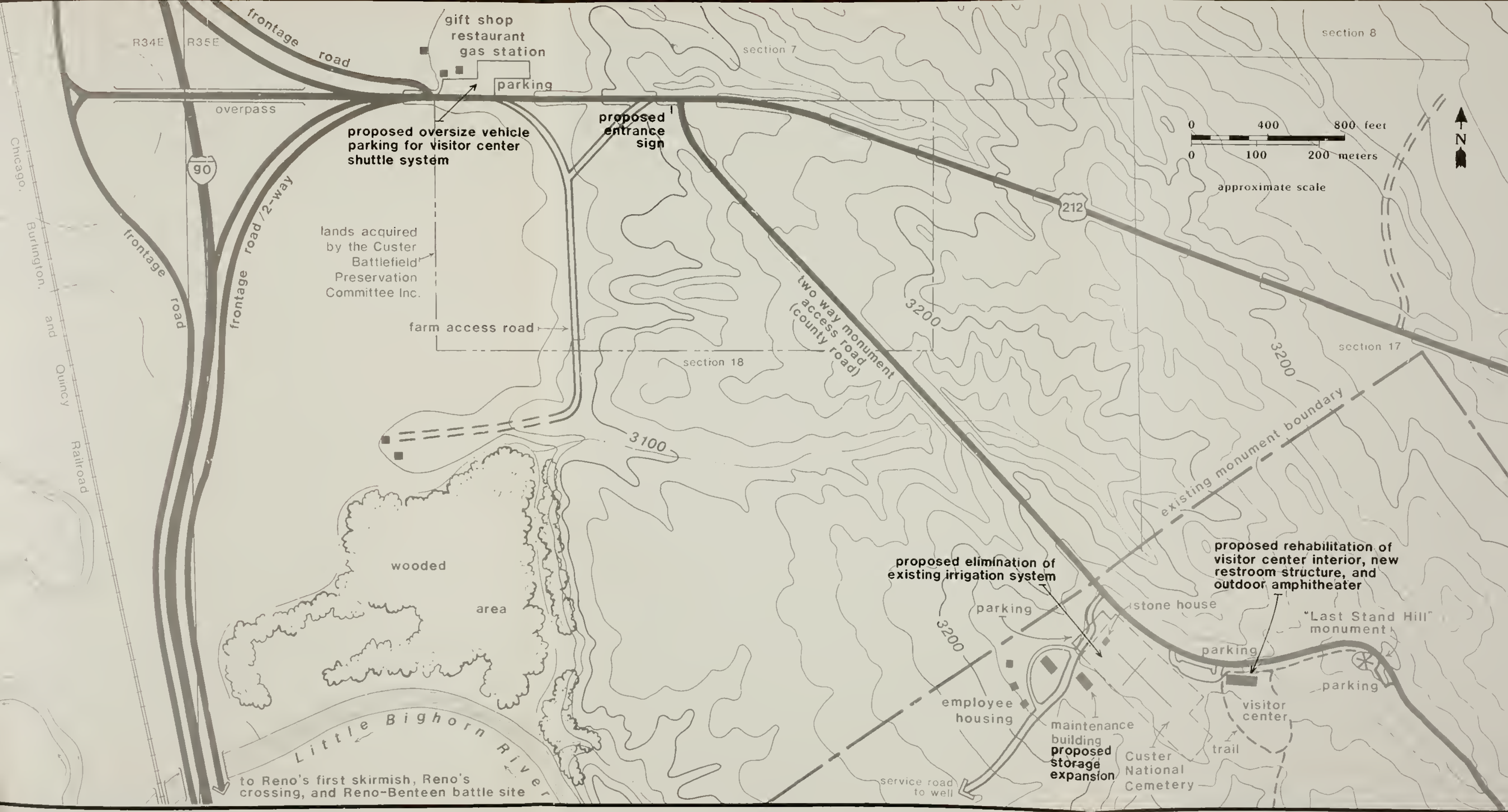
United States Department of the Interior - National Park Service



ALTERNATIVE "A" DEVELOPMENT CONCEPT PLAN

CUSTER BATTLEFIELD NATIONAL MONUMENT

United States Department of the Interior - National Park Service



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COST ESTIMATE ALTERNATIVE "A"
(all figures in thousands)

ITEM	*	COST	NET	SUBTOTAL
<u>Historic Setting and Resource Protection</u>				
None.				
Subtotal				0
<u>Visitor Orientation and Administrative Facilities</u>				
Outdoor amphitheater 100 seats @ \$600/seat		60		
New rest rooms 770 sq. ft. @ \$135/sq. ft.		104		
Rehabilitate existing structure 2,000 sq. ft. @ \$90/sq. ft.		180		
Walks and Landscaping for building lump sum		20		
Furnishing, 10% rehab.		18		
Subtotal				382
<u>Visitor Historical Comprehension Improvements</u>				
Interpreters - 2 for 1/4 year ea.				
GS-4	* 6			
Park Technician - Full time	*17			
Topo Relief Map - (Lighted) 4' x 8' L.S.		30		
Wayside Exhibits - 10 @ \$2,500 ea.		25		
Subtotal				55
<u>Oversize Vehicles</u>				
Parking - off site				
Shuttle Van - GSA @ \$122/month + \$.17/mile	* 3			
Shuttle Van Driver - GSA, 1/4 yr.	* 3			
Subtotal				0
<u>Picnic Area</u>				
None				
Subtotal				0

*Recurring Annually

COST ESTIMATE ALTERNATIVE "A" - CONT.
(all figures in thousands)

ITEM	*	COST	NET	SUBTOTAL
<u>Outlying Sanitary Facilities</u>				
Underground double chemical facility, Reno-Benteen Site. Lump sum		45		
Subtotal				45
<u>Maintenance Storage</u>				
Double Deck 14' x 20' L.S.		20		
Freight Elevator		20		
Subtotal				40
<u>National Cemetery Irrigation</u>				
None		*-45		
Subtotal				0
Alternative "A" Total Cost Estimate (NET) (saving 45 - 29 =16)*		*-16		522
Gross Cost Estimate - Alternative "A"		*-16		762

*Recurring Annually

B. Alternative "B"

Issues, solutions, and outcome of this alternative are as follows:

1. Historic Setting and Resource Protection

Historic resources of the national monument that relate to the Battle of the Little Bighorn would be protected by eventually including them in the park. This desirable land protection area would include all lands in the foreground horizon to the east, to Reno Creek on the south, Interstate 90 on the west, and U.S. Highway 212 on the north. It would extend across Interstate 90 to include lands occupied by Reno's troops during the first skirmish of the battle. The desirable land protection zone would add approximately 12,200 acres to the national monument. These lands would include Indian encampment areas and eliminate the threat of despoliation of undisturbed upland prairie landscape that appears similar to the setting at the time of the Battle of the Little Bighorn. Plowing the existing prairie, new ranch buildings, access roads, overhead power lines, and other manmade enfastructures pose a real threat to this historic setting. This plan recommends continued agricultural practices as they exists today on lands recommended for addition to the national monument. However, it would preclude industrial, commercial, additional housing, and tree clearing due to the adverse effects that these types of land use poses on the historic setting. Known direct costs to the National Park Service for these resource protection changes would include fencing and one additional seasonal ranger (for resource management and visitor protection).

National monument boundary expansion could be accomplished through legislative action by an Act of Congress or Presidential proclamation under the Antiquities Act of 1906. Expansion could take place in the future based on this plan. The success of the Custer Battlefield Preservation Committee, Inc., and other innovative land use control strategies will determine the time period that it takes to accomplish this resource protection goal.

2. Visitation Orientation and Administration Facilities

The new visitor orientation/administration facility would be located 1/4-mile south of U.S. Highway 212 providing convenient access from Interstate 90. This building and accompanying large parking area would be totally out of view from "Last Stand Hill." Visitor facilities would include an improved version of all visitor facilities now provided at the existing structure--specifically museum displays, park orientation displays, auditorium, information counter, and rest rooms.

Visitors would receive orientation of the park and be encouraged to proceed on a loop tour, or those with limited time could proceed directly to "Last Stand Hill." In either case, visitors could stop at the orientation structure on their way out of the park to gain additional information.

The new visitor orientation structure would include a 150-seat auditorium. The existing audiovisual room is a converted storage room in the basement of the visitor center, seats 60 visitors, and is inadequate to handle the existing visitor needs. The existing facility is used primarily to show a 30-minute movie, "Red Sunday." The movie is shown five times a day, with overflow crowds that average a turn-away rate of 5 to 10 people per showing at the three showings between the hours of 10:30 a.m. and 3:30 p.m. This turn-away rate exists through the heavy visitor-use season of Memorial Day to Labor Day. The movie is not announced during this time period. When the movie was announced at the midday showing, the turn-away rate was averaging 30 to 40 people per showing (an estimated annual turn-away rate of 800 to 11,000 visitors). The movie is not shown more often due to conflicts with other scheduled programs, many of which are held in the covered porch of the visitor center.

Typical attendance at interpretive talks average 80 to 90 visitors and often reach 180 visitors during the heavy visitor season of June through August. Under existing conditions, visitors are forced to stand in the sun or bunch up under the temporary sun shelter on the south side of the existing visitor center to listen to interpretive programs. An auditorium in the new visitor orientation facility would eliminate this unfortunate situation.

The new auditorium would be used all day, 8:30 a.m. to 7:30 p.m., each day during the heavy visitor use season. Twenty-seven of the existing thirty-one interpretive programs per day could take place in the new auditorium. Visitors would be protected from the hot and cold temperature extremes that they now endure at interpretive programs under the porch of the existing visitor center.

The new visitor/administrative facility site would be on a small ridge with a south facing slope providing the opportunity for solar heat and air conditioning. Visitors would view the building as a single-level structure. However, the administrative and storage facilities would be located on the lower floor with south facing windows in the office portion. Construction costs for the administration and storage portion of the structure would be reduced by approximately one-third as compared to a single-story building. Heating and air conditioning costs would also benefit by approximate one-third

savings depending on the type of construction selected. All life-cycle costs should be reduced by approximately one-third again dependent on the type of construction.

The existing visitor center building, built in the mid-50's, would be obliterated along with all associated walks and parking. The site would be restored, as nearly as possible, to blend with surrounding site conditions.

Parking for the national cemetery would continue in the existing parking area north of the cemetery. This area is out of view from "Last Stand Hill."

3. Visitor Historic Comprehension Improvements

A better comprehensive view of the events and historic perspective of the Battle of the Little Bighorn would be provided to park visitors through orientation facilities, implementation, and improvements of interpretive methodology.

A new visitor facility would be used for visitor orientation, interpretive demonstrations, and presentations. Improvements to the quality and extent of static media would be made by implementing the state-of-the-art techniques in upgrading the museum and wayside exhibits and improving audiovisual programs.

Visitors would be provided the opportunity to tour the battlefield in a correct chronological sequence. They would receive an orientation at the visitor facility and then begin their tour either by bus or private vehicle. The tour would start at the visitor orientation facility, proceed to Garryowen on an existing interstate frontage road to Reno's first skirmish line site, and back under Interstate 90 to Reno's Crossing. A new one-way road would begin at the Reno's Crossing site and proceed south along the west side of the Little Bighorn River, up Reno Creek, enter the existing national monument from the south, connect with the existing monument road at the Reno-Benteen site, and proceed over the existing road to "Last Stand Hill." Unattended wayside exhibit structures would be located at Reno's first skirmish site and the Reno crossing site.

Bus tours operating from Memorial Day through Labor Day would provide a large percentage of the annual visitation the opportunity for a guided tour of the battlefield and its environments. The Custer Battlefield Historical and Museum Association would continue to provide bus service and interpreters. The association would charge a nominal fee to cover expenses.

Museum exhibits should be restructured to emphasize more aspects of the national monument's secondary theme, A Conflict of Cultures. The monument's story is best told where it happened--on the battlefield. Existing wayside exhibits are poor revealing little understanding of the events on the field. The plan proposes 15 new wayside interpretive panels in key historic locations.

The national monument would maintain its current unbiased approach to the battle. Museum exhibits need to be more sensitive to Indian visitors and Indian attitudes about the fight. Existing exhibits lack interpretation of Indian leaders in the battle such as Sitting Bull, Crazy Horse, Gull, and other leading warriors.

The topographic relief map, completed in 1953, is of great interest to most visitors and is useful in providing an orientation of the national monument. However it is ineffective in providing troop and warrior interpretation of the battle to the average visitor. The 1980 draft Interpretive Plan, prepared by the Rocky Mountain Regional Office and park staff, recommended a new relief map that utilized fiber optics or light omitting diode transplants (or similar devices) that trace soldier and warrior movements. This map is a base, unmanned interpretive device needed to provide all visitors with an overall picture of the Battle of the Little Bighorn. A new interpretive perspectus will be prepared upon completion and approval of this plan.

National Park Service seasonal personnel positions at Custer Battlefield have been reduced to 1.3 work years in fiscal year 1982, which is down from 2 work years in fiscal year 1980. Despite the decrease in seasonal staff, interpretive programs have increased as a result an active VIP program. VIP's contributed 3 work years in fiscal year 1984. Utilizing VIP's to conduct much of the interpretation creates a poor national monument image since it becomes difficult for visitors to differentiate between who is managing and who is interpreting the park. The proposed recommendation is to reverse this trend reestablishing the high profile image and accessibility of National Park Service rangers to the public. Two additional seasonal interpreters are recommended.

4. Oversized Vehicles

Adequate parking space would be provided for oversized vehicles in the new visitor center orientation/administration facility parking area. These vehicles would not be permitted beyond the parking area; however, occupants of these vehicles could take the guided bus tour through the national monument or take a shuttle or trail to "Last Stand Hill." In the interm, the

existing gravel-surface parking area adjacent to U.S. Highway 212 in the restaurant/gift-shop complex could serve as parking for semitrucks. A shuttle bus could provide transportation between the semitruck parking area and existing visitor center during the busy use season. These vehicles would be permitted as far as the cemetery parking area during the off season. Motor homes, pickup campers, and busses would be permitted in the monument.

5. Picnic Area

A picnic area would be provided near the new visitor orientation facility. The picnic area would be located on fertile soils capable of supporting trees for shade to provide a welcome relief from the hot summer sun.

6. Sanitary Facilities in Outlying Areas

Underground chemical sanitary facilities would be built at the Reno-Benteen Battle site. These facilities would be built underground to protect the historic resources from the visual intrusion of an above ground structure. There is a reluctance to place these facilities at this site due to potential harm to historical resources. Vault-type chemical handicap-accessible sanitary facilities would be needed at Reno's first skirmish site and at the Reno's retreat river crossing site.

7. Maintenance Storage

Additional storage in the maintenance area would be accomplished by double-decking a portion of the interior of the existing maintenance structure and adding a freight elevator.

8. National Cemetery Irrigation

The existing spray irrigation system may be replaced by an underground-drip system in the national cemetery. This new system would eliminate spraying of the headstones and the depositing mineral that causes staining and headstone deterioration. Other benefits include reduced maintenance cost and water and electricity conservation. A method to reduce or eliminate cemetery irrigation would be investigated and, if practical, implemented.

9. Other

The collection of correspondence, manuscripts, books, documents, and such was stored at Eastern Montana College, Billings, Montana, from 1979 through 1984 through a cooperative agreement between the National Park Service and the college.

The college provided a service of disseminating information upon receiving requests from the public. The cooperative agreement was not renewed in 1984, and the entire collection is now stored at the park along with the responsibility of replying to the continuous, voluminous requests for information. As a result, one additional full-time position is needed to manage and preserve the museum collection and to respond to public requests for historical information.

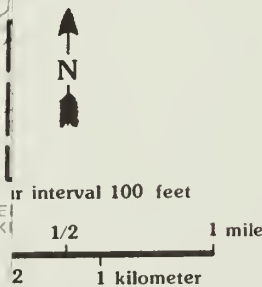
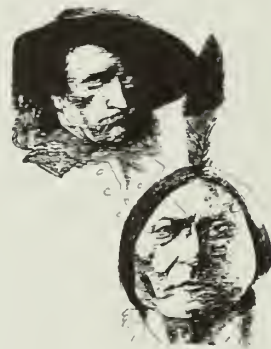
10. Proposed Land Use and Management - Alternative "B"

The National Register Nomination states, "All of the land in both sections of the monument are considered significant for the historic scene, resources, and archeology. Archeological resources are not addressed in this nomination. The modern intrusions are listed as noncontributing."

The National Register boundary and the Historic Zone would be expanded in the future should the National Park Service boundary be expanded. Lands outside the Historic Zone would be zoned Natural and Park Development Zones.

LEGEND

- EXISTING MONUMENT BOUNDARY
- CUSTER'S "LAST STAND HILL"
- CUSTER NATIONAL CEMETERY
- CONTOUR LINE
- INTERMITTENT STREAM
- EXISTING VISITOR CENTER-MUSEUM
- EXISTING ROAD
- EXISTING PRIMITIVE ROAD
- EXISTING PARKING
- EXISTING MAINTENANCE BUILDING
- PROPOSED PICNIC AREA
- PROPOSED PARKING
- PROPOSED VISITOR ORIENTATION/ADMINISTRATION FACILITY
- PROPOSED WAYSIDE EXHIBIT STRUCTURE
- PROPOSED TRAIL
- PROPOSED SANITARY FACILITY
- PROPOSED ROAD-ONE WAY
- PROPOSED ROAD-TWO WAY
- PROPOSED CHANGE OF EXISTING ROAD TO ONE WAY
- PROPOSED MONUMENT BOUNDARY
- OBLITERATE EXISTING FACILITY
- VIEWSHED



RAL MANAGEMENT PLAN ALTERNATIVE "B" ATTLEFIELD NATIONAL MONUMENT

BIGHORN COUNTY, MONTANA

ates Department of the Interior - National Park Service

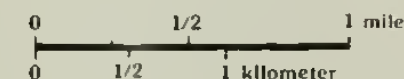


LEGEND

- EXISTING MONUMENT BOUNDARY
- * CUSTER'S "LAST STAND HILL"
- ... CUSTER NATIONAL CEMETERY
- - - CONTOUR LINE
- - - INTERMITTENT STREAM
- EXISTING VISITOR CENTER-MUSEUM
- EXISTING ROAD
- - - EXISTING PRIMITIVE ROAD
- P EXISTING PARKING
- I EXISTING MAINTENANCE BUILDING
- PROPOSED PICNIC AREA
- P PROPOSED PARKING
- PROPOSED VISITOR ORIENTATION/ADMINISTRATION FACILITY
- PROPOSED WAYSIDE EXHIBIT STRUCTURE
- - - PROPOSED TRAIL
- PROPOSED SANITARY FACILITY
- PROPOSED ROAD-ONE WAY
- ← PROPOSED ROAD-TWO WAY
- >> PROPOSED CHANGE OF EXISTING ROAD TO ONE WAY
- PROPOSED MONUMENT BOUNDARY
- OBLITERATE EXISTING FACILITY
- VIEWSHED



contour interval 100 feet

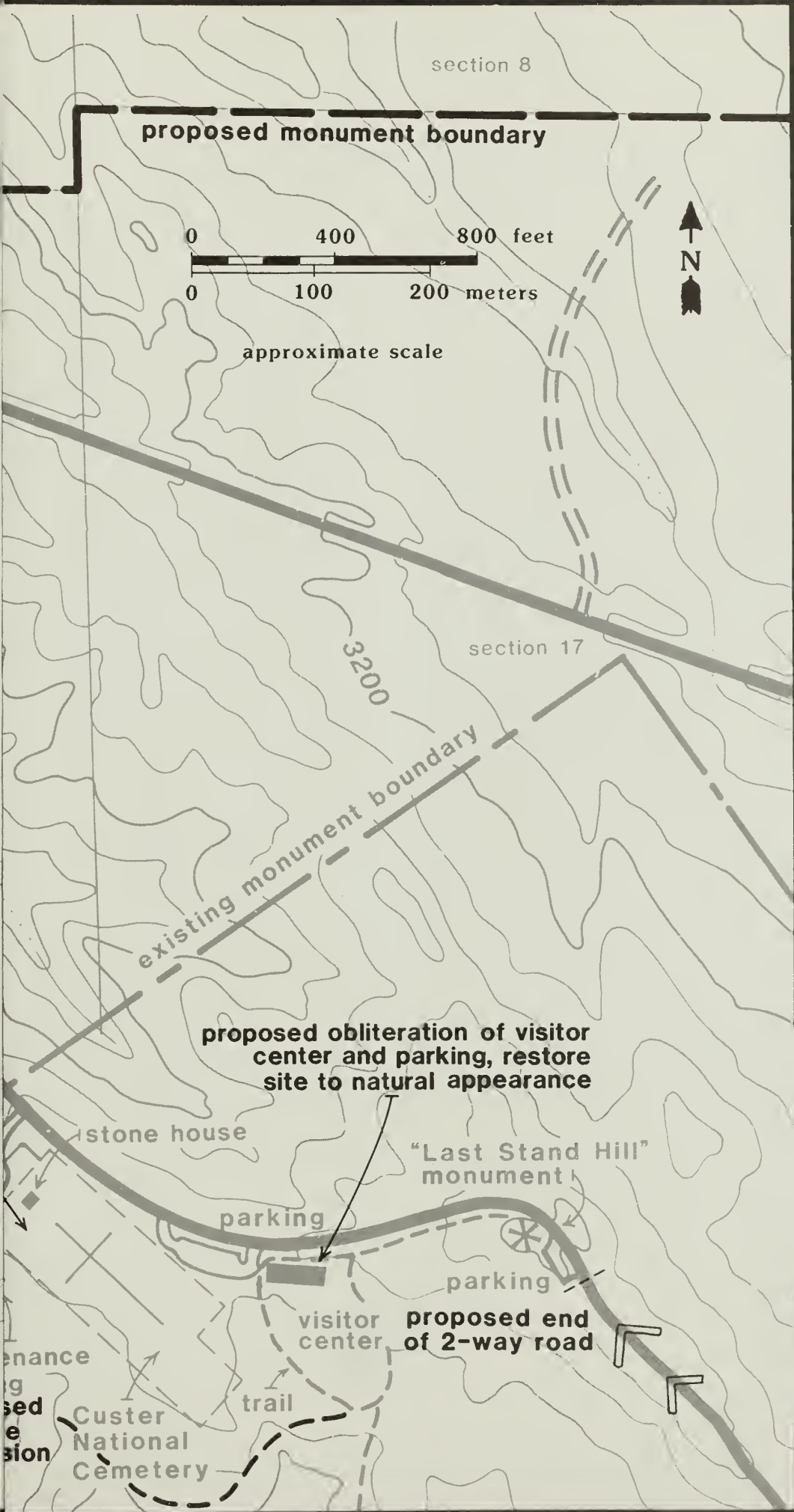


GENERAL MANAGEMENT PLAN ALTERNATIVE "B"

CUSTER BATTLEFIELD NATIONAL MONUMENT

BIGHORN COUNTY, MONTANA

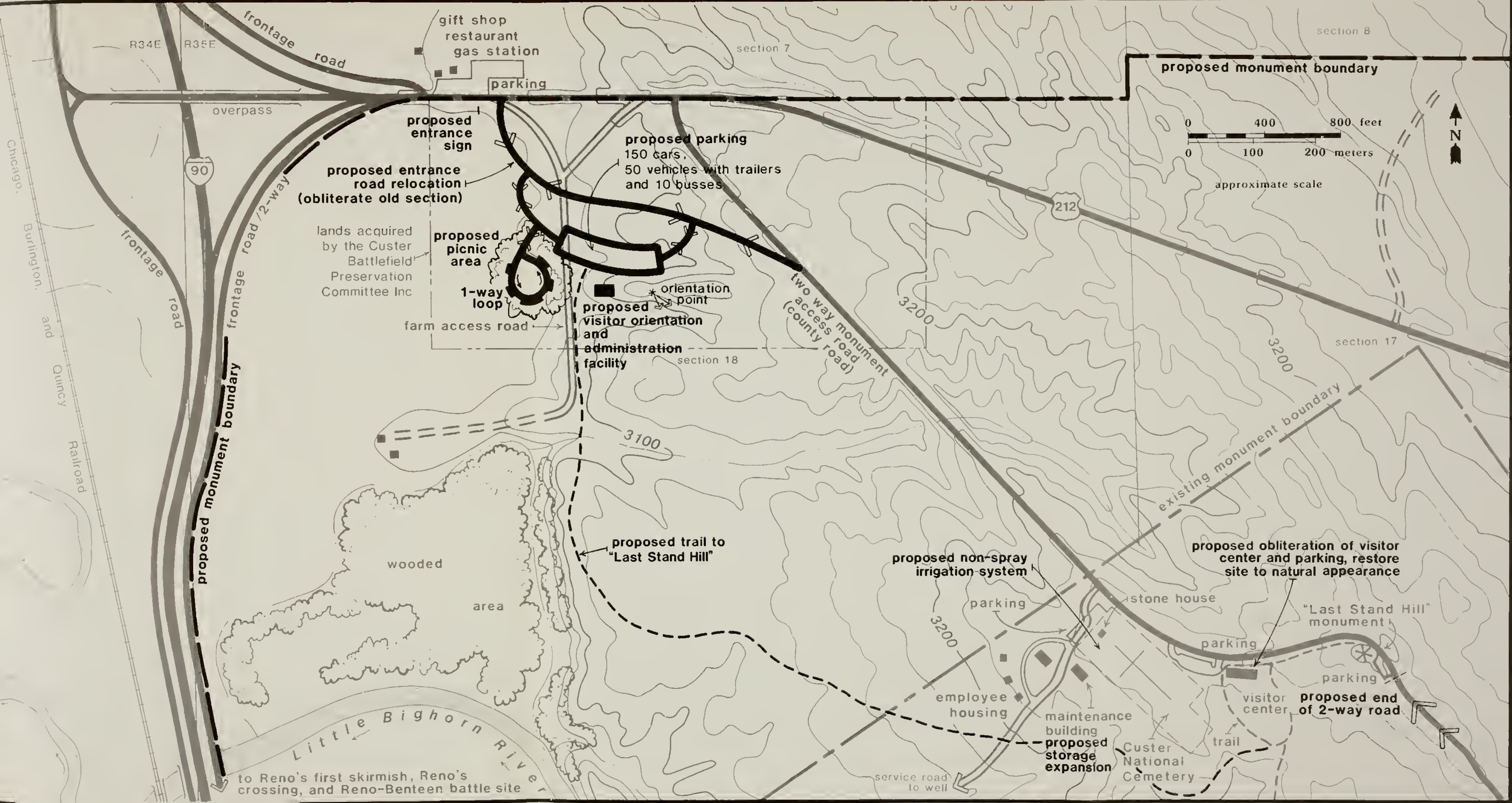
United States Department of the Interior · National Park Service



ALTERNATIVE "B" DEVELOPMENT CONCEPT PLAN

CUSTER BATTLEFIELD NATIONAL MONUMENT

United States Department of the Interior - National Park Service



ALTERNATIVE "B" DEVELOPMENT CONCEPT PLAN

CUSTER BATTLEFIELD NATIONAL MONUMENT

COST ESTIMATE ALTERNATIVE "B"
(all figures in thousands)

ITEM	*	COST	NET	SUBTOTAL
<u>Historic Setting and Resource Protection</u>				
Fencing - Estimate 1/3 new boundary (12 mi.) @ \$26,000/mi. 4 barbed wire		312		
Ranger - Resource Protection - 1/2 year GS-4	*6			
Subtotal	*6			312
<u>Visitor Orientation and Administrative Facilities</u>				
Museum w/Displays - 2,000 sq. ft. @ \$200/sq. ft.		400		
Auditorium - 150 person - 8 sq. ft./person @ \$200/sq. ft.		240		
Lobby - 800 sq. ft. @ \$200/sq. ft.		160		
Public Rest Rooms - 350 sq. ft. @ \$200/sq. ft.		70		
Ass'n Book Sales - 400 sq. ft. @ \$200/sq. ft.		80		
Basement Offices NPS and Ass'n - 800 sq. ft. @ \$75/sq. ft.		60		
Museum Vault - 400 sq. ft. @ \$50/sq. ft.		20		
Library - 600 sq. ft. @ \$65/sq. ft.		40		
Association Storage - 600 sq. ft. @ \$50/sq. ft.		30		
Utility Room - 120 sq. ft. @ \$50/sq. ft.		6		
Employee Shower and Lockers - 200 sq. ft. @ \$50/sq. ft.		10		
Furnishings - 10% of building cost		116		
Net Building			1,232	
<u>Utilities</u>				
Water - 1 mi., 6" pipe @ \$20/lin. ft.		106		
Sewer System				
Septic Tanks - 2 ea. @ \$22,000 ea.		44		
Dosing Siphon - 1 @ \$6,000 ea.		6		
Main Line - 300 lin. ft. @ \$20/lin. ft.		6		
Man Holes - 3 ea. @ \$3,000 ea.		9		
Absorption Trench - 1,600 lin. ft. @ \$20/lin. ft.		32		
Power 1/4 mi. underground @ \$12/lin. ft.		16		
Phone 1/4 mi. underground @ lump sum		6		
Net Utilities			225	
*Recurring Annually	37			

COST ESTIMATE ALTERNATIVE "B" CONT.
(all figures in thousands)

ITEM	*	COST	NET	SUBTOTAL
<u>Entrance Road and Parking</u>				
New Entrance Road 1/2 mi. @ \$500,000/mi.		250		
Parking				
150 cars @ \$1,200/car		180		
50 vehicles w/trailers and busses @ \$4,500 ea.		225		
10 semitrucks w/trailers @ \$4,500 ea.		45		
Net Ent. Rd. & Parking			700	
Entrance Sign lump sum		10		
Landscaping - lump sum		150		
Obliterate old visitor center and Restore Site - lump sum		35		
Net Landscaping & Site Restoration			195	
Visitor orientation and administrative facilities-subtotal				
<u>Visitor Historical Comprehension</u>				2,352
<u>Improvements</u>				
Interpreters - 2 for 1/4 year ea. GS-4	*6			
Topo Relief Map - (lighted) 4' x 8' lump sum		30		
Unattended Wayside Exhibit Structure 2 EA's @ \$10,000 ea.		20		
Wayside Exhibits - 15 @ \$2,500 ea.		38		
New one-way road - 2.8 miles @ \$300,000/mile		840		
New Bridge 600 sq. ft. @ \$95/sq. ft.		570		
New two-way road - 1.6 miles @ \$500,000/mi.		800		
New 1.2 mi. trail - 4' @ \$30,000/mi.		36		
Subtotal	*6			2,334
<u>Oversize Vehicles</u>				
Shuttle Van - GSA @ \$122/mo + \$.17/mile	*3			
Driver GS-4, 1/4 year	*3			
Subtotal	*6			0

COST ESTIMATE ALTERNATIVE "B" CONT.
(all figures in thousands)

ITEM	*	COST	NET	SUBTOTAL
<u>Picnic Area</u>				
2-way rd. - .1 mi. @ \$500,000/mi.		50		
1-way rd. - .12 mi. @ \$300,000/mi.		36		
Parking - 20 spaces @ \$2,100 ea.		42		
Utilities				
Waterline - 400 lin. ft. of 4" @ \$24/lin. ft.		10		
Shelters lump sum		50		
Landscaping lump sum		30		
Water & drinking fountain 2 ea.				
lump sum		4		
Double sanitary facility lump sum		15		
Tables - 20 ea. @ \$350 ea.		7		
Grounds maintenance (picnic and sanitary facilities)				
1/4 yr. GS-4	*3			
Subtotal	*3			244
<u>Outlying Sanitary Facilities</u>				
Reno site - double underground				
Chemical facilities		45		
2-double chemical facilities @ \$30,000 ea.		60		
Subtotal				105
<u>Maintenance Storage</u>				
Double deck 14' x 20' L.S.		20		
Freight elevator L.S.		20		
Subtotal				40
<u>National Cemetery Irrigation</u>				
12½ A @ \$7,000/A		88		
Subtotal				88
Alternative "B" Total Cost Estimate (NET) *21				5,475
Gross Cost Estimate - Alternative "B" *21				7,993
*Recurring Annually				

C. Alternative "C"

Issues, solutions, and outcome of this alternative are as follows:

1. Historic Setting and Resource Protection

This alternative addresses the minimal Land Protection Zone. This Land Protection Zone includes basic essential historic lands believed to relate to troop and Indian movements during the battle as evidenced by battle artifacts that have been collected in these areas. This minimal land protection area was identified by hydrographic lines (ridge tops and drainages) and existing enfastructures (highways) where practical. The minimal land protection zone would protect the foreground view areas as seen from the park roads from further degradation. The inclusion of the minimal Land Protection Zone would enlarge the park by approximately 9,300 acres.

2. Visitor Orientation and Administration Facilities

The existing visitor center and parking area would remain. Park administrative functions would be relocated into the Old Stone House upon its rehabilitation for office space. A new rest room with handicap access would be constructed to meet the current volume demand by the public. The visitor center would be rehabilitated to expand the museum and relocate the auditorium to the main floor. As described in Alternative "A", this solution is temporary in nature and is undesirable since it would further impact an already heavy conflicting use of the prime resource, "Last Stand Hill."

3. Visitor Historical Comprehension Improvements

(Same as Alternative "B".) Develop a new interpretive loop road, new unattended wayside exhibit structures at Reno's first skirmish site and at Reno's retreat crossing of the Little Bighorn River, 15 new wayside exhibits, and a new topographic relief map.

4. Oversized Vehicles

(Same as Alternative "A".) Park oversized vehicles at the park entrance during peak visitor use season and shuttle visitors to the visitor center.

5. Picnic Area

(Same as Alternative "B".) Develop a new picnic area on a new segment of the park entrance road to place the picnic area out of a prime resource area.

6. Sanitary Facilities in Outlying Areas

(Same as Alternative "B".) New underground double chemical toilet facilities at the Reno-Benteen area and new chemical facilities at Reno's first skirmish site and at Reno's retreat river crossing site.

7. Maintenance Storage

(Same as Alternative "A".) Double-deck a portion of the existing maintenance building and add a freight elevator.

8. National Cemetery Irrigation

(Same as Alternative "B".) Install a new, nonspray irrigation system.

9. Proposed Land Use and Management-Alternative "C"

(Same as Alternative "B".) Historical Zone - lands on the National Register; Natural Zones - all other lands with the exception of a minimal amount of lands within the development zone.

COST ESTIMATE ALTERNATIVE "C"
(all figures in thousands)

ITEM	*	COST	NET	SUBTOTAL
<u>Historic Setting and Resource Protection</u>				
Fencing - Estimated 1/3 new boundary (11 mi.) @ \$26,000/mi. 4 barbed		286		
Ranger - Resource protection 1/2 yr. GS-4	*6			
Subtotal	*6			286
<u>Visitor Orientation and Administrative Facilities</u>				
New rest rooms 770 sq. ft. @ \$135/sq. ft.		104		
Rehabilitate Old Stone House (Interior) 1,800 sq. ft. @ \$90/sq. ft. (with some structure)		162		
Furnishings (10%) rehab.		16		
Rehabilitate - convert existing administrative office space and restroom space into auditorium plus museum space 2,000 sq. ft. @ \$90/sq. ft. (some structural)		180		
Furnishings (10%) building rehabilitation		18		
Walks and Landscaping lump sum		25		
Subtotal				505
<u>Visitor Historical Comprehension Improvements</u>				
Same as Alternative "B" (Without New Trail)				
Subtotal	*6			2,298
<u>Oversize Vehicles</u>				
Parking - Off site				
Shuttle Van - GSA @ \$122/mo. + \$.17/mi.	*3			
Van Driver - GSA 1/4 yr.	*3			
Subtotal	*6			0
<u>Picnic Area</u>				
New entrance road .5 mi. @ \$500,000/mi.		250		
2-way picnic area road .1 mi. @ \$500,000/mi.		50		
1-way picnic area road .12 mi. @ \$300,000/mi.		36		
Parking 20 spaces @ \$2,100 ea.		42		
Utilities				
Waterline 400' lin. ft. of 4" @ \$24/lin. ft.		10		
Drinking fountain 2 ea lump sum		4		
Double sanitary facility lump sum		15		

COST ESTIMATE ALTERNATIVE "C" - CONT.
(all figures in thousands)

ITEM	*	COST	NET	SUBTOTAL
Trees, seeding, and irrigation lump sum		30		
Shade shelters lump sum		50		
Tables 20 ea. @ \$350 ea.		7		
Grounds Maintenance 1/4 yr.				
GS-4 (Picnic area and sanitary	*3			
sanitary facilities - lump sum				
Subtotal	*3			494
<u>Outlying Sanitary Facilities</u>				
Reno-Benteen Sites - double underground				
chemical sanitary facilities - lump sum		45		
2 double chemical sanitary facilities				
1 ea. - Reno's 1st skirmish site lump sum		30		
1 ea. - Reno's crossing sites lump sum		30		
Subtotal				105
<u>Maintenance Storage</u>				
Double deck 14' x 20' lump sum		20		
Freight elevator lump sum		20		
Subtotal				40
<u>National Cemetery Irrigation</u>				
12½ A. @ \$7,000/A		88		
Subtotal				88
Net Total Cost Estimate - Alternative "C"				3,816
Gross Total Cost Estimate - Alternative "C"				5,571

D. Alternative "D"

Issues, solutions, and outcome for this alternative are as follows.

1. Historic Setting and Resource Protection

(Same as Alternative "B".) Expand the Land Protection Zone by approximately 11,800 acres.

2. Visitor Orientation and Administration Facilities

(Same as Alternative "C".) The existing visitor center and parking area would remain. Park administrative functions would be relocated to the Old Stone House upon rehabilitation for office space. New rest rooms with handicap access would be constructed to meet the current volume demand by the public. Visitor center would be rehabilitated to expand the museum and relocate the auditorium to the main floor. This would further impact an already impacted prime resource, "Last Stand Hill," as described in Alternative "A."

3. Visitor Historical Comprehension Improvements

(Same as Alternative "B".) Develop a new interpretive loop road, new unattended wayside exhibit structures at Reno's first skirmish site and at Reno's retreat crossing of the Little Bighorn River Site, 15 new wayside exhibits, and a new topographic relief map.

4. Oversize Vehicles

(Same as Alternative "A".) Park oversized vehicles at the park's entrance during peak visitor-use season and shuttle these visitors to the visitor center.

5. Picnic Area

(Same as Alternative "C".) Develop a new picnic area on a new segment of the park entrance road to place the picnic area out of a prime resource area.

6. Sanitary Facilities in Outlying Areas

(Same as Alternative "B".) New underground double chemical facilities at the Reno-Benteen area and new chemical facilities at Reno's first skirmish site and Reno's retreat river crossing site.

7. Maintenance Storage

(Same as Alternative "A".) Double-deck a portion of the existing maintenance building and add a freight elevator.

8. National Cemetery Irrigation

(Same as Alternative "B".) Install a new, nonspray irrigation system.

9. Proposed Land Use and Management - Alternative "D"

(Same as Alternative "B".) Historic Zone - lands on the National Register; Natural Zone - all other lands with the exception of a minimal amount of land within the Development Zone.

COST ESTIMATE ALTERNATIVE "D"
(all figures in thousands)

ITEM	*	COST	NET	SUBTOTAL
<u>Historic Setting and Resource Protection</u>				
Fencing estimate, 1/3 total land protection zone. (12 mi) @ \$26,000/mi. 4 barbed wire.		312		
Ranger - resource protection 1/2 yr., GS-4	*6			
Subtotal	*6			312
<u>Visitor Orientation and Administrative Facility</u>				
New rest rooms, 770 sq. ft. @ \$135/sq. ft.		104		
Rehabilitate Old Stone House (Interior)				
1,800 sq. ft. @ \$90/sq. ft. (some structural)		162		
Office furnishings (10% building cost)		16		
Rehabilitation interior of existing visitor center, 2,000 sq. ft. @ \$90/sq. ft. (some mechanical and structural)		180		
Visitor center furnishings (10% building costs)		18		
Walks & landscaping, lump sum		25		
Subtotal				505
<u>Visitor Historical Comprehension Improvements</u>				
New one way road, 2.8 mi. @ \$300,000/mi.		840		
New two way road, 1.6 mi. @ \$500,000/mi.		800		
New bridge - one way, 600 sq. ft. @ \$94/sq. ft.		570		
Wayside exhibit structures, 2 @ \$10,000 ea.		20		
Wayside exhibits - 15 @ \$2,500 ea.		38		
New topo relief map - 4' x 8' lump sum		30		
Interpreters - 2 for 1/4 yr., GS-4	*6			
Subtotal	*6			2,298
<u>Oversize Vehicles</u>				
Parking - off site				
Shuttle van - GSA @ 122/mo. + \$.17/mi.	*3			
Shuttle van driver - GSA, 1/4 yr.	*3			
Subtotal	*6			0

COST ESTIMATE ALTERNATIVE "D" - CONT.
(all figures in thousands)

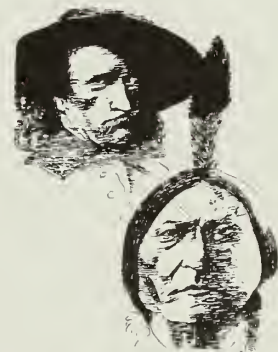
ITEM	*	COST	NET	SUBTOTAL
<u>Picnic Area</u>				
New entrance road .5 mi. @ \$500,000/mi.		250		
Two way road .1 mi. @ \$500,000/mi.		50		
One way road .12 mi. @ \$300,000/mi.		36		
Parking, 20 spaces @ \$2,100/ea.		42		
Utilities				
Waterline 400 L.F. of 4" pipe @ \$24/L.F.		10		
Drinking fountain - 2 ea. @ \$2,000 ea.		4		
Double chemical sanitary facility lump sum		15		
Trees, seeding, irrigation lump sum		30		
Shade shelters lump sum		50		
Tables 20 ea. @ \$350 ea.		7		
Grounds maintenance 1/4 yr. GS-4	*3			
Subtotal	*3			494
<u>Outlying Sanitary Facilities</u>				
Reno-Benteen, double underground				
chemical sanitary facilities lump sum		45		
2 double chemical sanitary facilities @ \$30,000 ea.		60		
Subtotal				105
<u>Maintenance Storage</u>				
Double deck 14' x 20' lump sum		20		
Freight elevator lump sum		20		
Subtotal				40
<u>National Cemetery Irrigation</u>				
12½ A. @ \$7,000/A.		88		
Subtotal				88
<u>ALTERNATIVE "D" TOTAL COST ESTIMATE (NET) *21 \$3,842</u>				
<u>CROSS COST ESTIMATE - ALTERNATIVE "D" *21 \$5,609</u>				

*Recurring Annually



LEGEND

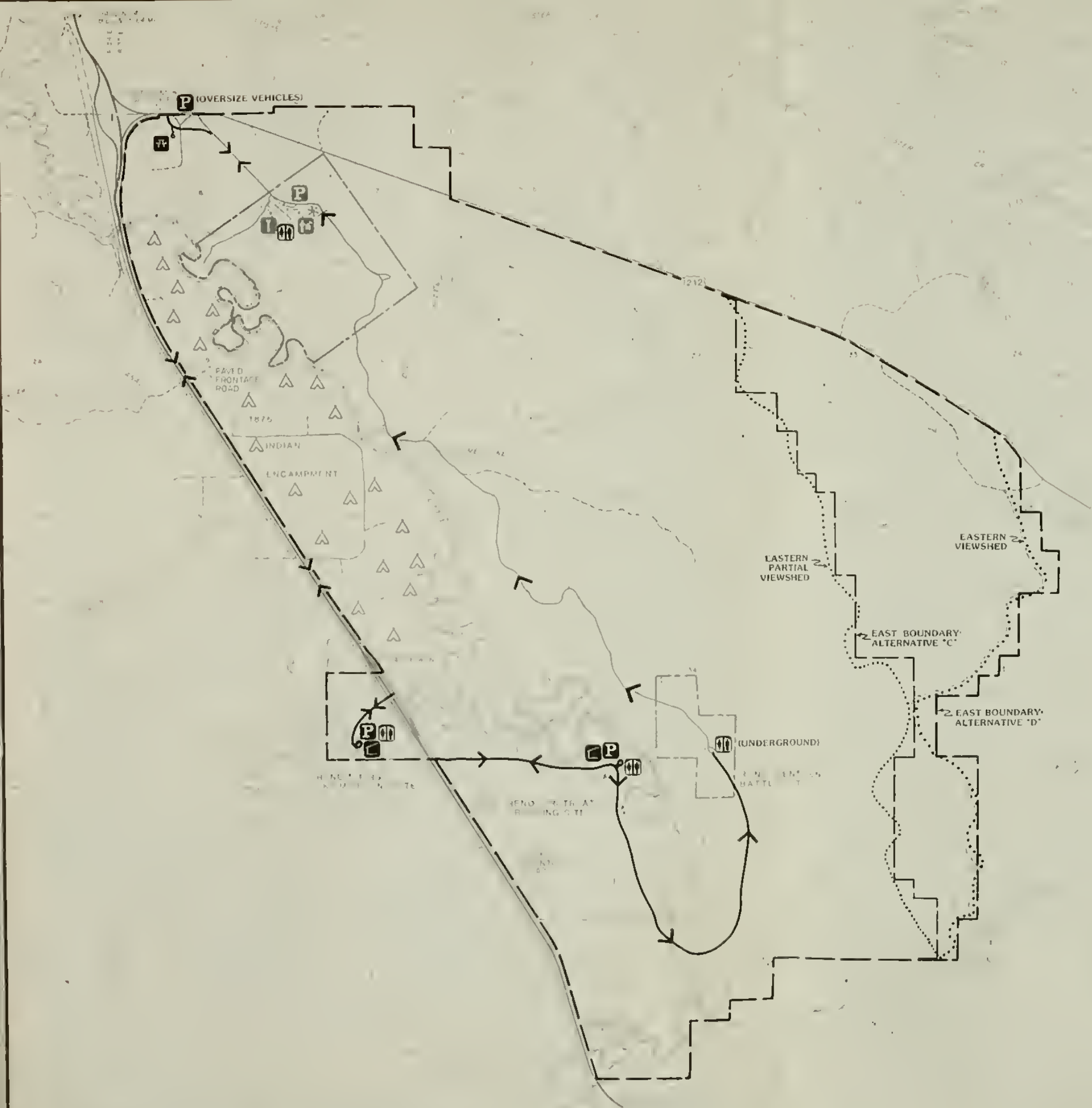
- EXISTING MONUMENT BOUNDARY
- CUSTER'S "LAST STAND HILL"
- CUSTER NATIONAL CEMETERY
- CONTOUR LINE
- INTERMITTENT STREAM
- EXISTING VISITOR CENTER-MUSEUM
- EXISTING ROAD
- EXISTING PRIMITIVE ROAD
- EXISTING PARKING
- EXISTING MAINTENANCE BUILDING
- PROPOSED PICNIC AREA
- PROPOSED PARKING
- PROPOSED WAYSIDE EXHIBIT STRUCTURE
- PROPOSED SANITARY FACILITY
- PROPOSED ROAD-ONE WAY
- PROPOSED ROAD-TWO WAY
- PROPOSED CHANGE OF EXISTING ROAD TO ONE WAY
- PROPOSED MONUMENT BOUNDARY-ALTERNATIVE "C"
- PROPOSED MONUMENT BOUNDARY-ALTERNATIVE "D"
- VIEWSHED



MANAGEMENT PLAN ALTERNATIVES "C" & "D" BATTLEFIELD NATIONAL MONUMENT

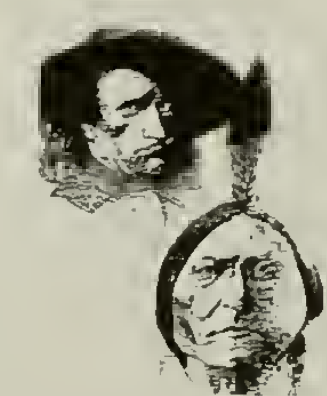
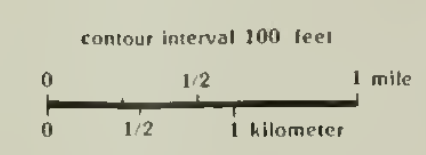
BIGHORN COUNTY, MONTANA

U.S. Department of the Interior - National Park Service



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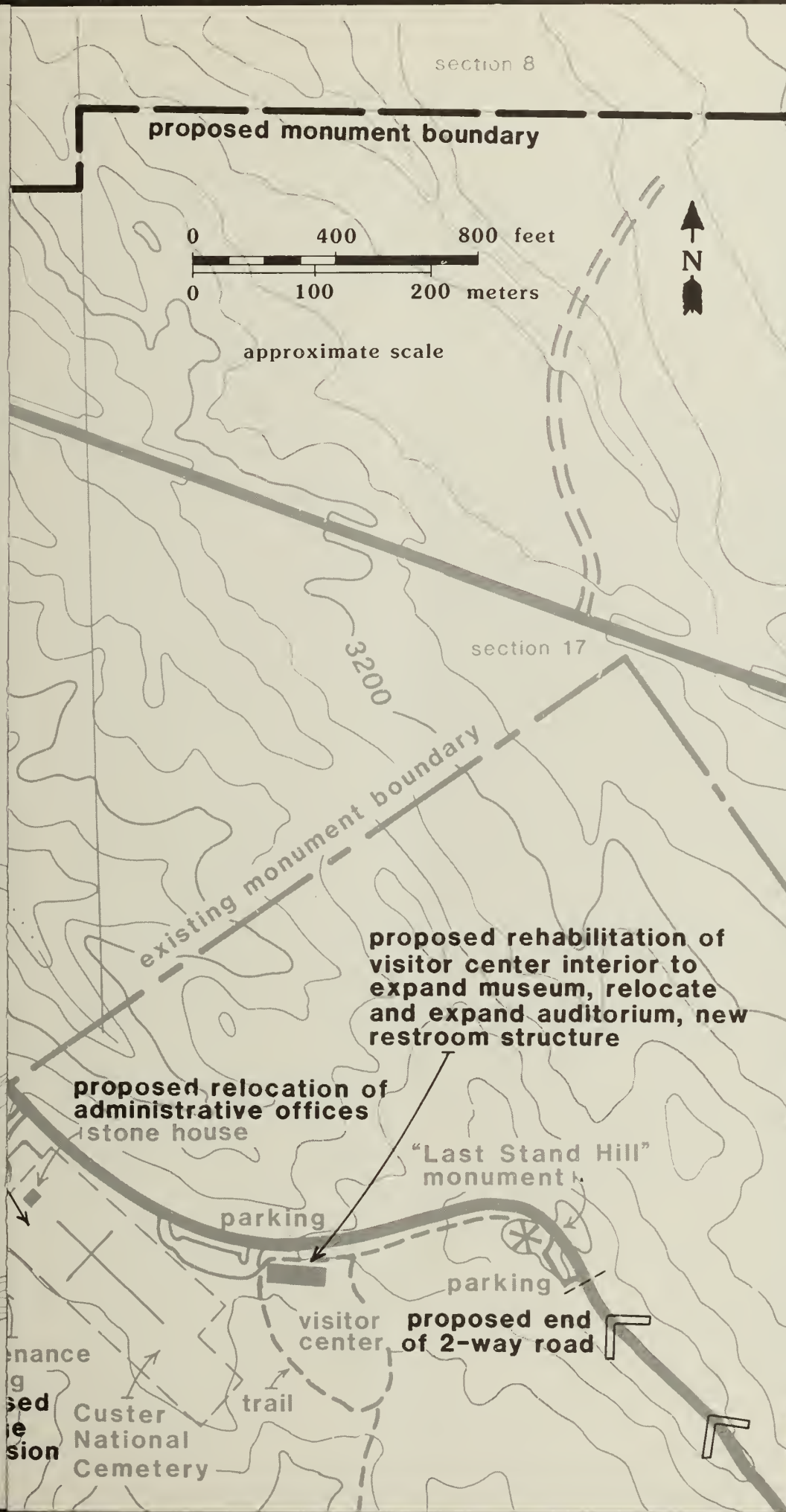
- EXISTING MONUMENT BOUNDARY
- * CUSTER'S "LAST STAND HILL"
- CUSTER NATIONAL CEMETERY
- CONTOUR LINE
- INTERMITTENT STREAM
- EXISTING VISITOR CENTER-MUSEUM
- EXISTING ROAD
- EXISTING PRIMITIVE ROAD
- P EXISTING PARKING
- I EXISTING MAINTENANCE BUILDING
- W PROPOSED PICNIC AREA
- P PROPOSED PARKING
- W PROPOSED WAYSIDE EXHIBIT STRUCTURE
- W PROPOSED SANITARY FACILITY
- PROPOSED ROAD-ONE WAY
- PROPOSED ROAD-TWO WAY
- >> PROPOSED CHANGE OF EXISTING ROAD TO ONE WAY
- PROPOSED MONUMENT BOUNDARY-ALTERNATIVE "C"
- PROPOSED MONUMENT BOUNDARY-ALTERNATIVE "D"
- VIEWSHED



GENERAL MANAGEMENT PLAN ALTERNATIVES "C" & "D" CUSTER BATTLEFIELD NATIONAL MONUMENT

BIGHORN COUNTY, MONTANA

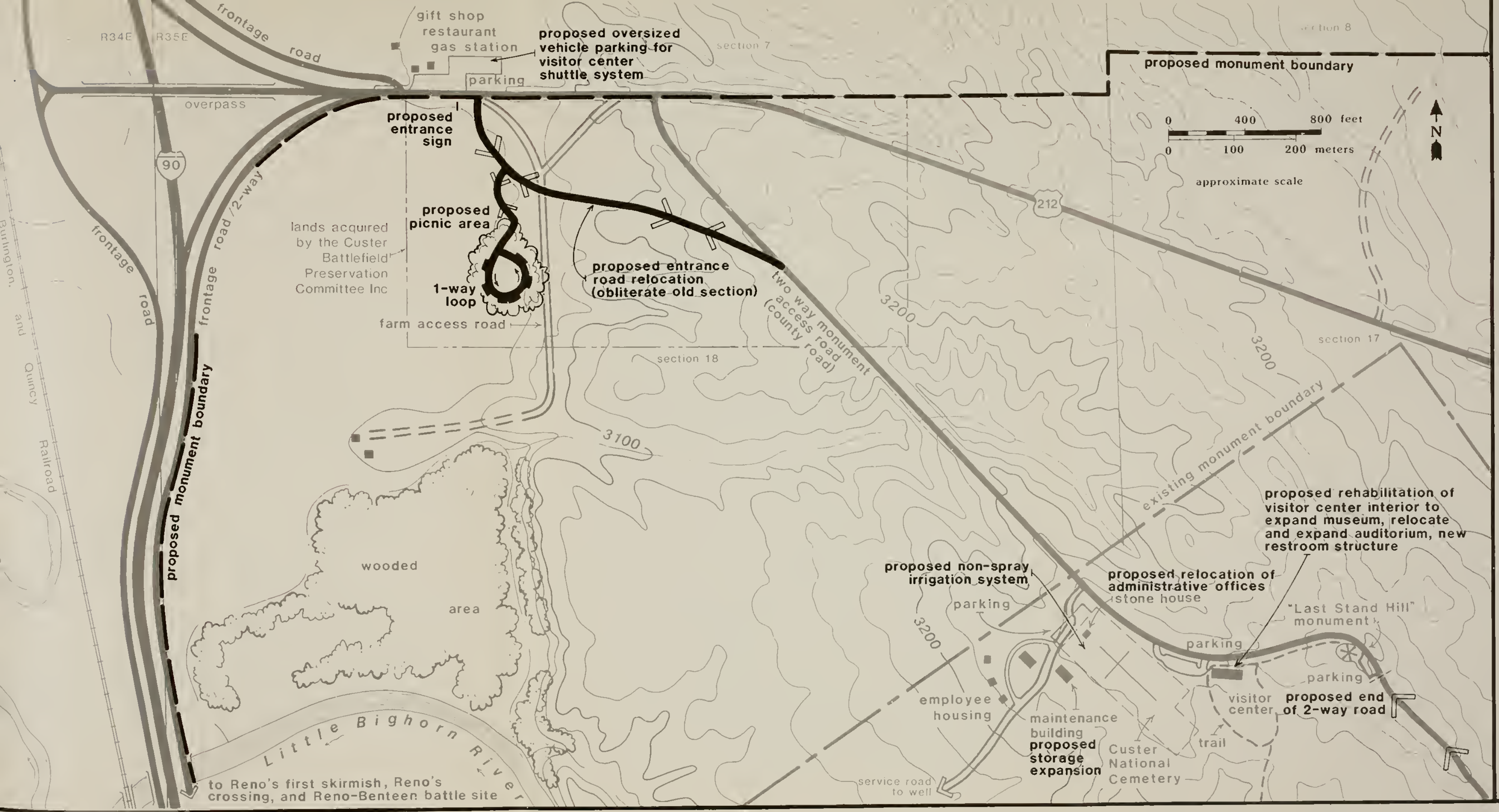
United States Department of the Interior - National Park Service



ALTERNATIVES "C" AND "D" DEVELOPMENT CONCEPT PLAN

CUSTER BATTLEFIELD NATIONAL MONUMENT

United States Department of the Interior - National Park Service



ALTERNATIVES "C" AND "D" DEVELOPMENT CONCEPT PLAN

CUSTER BATTLEFIELD NATIONAL MONUMENT

United States Department of the Interior - National Park Service

E. Other Alternative Solutions Considered and Rejected

This section of the environmental assessment summarizes the alternative solutions to planning issues that were considered and why they were rejected.

1. Historic Resource Protection

Regulatory land use controls through county, Crow Tribe, and/or the Bureau of Indian Affairs was investigated since these concepts appeared to be the most prudent method of protecting the subject historic resources. The county or State does not have regulation land-use zoning authority on the reservation. Our investigation resulted in the following statement from the Superintendent, Crow Indian Agency, Bureau of Indian Affairs:

"Under the treaties and statutes of the United States, certain Indian tribes reserved exclusive use and control over land not ceded or taken. The Crow Tribe of Montana is one such Indian tribe. Therefore, the Bureau of Indian Affairs, an agency of the federal government has no authority except upon request by the tribe or individual tribe members, to conduct or otherwise limit activities occurring on trusts land.

In 1976, the Crow Tribe enacted land use and zoning ordinances to regulate activities on the Crow Reservation. These regulatory measures did not require Bureau or Departmental approval.

It may be possible for the Park Service to make separate arrangements with the individual landowners but that is a matter we would leave to your discretion and goodwill."

The Crow Tribe technically could impose zoning restrictions upon their members, but in reality they probably would not. If such restrictions were imposed, the next council could change these restrictions. Zoning is not a long-range solution to this problem.

2. Visitor Orientation/Administrative Facility

Locating the visitor facility at Reno's first skirmish line site was considered. This site presents a view of the Indian encampment and the area where the first Indian and 7th Cavalry encounter took place on June 25, 1876. Interstate 90 and a railroad track separate this site from the panoramic view of Reno's advance from Reno Creek and retreat along the Little

Bighorn River to the bluffs and of the Indian camp itself. The frontage road junction with Interstate 90 is constructed for local use; a safety hazard could develop if all National Park Service visitors enter this site from Interstate 90. A major visitor center at this site would impact the site similar to the existing facility that impacts "Last Stand Hill."

3. National Cemetery Expansion

An alternative was considered that would permit crematory burials within the cemetery. This would not result in actual cemetery expansion. After consideration, this alternative was deemed unacceptable, because of its precedent setting possibility. Operational costs would be minimal.

4. Oversized Vehicles

One alternative considered and rejected would exclude all visitor vehicles from the monument, thereby reducing infringement on the historic scene and creating an aesthetically pleasing atmosphere to appreciate the understanding of the monument's theme. The elimination of cars and the implementation of a compulsory guided bus system would assure that visitors view the battlefield in a more chronologically correct pattern. The elimination of vehicles from the monument has its drawbacks. It is assumed that many visitors would not be willing to part with their vehicles and completely bypass the monument. Many visitors prefer to explore the monument on their own time without the hindrance of meeting a bus schedule. A total elimination of private vehicle use is not recommended.

Another alternative considered and rejected included upgrading and enlarging existing roadways and parking facilities within the monument to accommodate oversized vehicles. This alternative was found impractical from the standpoint of its conflict with the policies and mandates of the National Park Service. Enlargement of roads or parking lots would result in the encroachment and destruction of primary historic resources. This approach would encourage additional oversized vehicle use of monument roads resulting in increased visual deterioration of the historic setting and aesthetics of the monument.

An alternative to limit load and length of vehicles entering the monument was considered and rejected. It would be difficult to enforce such a regulation.

The exclusion of commercial vehicles entirely from the monument is another alternative discussed and rejected. There would be little problem with enforcing the decision to prohibit their

entry. The Code of Federal Regulations, "Title 36, Chapter I, Section 5.6, Paragraphs a. and b." states that the use of Government roads within the park area by commercial vehicles is prohibited. Elimination of commercial vehicles would reduce the burden of overcrowded parking, and save wear and tear on park roads and parking facilities. It would not act as a panacea to the problems caused by other oversized vehicles such as busses, campers, motorhomes, and trailers.

5. Maintenance Storage Expansion

An alternative to add a 27-foot by 36-foot wing to the existing maintenance building was considered and rejected. A more economical solution is presented in other alternatives.

F. All Alternatives - Common

National Cemetery Expansion

The national cemetery is closed except for reserved spaces. The monument staff would work with the Veterans Administration and the State of Montana to find a nearby site outside the national monument for future burials.

The national cemetery has been closed to further interments since 1977, except for the burials of spouses and reserved spaces. Further expansion increases encroachment on the historical integrity of the national monument.

VII. AFFECTED ENVIRONMENT

A. Historical Resources

The primary historical resources is the battlefield itself, where on June 25, 1876, five troops of the U.S. Cavalry met defeat and death at the hands of Sioux and Cheyenne allies who were defending their way of life. White marble headstones dot the landscape of the battlefield indicating where soldiers fell. A granite shaft sits on top of "Last Stand Hill," a memorial honoring the soldiers and Indian scouts who lost their lives in the battle.

A visitor center is situated 150 yards below the memorial. Inside, displays and exhibits attempt to tell the story of the battle from both the soldier and Indian point of view.

Superimposed on the battlefield is Custer Battlefield National Cemetery. Soldiers from abandoned military posts in Wyoming, Montana, and the Dakotas have been reinterred (along with veterans and dependents from other wars). Over the years veterans and dependents from other wars have been interred, swelling the cemetery to nearly 5,000 interments and forcing its closure in 1977.

Four miles away, Reno-Benteen Battle Site, scene of 2 days of intense fighting, is preserved. A memorial to the soldiers punctuates the treeless bluffs overlooking the Little Bighorn River where Major Reno's forces were initially repulsed by Indian warriors. Reconstructed earthen entrenchments around Reno's defense perimeter aid in the understanding of the story.

Reno-Benteen Battle Site offers excellent opportunities for visual observations of other historically related areas that are off monument land, but eminently affiliated with the battlefield: Reno Creek, Crow's Nest, Reno's Crossing, Valley Fight, Reno's Retreat, Indian Camp, and defense lines.

A 4.1 mile road connects the Reno-Benteen Battle Site with the Custer "Last Stand Hill" passing over and near prime historic land and historic resources outside of the monument boundary. Historic resources identified from this road are Wier Point, Custer's route to the battlefield, Medicine Tail Ford and Coulee, and Nye-Cartwright Ridge.

B. Natural Resources

Natural resources at the national monument are heavily influenced by climate and topography. Light and comparatively short periods of heavy precipitation with abundant sunshine, low relative humidity, and clay soils produce a suitable

environment for sagebrush and grasses, the dominant and prevailing vegetative cover. Bluebunch wheatgrass makes up about one-third of the vegetation. Other main grasses are winter wheatgrass, green needlegrass, and blue grama. Cottonwood trees are predominant in areas along the Little Bighorn River. This vegetation has adapted to Montana's long harsh winters which may see the mercury plummet to 40 degrees below zero for several days. Summers are usually short in duration, but can be extremely hot--the thermometer reaching 100 degrees or higher. Mean elevation at the monument is approximately 3,300 feet.

Wildlife consisting of mammals such as cottontails, porcupines, skunks, whitetail deer, and coyotes are occasionally observed. Rattlesnakes and bullsnakes represent 95 percent of the reptile population with bullsnakes alone accounting for about three-fourths of all sightings. Birds frequently seen on the battlefield are sharptail grouse, robins, and magpie.

Custer Battlefield National Monument is part of the Fort Union Geologic formation which is rich in mineral deposits--coal being the dominant resource. Coal is extensively mined in the area east of the monument. As yet, pollution from coal production or other mineral explorations has not developed or been in evidence at the monument.

C. Visitor Use Data

Most visitors to the monument are family groups. The average length of stay is approximately 1 hour. Visitation is at its peak from June through August. Over 63 percent of all visits are recorded in this period. Fall visitation accounts for 21 percent, winter for 2 percent, and spring for 14 percent.

Based on the 1982 visitation observations, the northwest States of Montana, Wyoming, Washington, Idaho, and Oregon account for 36 percent of all visitation. Regional visitation including the above States and North Dakota, South Dakota, Minnesota, and Wisconsin make up 45 percent of visitation. Local visitation is under 2 percent. Western States account for 66 percent of visitation. About 40 percent of all visitors tour Reno-Bentley Battle Site.

In fiscal year 1984, 133,107 visitors attended 3,823 interpretive programs.

D. Regional Land Use

Crow Tribe reservation lands surround the monument. These lands are divided basically into three categories: individual allotted land; fee patent land; and tribal trust land.

Individual allotted lands comprise over 1.2 million acres or approximately half of the reservation area. These lands are held in trust by the Federal Government and apportioned to an individual. By definition such land must be allotted to Indians, but they in turn may lease their allotted land to anyone. For example, 90 percent of the individual allotted and tribal trust grazing and farm land is leased to non-Indian farmers.

Approximately 15 percent of the reservation is tribal trust land, held in trust by the Federal Government, reserved for the use and benefit of the tribe as a whole. Such land can be leased or exploratory permits can be issued. Recently, through the Crow land purchase program, the tribe is buying up available fee patent land, hence expanding ownership by the tribe.

The remainder of reservation land, about 5 percent, is owned in fairly small parcels by a variety of governmental Agencies and levels: towns, the State, the National Park Service, the Bureau of Indian Affairs, and the Bureau of Reclamation.

E. Social and Economic Setting

State Economic Region V, an eight-county sector lying in south-central Montana, is the regional setting for Custer Battlefield National Monument. The total regional population in 1980 was about 200,000--mostly in Yellowstone County. Population in the area increased rapidly during the energy development boom.

The Crow Reservation is one of seven Indian reservations in the State of Montana. The reservation, situated largely within Big Horn County and a portion of the southeast corner of Yellowstone County, covers 2.27 million acres and has a population of about 6,500--almost one-fourth of which are non-Indian. About 150 tribal members live in Hardin and 300 in Billings. The population of the tribe is increasing about 3.5 percent per year, much faster than the national average.

The city of Hardin, 15 miles northwest of the monument, is the largest commercial and residential center in the county. A recent comprehensive plan of the city and county describes a basic two-fold future economy--production of power and tourism.

A third sector, agriculture, which is presently the area's most important economic element, is expected to fall to third place in rank of importance.

Thirty-five miles west of Hardin, fields of subbituminous coal have been discovered and found to be the largest in the United

States. The fields cover most of eastern Montana, extending south into Wyoming. The recent environmental conscience of the country makes the resources especially valuable due to its low sulphur content. Approximately 20-plus million tons of coal are mined each year in Big Horn County.

The mineral resources and minable products of the area surrounding the national monument include petroleum, natural gas, stone, lime, sand, gravel, and coal. Of these, the principal sources of revenue on the reservation have been coal, oil, and gas. Although no oil has yet been found in the immediate vicinity of the monument, exploration leases are let periodically and there is a possibility that coal will be found. Recently, coal strip mining has increased in eastern Montana. The high-grade, low sulphur coal deposits are some of the last high-quality reserves, and demand for mining is great.

The Colstrip Mining project, about 47 miles northeast of Custer Battlefield National Monument, has two coal powered generating plants that were completed in the fall of 1975 and the summer of 1976. Construction began in 1980 on two additional plants.

The influx of people operating the electric generating plants and coal mines is expected to impact the region as new families move in to obtain housing and establish permanent residence in the region.

F. Climate

The climate of the area is characterized by abundant sunshine, low relative humidity, light to comparatively heavy precipitation, and wide daily and seasonal variations in temperature.

Longtime Weather Bureau averages show an annual average precipitation for Crow Agency of 14.44 inches. There are wide fluctuations between years. The highest annual precipitation recorded at Crow Agency was 25.25 inches and the lowest was 8.43 inches. Wide variations in monthly precipitation at various stations indicate that much of the precipitation is from localized storms. Although the distribution of rainfall is generally favorable for crop growth, the wide annual deviations from the normal make dryland farming an uncertain venture. About 33 inches of snow falls in an average year.

The average maximum and average minimum temperatures are about 61 degrees Fahrenheit and 31 degrees Fahrenheit, respectively. July is the warmest month and January is the coldest. The highest temperature recorded was 110 degrees Fahrenheit and the lowest was minus 50 degrees Fahrenheit.

VIII. SUMMARY OF ENVIRONMENTAL CONSEQUENCES OF THE PROPOSAL AND ALTERNATIVES
COMPARATIVE EFFECTS OF THE PROPOSED ACTION OF EACH ALTERNATIVE ON THE ENVIRONMENT

ALTS.	ADVERSE EFFECTS THAT CANNOT BE AVOIDED	RELATIONSHIP BETWEEN SHORT-TERM USE OF MAN'S ENVIRONMENT AND THE ENHANCEMENT OF LONG-TERM PRODUCTIVITY	IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES	MEANS OF MITIGATING ADVERSE ENVIRONMENTAL IMPACTS
"A"	<p>Eventual loss of historic resources to scattered housing and possibly commercial land uses. Eventual loss of cultural resources to "pot hunters."</p> <p>Incompatible land use would continue on "Last Stand Hill," a prime park resource.</p> <p>A chronological correct tour of the battle sequence would be difficult and incomplete.</p> <p>Picnicking would continue in and near the national cemetery.</p> <p>Many existing trees in the national cemetery would die due to lack of water.</p>	<p>Minimal as long as historic resources remain as pasturelands.</p>	<p>Land use changes would result in loss of undeveloped prairie pasture to farmsteads, housing, tilled lands, power lines, roads, and possible commercial development.</p> <p>Loss of cultural artifacts through activities of "pot hunters."</p>	<p>Oversized vehicles would be eliminated from park roads and parking area during the heavy use summer season.</p> <p>Eliminate water stains from head stones and inscription erosion on monuments in the national cemetery.</p> <p>Native trees would be planted to replace the existing nonnative trees in the national cemetery if they did not survive through nonirrigation practices.</p>
"B"	<p>Land disturbance would consist of 10 acres for development of the new entrance road, picnic area, parking, and visitor orientation/administration facility and 13 acres for all other development.</p>	<p>Historic and cultural resources would be preserved. Existing impacts due to parking and visitor center near "Last Stand Hill" would be eliminated by removal of these facilities.</p> <p>Four and one half acres of presently disturbed lands would be restored.</p> <p>Visitor interpretive opportunities would be improved through an expanded museum and a chronologically correct tour of the battle sequence.</p> <p>Visitors would have an appropriate picnic area.</p> <p>Heavy visitor use areas would have sanitary facilities.</p>	<p>Possibly disturb some cultural artifacts in development areas.</p>	<p>Historic resources would be protected against adverse use for future generations through controlled land use.</p> <p>Approximately 5-1/2 acres of the area that would be disturbed through development has been previously disturbed as an old gravel pit.</p> <p>Archeological investigation and reevaluation prior to and during construction would salvage most artifacts.</p> <p>Construction activity disturbance would be rehabilitated through use of native topsoil and indigenous plant materials.</p> <p>Impacts of oversized vehicles on park resources would be reduced.</p> <p>Oversize vehicles would be eliminated from park roads.</p> <p>Eliminate water stains from headstones and inscription erosion on monuments in the national cemetery.</p>
"C"	<p>Historical resource protection would not be fully protected through uncontrolled land use of 2,100 acres of the eastern viewshed.</p> <p>Incompatible land use would increase on "Last Stand Hill," a prime park resource.</p> <p>Land disturbance would consist of 9 acres for development of the new entrance road and picnic area, and 13 acres for all other development.</p>	<p>Visitor interpretive opportunities would be improved through an expanded museum and a chronologically correct tour of the battle sequence.</p> <p>Historic and cultural resources would be preserved.</p> <p>Visitors would have an appropriate picnic area.</p> <p>Heavy visitor use areas would have sanitary facilities available.</p>	<p>Uncontrolled land use within the eastern viewshed would result in a loss of historic resources.</p> <p>Possibly disturb some cultural artifacts in development areas.</p>	<p>Historic resources would be protected against adverse use for future generations through controlled land use.</p> <p>Approximately 4-1/2 acres of the area that would be disturbed through development has been previously disturbed as an old gravel pit.</p> <p>Archeological investigation and evaluation prior to and during construction would salvage most artifacts.</p> <p>Construction activity disturbance would be rehabilitated through use of native topsoil and indigenous plant materials.</p> <p>Impacts of oversized vehicles on park resources would be reduced.</p> <p>Oversize vehicles would be eliminated from park roads.</p> <p>Eliminate water stains from headstones and inscription erosion on monuments in the national cemetery.</p>
"D"	<p>Incompatible land use would increase on "Last Stand Hill," a prime park resource.</p> <p>Land disturbance would consist of 10 acres for development of the new entrance road, picnic area, parking, and visitor orientation/administration facility and 13 acres for all other development.</p> <p>Approximately 5-1/2 acres of this area has been disturbed previously by an old gravel pit.</p>	<p>Historic and cultural resources would be preserved.</p> <p>Visitor interpretive opportunities would be improved by providing a chronologically correct tour of the battle sequence.</p> <p>Visitors would have an appropriate picnic area.</p> <p>Heavy visitor use areas would have sanitary facilities.</p>	<p>Possibly disturb some cultural artifacts in development areas.</p>	<p>Historic resources would be protected against adverse use for future generations through controlled land use.</p> <p>Approximately 4-1/2 acres of the area that would be disturbed through development has been previously disturbed as an old gravel pit.</p> <p>Archeological investigation and evaluation prior to and during construction would salvage most artifacts.</p> <p>Construction activity disturbance would be rehabilitated through use of native topsoil and indigenous plant materials.</p> <p>Impacts of oversized vehicles on park resources would be reduced.</p> <p>Oversize vehicles would be eliminated from park roads.</p> <p>Eliminate water stains from headstones and inscription erosion on monuments in the national cemetery.</p>

IX. LIST OF PREPARERS

James M. O'Shea, Jr., Team Captain, Landscape Architect/Park Planner, Division of Park Planning, Rocky Mountain Region, National Park Service

James V. Court, Superintendent, Custer Battlefield National Monument

William H. Sontag, Chief, Division of Interpretation, Rocky Mountain Region, National Park Service

Lloyd L. Garrison, Realty Specialist, Division of Lands, Rocky Mountain Region, National Park Service

Michael Schene, Regional Historian, Rocky Mountain Region, National Park Service

Neil Mangum, Park Ranger-Historian, Custer Battlefield National Monument

X. COORDINATION WITH OTHERS

Bureau of Indian Affairs, Crow Agency, Montana

Little Big Horn Associates, National

The Order of Indian Wars, National

Custer Battlefield Historical and Museum Association, Inc., Crow Agency, Montana

Crow Indian Tribe, Crow Agency, Montana

Cheyenne Indian Tribe, Lama Deer, Montana

Hardin, Montana, Community

Sheridan, Wyoming, Community

Billings, Montana, Community

Montana State Clearinghouse - (106 Compliance)

Montana State Historical Society

Montana State Highway Department

Jerome Greene, Denver Service Center

James King, Lame Deer, Montana

Caleb Shields, Fort Peck Reservation

Joe Medicine Crow, Crow Reservation

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Don Ricky, Evergreen, Colorado

Richard T. Hart, Sturgis, South Dakota

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APPENDIX A

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Monument

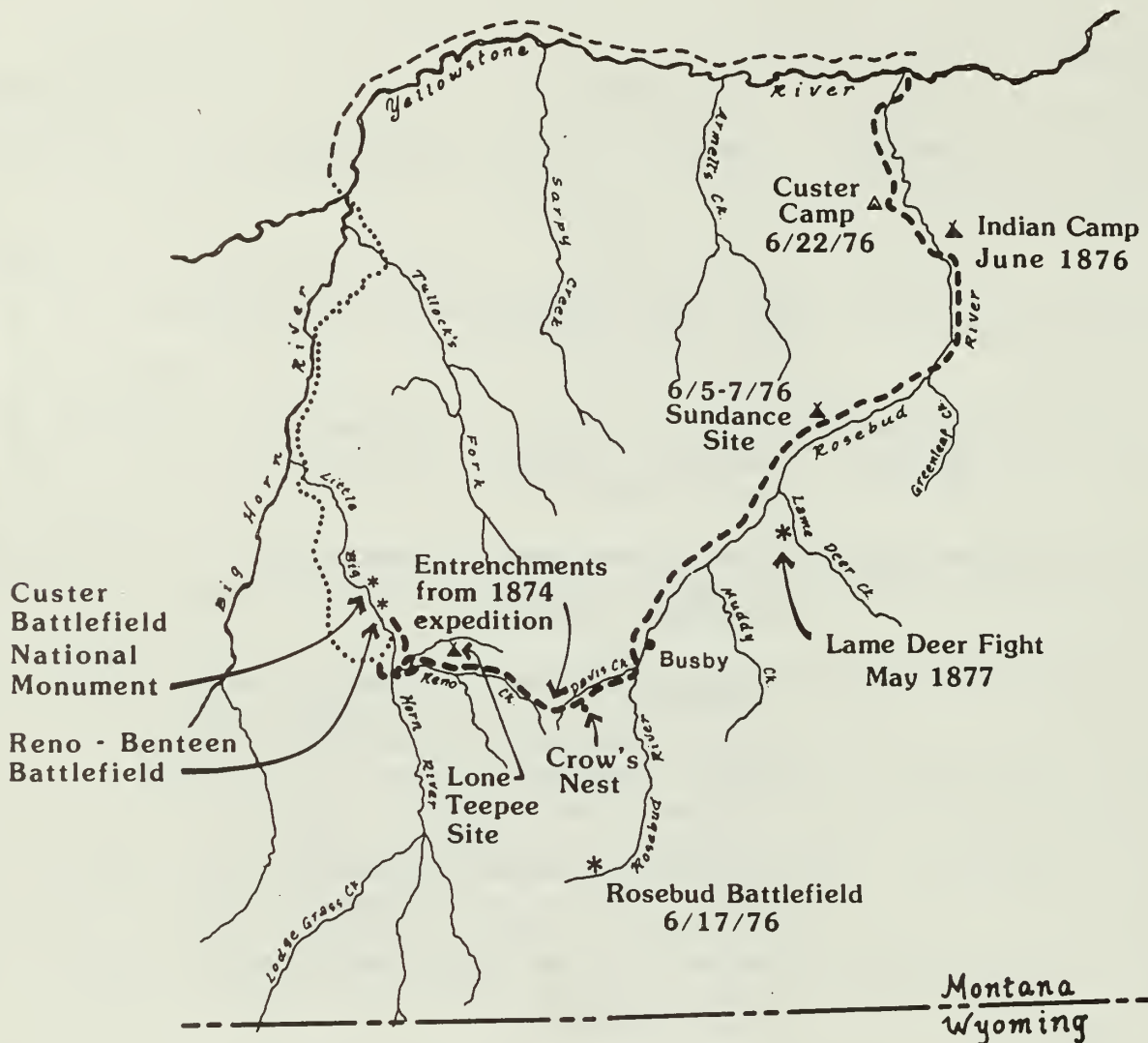
APPENDIX B
FACILITY ANALYSIS

<u>Facility No.</u>	<u>Purpose</u>	<u>Description</u>	<u>Condition</u>
1	Historic Building	Historic Residence of Superintendent of Custer Battlefield National Cemetery, 1894. Two-story, 1800 sq. ft., masonry construction of native stone. National Register of Historic Places, 1966.	Good
9	Storage Shed	Corrugated, galvanized, sheet steel quonset hut, one-story, 1050 sq. ft., gravel floor. Transfer from YELL, 1950.	Good
10	Visitor Center/ Admin. Building	Museum, bookstore, administrative offices, library, vault, and audio-visual room, 1952. Concrete frame, cinder block walls, plastered interior, concrete floors, tar and gravel roof, one floor and basement. <u>Analysis:</u> Although the condition of the visitor center is good, the facility is not large enough to handle the 250,000 visitors per year, which is computed in the summertime as 2,000 per day, coming to a very small visitor center. Also the exhibits in the museum are not adequate to tell the park story.	Good
11	Maintenance Shop	Repair shop, equipment storage, cemetery irrigation system and tank, sewage system chlorinator, 1963. Concrete block with wooden truss, cedar shingled roof, 102' x 27'4". <u>Analysis:</u> The Maintenance Shop is in good condition, but not adequate to house the equipment and utilities for the national cemetery.	Good
12	Permanent Employee Residence	Three bedroom, 1½-bath, dining/living room, attached unheated garage, no basement, carpet and vinyl flooring, built-in	Excellent

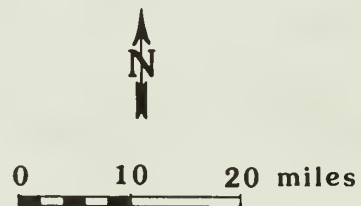
<u>Facility No.</u>	<u>Purpose</u>	<u>Description</u>	<u>Condition</u>
		cast iron stove for wood/coal, 1963. Wooden frame construction with cedar siding and cedar shingle roof. Certified as needed housing, 1982.	
13	Permanent Employee Residence	(Same as above)	Excellent
14	Permanent Employee Residence	(Same as above)	Excellent
15	Seasonal Employee Residence	Four one-bedroom units with utility and storage rooms, 1963. Wooden frame construction with cedar siding and cedar shingle roof. Not constructed for winter use. Certified as needed housing, 1982.	Excellent
--	Electrical System	1425' underground power cable and lines with alarm horn at Maintenance Shop, 1963.	Good
--	Sewer System	Concrete septic tank, distribution box, 300' filter trench, 100' of 4" drain tile, 1394' of 6" drain tile, 20' of cast iron soil pipe, 1959. <u>Analysis:</u> The septic system for the entire park is deteriorating and needs to be upgraded.	Fair
--	Water System	Pumphouse by the river for all water, 4200' of 6" line with connections to buildings, 1955.	Good
--	Irrigation System	Irrigation system for cemetery, 1968. <u>Analysis:</u> The irrigation system for the national cemetery is controlled manually and needs to be overhauled for an automatic system, and the length needs to be extended around the visitor use area.	Fair

<u>Facility No.</u>	<u>Purpose</u>	<u>Description</u>	<u>Condition</u>
Route 2	Primary Road	Entrance road of Custer Battlefield from the north boundary to south boundary, including visitor center parking area, 1.6 miles. <u>Analysis:</u> Route 2 is deteriorating rapidly and needs to be reconstructed.	Fair
Route 3	Primary Road	Road and right-of-way from south boundary of Custer Battlefield to west boundary of Reno-Benteen Battlefield, 4.1 miles.	Good
Route 4	Primary Road	West boundary of Reno-Benteen Battlefield to and including parking area, 0.2 mile.	Good
Route 5	Secondary Road	Main cemetery drive, 0.238 mile. <u>Analysis:</u> Route 5 is in poor condition and needs to be rebuilt.	Poor
Route 6	Secondary Road	New cemetery drive, .08 mile.	Good
Route 50	Service Road	Gravel road from HQ area to storage shed and pumphouse, 0.7 mile.	Good
Trail 1	HQ Walks	Concrete walks from parking area to visitor center, to cemetery, and to amphitheater including asphalt base walks, rest benches, and flagstone steps, 1966.	
Trail 2	HQ Trail	Asphalt base trail from visitor center to Custer Monument, 700' long, 1964.	Good
Trail 3	Self-Guiding Trail	Reno-Benteen Battlefield self-guiding trail, 0.7 mile, 1959. <u>Analysis:</u> Trail 3 needs a good chip seal on it to prevent further deterioration.	Fair

<u>Facility No.</u>	<u>Purpose</u>	<u>Description</u>	<u>Condition</u>
Trail 4	Cemetery Walks	Concrete walks within cemetery, 1968.	Good
--	Historic Monument	Marble shaft. Custer Historic Monument inscribed with 220 names of officers and men. Custer's Last Stand.	Good
--	Historic Marker	Granite shaft. Reno-Benteen Historic Marker inscribed with names.	Good
--	Monument	Marble and granite monuments in cemetery. Fort Smith shaft and Bear Paw cube.	Fair
<u>Analysis:</u> The Fort Smith Shaft is eroded to the point where the inscription cannot be read. The white marble headstones have been stained brown, due to the iron content in the water. The suggested remedial measure has been taken by not chlorinating the water, which is suppose to actually turn the brown stains white again. This is not yet a proven fact.			
--	Flagpole	76' high with guy lines, 1959.	Good
--	Message	Four message repeaters located at southeast corner of visitor center, monument hill, Reno-Benteen Battlefield, and cemetery, 1976.	Good
--	Entrance Gate	Square concrete posts with brick veneer and wrought iron gates, 1959.	Good



- Custer's route
June 22-26, 1876
(proposed historic trail)
- Terry's route
June 23-27, 1876
- . - . - . Gibbon's & Terry's route
June 22-26, 1876



Historic Trail Study Proposal

Custer Battlefield National Monument
U.S. Dept. of the Interior - National Park Service

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APPENDIX C

ADDITIONAL STUDIES NEEDED

A trail study is needed to determine the most effective procedure to preserve and interpret Custer troop advances from Rosebud Creek to Custer Battlefield National Monument. This troop movement is an integral part of the Battle of the Little Bighorn.

Alternatives:

1. Existing conditions to continue.

Currently there is no historic trail reflecting the significance of the route of Custer and the Indians to the epic battle on the Little Bighorn. Visitor inquiry and interest in retracing the historic route is growing. Unless the area is protected, the potential for the trail's destruction via oil, gas, or mineral development appears large. While it is true the trail is not needed at the monument to interpret the monument story, the advantages of preserving it in whole will add immensely to the overall historic interpretation.

2. Establishment of historic trail from mouth of Rosebud Creek to Custer Battlefield National Monument.

Under this alternative the National Park Service would seek historic trail status for the areas associated with The Battle of the Little Bighorn, beginning from the mouth of the Rosebud and ending at Custer Battlefield National Monument. Total length of the trail is approximately 100 miles: 80 miles are on existing State or county roads, and the remaining 20 miles are on private or Indian land. Negotiations for easements are needed with State, county, and other landowners. Interpretive markers would be placed at significant historic points along the trail. Those already identified as possessing historic importance include, but are not limited to, the following:

1. Custer campsite, June 21, 1876
2. Custer campsite, June 22, 1876
3. Custer campsite, June 23, 1876
4. Indian campsite, June 5-7, 1876
(Site of Sitting Bull's Sun Dance)
5. Custer campsite, June 24, 1876
6. Crow's Nest
7. Indian campsite, June 16, from which warriors
attacked Crook at battle on Rosebud, June 17, 1876
8. Morass
9. Lone Teepee
10. Reno's Crossing.

An interpretive prospectus is needed to provide sufficient detail to implement this general management plan/development concept plan.

[illegible]

NPS D-16

