

FREDERICKSBURG & SPOTSYLVANIA NATIONAL MILITARY PARK

ENVIRONMENTAL ASSESSMENT

of

BERNARD'S CABINS TRAIL

AUGUST 1992

Submitted by: _____
John Perez, Natural Resource Management Date

Reviewed By: _____
Michael K. Johnson, Chief Ranger Date

Approved by: _____
Maria Burks, Superintendent Date

This assessment is being made on the proposal to construct an

interpretive trail from South Lee Drive to Bernard's Cabins. This trail will follow old road traces, and in some sections along earthworks use by elements of General "Stonewall" Jackson's infantry during their repulse of General Gibbon's attack on the right flank of the Confederate Army at Fredericksburg.

This action is tiered to one of the major objectives in the Land Protection Plan, "Make the historical points accessible to the public and to students of the battles" (page 10). Also, the General Management Plan states, "Interpret the park's cultural resources and their significance and make them available to park visitors" (page 97), and "Trails interpreted by narrative signs and supplemented by free publications are available to visitors who wish a more leisurely and intimate association with important park features than would normally be possible by driving" (page 30). By establishing the Bernard's Cabins Historic Trail, the park will be offering the visitor/student an opportunity to experience this portion of the Fredericksburg Battlefield that played a pivotal role in the Confederate victory.

I. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action

The park proposes to construct an interpretive hiking trail of approximately 5100 feet from South Lee Drive to Bernard's

Cabins. In the fields and woods surrounding the site, elements of the Union Army attempted a futile assault on the Confederate Army's right flank. The knoll was also home to a small community of plantation slaves. This tract of land was recently purchased for the sole purpose of preserving and interpreting the terrain where Union troops attacked the Confederate positions along the complex network of earthworks.

B. Proposed Procedures

The present tour stop pull-off along Lee Drive would be expanded to accommodate three cars, or one bus. Approximately 150 square feet of asphalt, three feet wide, would be placed along the shoulder of Lee Drive.

None of the following trail alternatives would alter drainages or in any way impact the hydrology of adjacent wetlands. Saplings would be cut from the trail path and poison ivy vines trimmed from the trail or killed with an application of an approved herbicide, all non-target plants would be avoided. No trees larger than 3"dbh would be cut for this project. No fill material will be required for this project. The trail will not cross any earthworks.

C. Alternatives

1. No Action - The intent of this proposal is to open access to this very important knoll used by Confederate Generals in directing the counterattack on Union soldiers assaulting the Confederate's right flank. The alternative of No Action is not considered viable as it would contradict the park's approved General Management Plan and Land Protection Plan, and result in the continued lack of interpretation of this important historic terrain.

2. Loop Trail - This 5100 ft. trail would traverse woods and fields where Confederate troop and gun positions were located in and around the Bernard Cabin's site. This alternative would lead visitors through the woods along an old road trace to the edge of agricultural fields. It would then cross the field to the cabin site. From the cabin site it would reenter the woods, slip around the Confederate trenches and follow the earthworks back to the road trace, thus creating a loop (see Appendix 1).

3. Woodland Trail- (No Loop) - This trail would follow the same road trace mentioned above, but the segment running through the north edge of the field would be eliminated. The trail would follow the old road trace running south along Confederate trenches to its terminus just before the wetland. There it would continue east just inside the woods until it approached the cabin site, where a short 20 yard segment would cross the field to the cabin site.

The large poison ivy patch bordering the field and the wet areas surrounding the hedgerow on the north loop would be avoided. Visitor safety would not be compromised by the airport flightpath. The cyclic maintenance of the 1000' trail through the fields would be eliminated by this alternative. Maintenance of the 1/4 acre cabin site would require the same amount of resources as in Alternative 2.

The permittee would be free to till the entire field without the inconvenience of lifting his tractor attachments over the trail path.

II. DESCRIPTION OF THE EXISTING ENVIRONMENT

A. Non-living Components

1. Climate: The average summer temperature is 75 deg. F with the highest daily maximum being 87 deg. F. Days are hot and often humid. The record high for the area was in August 1953, at 106 deg. F. The average winter temperature is 36 deg. F with an average daily minimum of 23 deg. F. The lowest temperature on record occurred in January 1957, at -16 deg. F. Total annual precipitation is 45.5 inches with 54% falling from April to September. The average seasonal snowfall is 18 inches. Prevailing winds are from the south with the highest average windspeed occurring in the spring at nine-miles per hour.

2. Land:

a. Soils - According to the Soil Survey of Spotsylvania County, soil types are predominately Aqualts in the low lying areas found on half of the project area. These soils are poorly drained and ponded for brief periods during winter, spring, after heavy rains, and during prolonged wet periods throughout the remainder of the year. This soil is usually associated with wetlands.

It should be noted that the trail traversing these aqualt soils follows the road trace built by the Civil Conservation Corps during the 1930's. This old trailbed allows access through these wetland soils without the placement of boardwalks and/or fill material.

Soils found in the cabin site area are composed of Goldboro sandy loam - a deep well drained soil.

b. Geology - The proposed trail follows gentle terrain from Lee Drive to the northwest through a relatively level coastal plain terrace. Bordering the trail near Bernard's Cabins are two large forested wetlands, totalling approximately 50 acres. The trail would utilize old road traces built of gravel and cinders. There is no erosion occurring in the project area including the agricultural field.

c. Land Use Suitability - Presently, the project area is supporting a mature mixed hardwood forest of oaks, sweetgum, tulip poplar, and other coastal plain species. Excellent habitat for wildlife is utilized by numerous species. Bernard's Cabins site is surrounded by a 30 acre agricultural field. After trail

construction and completion of a archeological inventory, a fenced area in the field will protect the cabin site from the impacts of plowing/planting row crops.

3. Water - Surface water is present in the form of wetlands adjacent to southern edge of the proposed trail. No streams are present along the trail route.

B. Living Components

1. Vegetation - The overstory is dominated by Oaks, Red Maple, Sweetgum, and other scattered hardwood species associated with floodplain vegetation. The understory consists of American Holly, Viburnum, Red Maple, Greenbriar, Poison Ivy, Sassafras, Highbush Blueberry, Ironwood, etc. The following table denotes the present tree species, the total saplings/seedlings, and overall species in the path of the 2,000 foot trail leading from Lee Drive (Note: No species of tree size are affected by this action).

<u>Species</u>	<u>Saplings</u> (<3"dbh, >4.5' height)	<u>Seedlings</u> (<4.5' height)
Dogwood	6	4
American Holly	0	4
Highbush Blueberry	10	5
Red Maple	36	8
Red Cedar	2	0
Ironwood	5	0
Azalea	3	0

Sassafras	0	1
Fetterbush	2	2
White Oak	2	1
Black Gum	4	0
Sweetgum	11	5
Viburnum	5	2
Sweetbay Magnolia	0	3
Total	86	35

According to the Virginia Natural Heritage Program, there are no rare, threatened, or endangered species along the proposed trail route. Site visits by the park's Natural Resource Management Specialist also failed to produce any evidence of rare species.

2. Wildlife - No thorough inventory of avian residents exists. Many species of Warblers and Flycatchers can be expected to reside in the adjacent forested wetlands. No nesting activity was observed within the proposed trail route. Deer, turkey, groundhogs, squirrels, and other rodents either reside or transit the area. No reptiles were observed in the area.

C. Ecological Interrelationships

At present the project area consists of a mature oak forest and agricultural field. The farmer of the Bernard's Cabin site spends

approximately four working days in the field, spilt between spring and fall. Animals and plants of the forest and field "edge" are allowed to exist with little influence by humans.

The proposed trail will traverse a forested area undisturbed for decades, and introduce unknown numbers of visitors into this natural habitat. It is unknown what effects, if any, this human activity will have on animal feeding or breeding habits. The trail will avoid the biologically diverse wetlands.

D. Human Values

The chief use of this area would be agricultural, recreation, and historical interpretation. Installation of the trail would constitute a substantial step toward meeting the park's congressional mandate to make the "...historic points accessible to the public and to the students of said battles..." (Fredericksburg & Spotsylvania County Battlefields Memorial National Military Park enabling legislation, 1927).

III. ANALYSIS OF PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action

It is proposed that the first 2,000 feet of the trail follow

the old CCC Bridal Path. A trail width of six feet will be maintained to provide access for mowing equipment to Bernard's Cabins, as access is otherwise unattainable. Saplings and seedlings will be cut with handtools and their roots grubbed out of the ground. The trail surface will be natural, no fill will be used on any portion of the trailbed. The next 1,900 foot segment will be constructed for foot travel only, and will maintain a width of 3 feet just inside the woodline. A half acre exclusion zone would be maintained in sod around the Cabin Site and bordered by a wooden fence or other delineating device.

The 1,100 feet of the loop trail traversing the field would be maintained in sod. The trail would cross the exclusion zone mentioned above. The permittee would exclude the trail and cabin site from all farm operations.

Pursuant 106 approval and concurrence of the Superintendent, it will be determined which route will be utilized - the Loop Trail or Direct Route. Questions remain concerning the maintenance costs and interpretive value of each trail. For the purposes of this document, there are no outstanding environmental concerns that would eliminate an alternative from consideration.

1. Anticipated Impacts - If the general procedures are

followed, impacts on the area will be minimal. Some rutting may occur from mowing equipment using the trail, but impacts should be kept at a minimum if equipment is used only during dry periods in summer. Access to the previously remote earthworks may subject them to trampling and erosion caused by trail shortcutters. However, if the portion of the proposed trail slipping around the southern terminus of the earthworks is placed at a proper distance, hikers will not be inclined to cut across earthworks. This area is favored by illegal relic hunters and there is concern that this activity may increase with easy access made by this trail. The trail may also have the opposite effect of discouraging relic hunters because of their increased visibility to visitors. It remains unknown, whether the increased human activity will have an impact on breeding birds and animals.

2. Recommendations For Mitigating Measures - The elimination of the loop trail would free the farmer to implement plowing/planting activities unabated. Every effort will be made to properly place the trail away from earthworks so as to discourage crosscutting and trampling. Maintenance personnel will limit the size of mowing equipment to riding lawnmowers in order to prevent severe rutting of trailbed. A gate will be placed at the entrance of the trail to prevent unauthorized vehicle access.

B. Relationship Between Short-Term And Long-Term Productivity

This relationship is weighted toward the long-term maintenance and public enjoyment of the historic trail. If the proposed action is followed, maintaining the Cabin Site and trail will require bi-annual mowing and pruning. If the Loop Trail is chosen, maintaining the additional area will double the maintenance time. The Loop Trail borders the flightpath of Shannon Airport, and with each flight, the public will be exposed to noise and visual interruption of their Civil War experience. Lastly, eliminating as much maintenance of turf, with its associated cost and pollution, should be given careful consideration when selecting an alternative.

Long term monitoring of possible impacts to breeding bird populations will be initiated in the spring of 1993, and will continue yearly within the large wetland adjacent the project area.

IV. Persons, Groups, And Government Agencies Consulted

Noel Harrison, Cultural Resource Mgmt. Specialist, FRSP

Hal Wiggins, Regulatory Specialist, Army Corps of Engineers

Chris Ludwig, Virginia Natural Heritage Program
Planning Staff, Denver Service Center, NPS

V. Summary

This proposal will provide visitor access to a critical portion of the Fredericksburg Battlefield, exposing visitors to features of terrain that play a pivotal part in the Confederate victory. The overall impacts to natural and cultural resources will be minimal and will involve a small area of the park. Critical wetlands will not be directly impacted by this proposal.

APPENDICES

- APPENDIX 1: Map of proposed trail
APPENDIX 2: Section 106 Compliance

FREDERICKSBURG AND SPOTSYLVANIA NATIONAL MILITARY PARK

JANUARY 1993

Record of Decision and Finding of No Significant Impact

Bernard's Cabins Historic Trail

Submitted by: _____
Maria Burks, Superintendent Date

Approved by: _____
????????????????, Regional Director Date

The park proposes to construct a key historic trail on the Fredericksburg Battlefield. The following will provide you with the rationale used, and the consultations performed, to determine the strategy the park will use in constructing the trail. The trail is crucial in providing visitor access to the site of a small slave community, known during the Civil War as "Bernard's Cabins;" the site of a major Confederate artillery position; and offers an excellent vista from which to view the terrain used by the Union

attack against General "Stonewall" Jackson's Corps.

Background

The action being proposed is tiered to one of the major objectives of the General Management Plan, "Interpret the park's cultural resources and their significance and make them available to park visitors" (page 97), and "Trails interpreted by narrative signs and supplemented by free publications are available to visitors who wish a more leisurely and intimate association with important park features than would normally be possible by driving" (page 30).

In establishing the Bernard's Cabins Trail, the park will offer the visitor/student an opportunity to experience a previously remote portion of the Fredericksburg Battlefield that played a pivotal role in the Confederate victory.

Proposal

The purpose of the proposed action is to construct an interpretive hiking trail of approximately 5000' to the Bernard's Cabins. Most of the land traversed by the trail was recently purchased for the sole purpose of preserving and interpreting the terrain where Union

troops attacked Confederate positions.

The present tour stop pull-off along Lee Drive would be expanded to accommodate three cars, or one bus. Approximately 150 square feet of asphalt, three feet wide, would be placed along the road shoulder.

The project would not alter drainages or in any way impact the hydrology of adjacent wetlands. The majority of the trail would follow an existing remnant of a 1930s CCC bridal trail. Saplings would be cut from the trail path and poison ivy vines trimmed from the trail or treated with an approved herbicide, all non-target plants would be avoided. No tree larger than 3" dbh would be cut for this project. No fill material will be required, the existing natural litter will serve as a trailbed. The trail will not cross any earthworks.

An exclusion zone of approximately one acre will be established around the Cabin site to protect archeological resources. The farmer/permittee will continue to plant row crops in the remaining portion of the field.

Consultation

Consultation has been completed with the following offices and individuals:

Chris Ludwig, Virginia Natural Heritage Program

Hal Wiggins, Army Corps of Engineers, Fredericksburg Ofc.

Denver Service Center, Branch of Planning

Bob Krick, Chief Historian, Fredericksburg & Spotsylvania NMP

Nape Shelton, Ornithologist, WASO

FINDING OF NO SIGNIFICANT IMPACT

Based upon the environmental assessment and the rationale of the decision above, I find that the Bernard's Cabins Historic Trail is not a major Federal action significantly impacting the quality of the human environment under Section 102 (2) (c) of the National Environmental Policy Act of 1969. The action to be taken in connection with this proposal is consistent with the objectives and policies of that act.

The impact of implementing this trail construction does not appear to be highly controversial. The project does not commit the National Park Service to specific future actions that will constitute a significant or controversial impact. The impact of the proposal is not of a cumulative nature either in itself or in conjunction with the other Federal or non-Federal projects. Therefore, pursuant to Section 102 (2) (c) of the Environmental Quality and National Park Service Guidelines, the proposal herein does not require the preparation of an environmental impact statement.

APPENDIX 1

APPENDIX 2