

**FINDING OF NO SIGNIFICANT IMPACT
FOR THE
REHABILITATION OF VARIOUS ROADWAYS
AND PARKING AREAS
ENVIRONMENTAL ASSESSMENT**

ANTIETAM NATIONAL BATTLEFIELD

BACKGROUND

The Antietam National Battlefield (Park) was established in 1890 to commemorate the single bloodiest day of the American Civil War. The Battle of Antietam, or Sharpsburg as it was referred to by the Confederate army, began at dawn on September 17, 1862. About 40,000 Southerners under the command of Gen. Robert E. Lee were pitted against 87,000 troops of the Federal Army of the Potomac commanded by Gen. George McClellan. At the day's end a total of 23,110 soldiers were killed, wounded, or missing. The entire battlefield, including the private properties within the boundary, is listed on the National Register of Historic Places as a historic district. The Park today is considered one of the best preserved Civil War areas in the National Park System.

The National Park Service (NPS) proposes to improve the visitor's experience and safety by upgrading and/or expanding the roads and parking areas, and correcting areas along the roadways that currently have poor drainage. The proposed action is needed because the asphalt surfaces throughout the Park have deteriorated and continue to deteriorate. Signs of deterioration include cracking, edge failures, delamination, spot sub-base failure, and slight rutting. During rainfall events, the water does not drain properly from the roadway. This standing water causes hazardous driving conditions, especially in freezing temperatures because a layer of ice forms on the roadway. Several roadways have insufficient width to allow tour buses to pass each other and to complete turn movements along the tour route without driving off of the pavement.

The Federal Highway Administration (FHWA) prepared the Environmental Assessment for the Rehabilitation of Various Roadways and Parking Areas (EA) in cooperation with the NPS, and it was available for public review from October 15, 2007, through November 15, 2007. The EA analyzed two alternatives, the No Action and the Action Alternative (Preferred Alternative). The EA was prepared pursuant to the Council of Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) (40 CFR 1500 et seq.), 42 U.S.C. 4332(2)(C), and NPS Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision making and Handbook (2003) (DO-12).

SELECTED ALTERNATIVE

The NPS, in cooperation with the FHWA, has selected the Action Alternative. Under the Action Alternative, improvements will be performed to various roadways, parking areas, sidewalks, and paved trails throughout the Park. Details regarding the proposed improvements to the roadways and parking areas are listed below. For all of the below

listed roadways and parking areas that are currently asphalt-paved, measures to improve the surface condition of the roadway will be done. This could include milling the existing pavement, spot reconstruction of the underlying road base, paving with new asphalt, and one to two-foot widening at the intersection of roadways and at curves in the road where rutting outside of the existing pavement is shown.

The Visitor Center Trail, Philadelphia Brigade Trail, Old Burnside Bridge Trail, Georgian Overlook Trail, and the Hawkin's Zouaves Trail will be milled and/or paved with a natural-toned material to create a durable surface that will better blend with the surrounding landscape. Asphalt sidewalks adjacent to the parking areas will also be milled and/or paved with a natural-toned material. The Maryland Battery A, Light Artillery marker and New Jersey, Hexamer's Battery marker will be moved back approximately 8 feet from their existing locations immediately adjacent the roadway where they are in danger of being struck by passing vehicles.

Branch Avenue

The curves along Branch Avenue will be widened by approximately one foot to facilitate vehicle movement. Culverts will be replaced, and the paved waterway will be reconstructed. The area adjacent to the culvert will be re-graded to improve drainage. Existing culverts and ditches along the roadway will be cleaned and repaired

Old Burnside Bridge Road

The curve will be widened to the inside by approximately two feet. The bus parking stalls will be reconstructed, and spot reconstruction will occur where necessary. The handicapped parking spaces will be reconfigured for easier and more efficient use. The existing steel-backed timber guardrail will be reconstructed, and additional matching guardrail will be placed. Culverts will be reconditioned or replaced, and riprap may be placed where necessary. A paved waterway will be placed and ditch grading will be placed where necessary to improve drainage.

Rodman Avenue / Sherricks Run Bridge

The bridge will be rehabilitated through concrete repair. Spot reconstruction will be done where necessary and a stabilized topsoil mixture will be placed along a portion of the shoulder. Steel-backed timber guardrail will be installed, and a traffic counter will be installed in the pavement. To improve drainage, a culvert will be installed and the area adjacent to the roadway will be graded. The paved waterway will also be reconstructed.

Driveway to Maintenance Area

The asphalt will be removed, and the road base will be reconditioned. Once the base is reconditioned, the area will be paved with asphalt.

National Cemetery Parking

The existing partial gravel/partial asphalt pavement parking area will be paved to the limits of the gravel area, and the pavement will match the existing asphalt. A grassed

island surrounded by curbing will be constructed in the center of the parking area. Grading will be done to ensure adequate drainage of storm water.

Richardson Avenue

The portion of the road that is two-directional will be widened two feet along the curves, and one to 1.5 feet on each side throughout a portion of the roadway. Guardrail will be replaced alongside the existing stone retaining wall adjacent to the stone bridge. The area will be graded where deemed necessary to improve drainage.

Piper Lane

A new culvert will be placed, and grading will be done where necessary. There will be no change made to the width of this historic lane.

Option A: The roadway and parking area will be paved using a more natural-toned aggregate. This could be done through a mix of various-sized aggregate, which will be mixed with a clear adhesive compound to form the bonded aggregate; or, an asphalt pavement using natural-toned aggregate could be used to pave the roadway and parking area. The top layer of asphalt binder will be removed to reveal a natural-looking surface.

Option B: The existing uniform-sized gravel will be scarified to break it into varying sizes, including gravel dust. This material will be compacted to form a roadway and parking area similar to that constructed by the War Department in the 1890's.

Mumma Lane

At the intersection of Smoketown Road and Mumma Lane, two historic markers will be moved back from the edge of the roadway. The roadway will be widened by approximately two and a half feet at the curve. The ditch will be graded and reconditioned to improve drainage.

Visitor Center Entrance Road

The roadway will be widened by approximately two feet at the curve and spot reconstruction will be done where necessary. Areas adjacent to the roadway will be graded, and the culvert will be reconditioned. A traffic counter will be installed in the pavement.

Visitor Center Parking Area

The drainage of the existing parking site will be improved by grading and pipe reconditioning. A new handicapped ramp will be constructed, and several concrete panels in the sidewalk will be repaired where they have deteriorated.

Hagerstown Pike

Several areas will be graded and culverts will be reconditioned to improve drainage. An existing pull-off will be removed, and the area will be re-vegetated.

Philadelphia Brigade Driveway and Parking

The roadway will be widened by approximately one foot on each side. The roadway curve to the monument parking will be widened by two feet. Areas adjacent to the roadway will be graded to improve drainage.

Starke Avenue

The existing 16-foot roadway will be reconstructed and widened to 18 feet in width. The ditch will be graded and culverts will be reconditioned to improve drainage.

Cornfield Avenue and Parking

A portion of the sidewalk at parking area A will be removed and grading will be done to improve drainage. An interpretive sign will be moved to accommodate the grading. The roadway will be widened by approximately one foot on each side.

Mansfield Avenue and Parking

The roadway will be widened by approximately one foot on each side, and the curve will be widened by approximately 1.5 feet. Two culverts will be placed and the clay pipe will be replaced with a culvert to improve drainage. Curb will be removed at the parking area. The area will be graded, and a paved waterway will be constructed.

Shull House Parking

This road is currently paved and meets a gravel parking area. The gravel parking area and two other small parking areas will be paved. A permanent storm water management dry swale will be constructed.

Pry House Access Road

A new culvert will be placed, one culvert will be replaced with a larger culvert, and grading will be done where necessary. There will be no change made to the width of this historic lane.

Option A: The roadway and parking area will be paved using a more natural-toned aggregate. This could be done through a mix of various-sized aggregate, which will be mixed with a clear adhesive compound to form the bonded aggregate. Or, an asphalt pavement using natural-toned aggregate will be used to pave the roadway and parking area. The top layer of asphalt binder will be removed to reveal a natural-looking surface.

Option B: The existing uniform-sized gravel will be scarified to break it into gravel of varying sizes, including gravel dust. This material will be compacted to form a roadway and parking area similar to that constructed by the War Department in the 1890's.

OTHER ALTERNATIVES CONSIDERED

No Action Alternative

Under the No Action Alternative, no substantial improvements would be performed other than in accordance with planned routine maintenance operations. The existing safety concerns would not be addressed. None of the existing roadways or parking areas would be paved or reconstructed. Maintenance and some limited construction activities would occur in the foreseeable future to address preservation needs, the No Action Alternative would not address future impacts created by higher visitation rates and longer-term maintenance needs.

ENVIRONMENTALLY-PREFERRED ALTERNATIVE

The environmentally-preferred alternative is simply put, "this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources" (Q6a)(516 DM 6 4.10(A)(5)).

The Action Alternative is the environmentally-preferred alternative. The smooth driving surface from the rehabilitation and repaving will provide a more enjoyable ride for motorists on the tour route through the Park. The new roadways and bonded aggregate trail and walkway surface will provide a more aesthetically pleasing view for visitors. The Action Alternative also protects access to interpretation of the battle and its associated markers and monuments. The water quality of the storm water runoff will improve because of the treatment of areas proposed for rehabilitation. The deteriorated surfaces and standing water issues will no longer exist, decreasing the potential for safety concerns of Park staff and visitors. Under the No Action Alternative, the pavement will continue to deteriorate, no longer preserving the historic War Department roads throughout the Park. The expanded need for maintenance and the continued deterioration of the roadways will inconvenience visitors and will hamper their understanding and enjoyment of the battlefield.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined at 40 CFR §1508.27, from the regulations of the Council on Environmental Quality that implement the provisions of NEPA, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The Selected Alternative will include minor ground-disturbing activities to improve roadway drainage that will have short-term minor adverse impacts to the cultural landscape and water quality. Traffic control measures during construction, as well as the presence of construction equipment, will have a short-term minor adverse impact to visitor use and experience. Slight widening of several roadways will increase the impervious surface of the Park, which will have long-term negligible adverse impacts to water quality. Paving of Piper Lane and the Pry House Access Road and moving two markers back from the edge of the roadway will have long-term moderate adverse impacts to the cultural landscape. Improvement of the pavement of various roadways and parking areas throughout the Park will have long-term moderate beneficial impacts to visitor use and experience.

The degree to which the action affects public health or safety.

The Selected Alternative will have a long-term moderate beneficial impact to health and safety. The deteriorated roadways and parking areas will be rehabilitated and re-paved to create a smooth driving surface. Areas where there was standing water on the roadway will be corrected so there will no longer be a potential hazard to motorists. Additional guardrail will also be placed. Short-term minor adverse impacts will occur during construction because of the possible conflicts between construction equipment and motorists.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The entire battlefield is listed on the National Register of Historic Places as a historic district, and the Selected Alternative will improve roadways and parking areas within the historic district. The Selected Alternative will have adverse effects to cultural resources in the Park, therefore a Memorandum of Agreement (MOA) has been drafted to minimize and mitigate these effects. The MOA was signed on March 11, 2008. There are no wetlands, prime farmlands, wild and scenic rivers, or ecologically critical areas within the study area.

The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Implementation of the project will not result in controversial effects on the human environment. Two comments were received during the public comment period; one in support of the proposed action, and another requesting the movement of a monument to improve sight distance.

The degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

There are no identified risks associated with the Selected Alternative that are unique or unknown, and there are no effects associated with the Selected Alternative that are

highly uncertain that were identified during the analysis for the EA or during the public review of the EA.

The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Selected Alternative does not establish a precedent for any future actions that may have significant effects, nor does it represent decisions about future considerations. The purpose of this action is to address safety concerns associated with the deterioration of the pavement and drainage concerns on various roadways and parking areas throughout the Park.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The Washington County Department of Planning and Community Development, in partnership with the Maryland Department of Natural Resources, has proposed to acquire conservation and historic preservation easements on properties adjacent to the Park. The Selected Action, along with the known impacts from other actions in the past, present, and reasonably foreseeable future, will not cause a significant cumulative effect.

The degree to which the action may adversely affect items listed or eligible for listing in the National Register of Historic Places, or other significant scientific, cultural or historic resources.

The Selected Alternative will have potentially adverse effects to items listed or eligible for listing in the National Register of Historic Places, therefore a MOA has been drafted to minimize and mitigate these effects. The MOA addresses adverse effects to the Stone Culvert along Richardson Avenue over Richardson Run, paving of Piper Lane and the Pry House Access Road, and movement of the Maryland Battery A, Light Artillery marker and New Jersey, Hexamer's Battery marker from the edge of the roadway. The MOA was signed on March 11, 2008.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

A letter dated October 29, 2004 was sent to the U.S. Fish and Wildlife Service requesting concurrence that, "the project is not likely to adversely affect any Federally-listed threatened or endangered species." The U.S. Fish and Wildlife Service replied in a letter dated December 13, 2004 that, "Except for occasional transient individuals, no Federally-proposed or listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further section 7 Consultation with the U.S. Fish and Wildlife Service is required."

Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

This action violates no Federal, State, or local environmental protection laws.

MITIGATION

In order to minimize the environmental impacts associated with the selected alternative, the following measures will be taken:

- Noxious weed seeds will be restricted from use in seed mixes, and exotic invasive species will be managed when feasible.
- An erosion and sediment control plan/storm water pollution prevention plan will be prepared to meet Maryland and National PS standards and guidelines. All Best Management Practices to limit erosion and sedimentation will be incorporated to the extent possible.
- If any archeological resources are discovered during the construction of the project, all work will stop, and the appropriate agency personnel will be notified.
- In the unlikely event that human remains or cultural items subject to the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered, all work will stop, and the appropriate provisions of NAGPRA will be followed.
- Removal of pavement at two locations that are remnants of the old Confederate Avenue [(1) Dunker Church west to MD 65; (2) Adjacent to Starke Avenue], and removal of a portion of the asphalt at the D.R. Miller Farm to decrease the total impervious surface in the Park to reduce or eliminate the impervious area required for treatment under the state water quality standards. The pavement will be removed to the historic surface and be further stabilized and restored to the desired condition by the NPS after this project concludes.

PUBLIC INVOLVEMENT

The EA was made available for public review and comment during a 30-day period starting October 15, 2007. A notice of availability was published in the local papers during the week prior. Copies of the EA were made available at the Visitor Center, Park Library and the Sharpsburg Public Library. The public review and comment period for the EA closed on November 15, 2007, and two public comments were received.

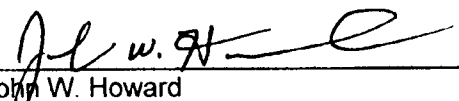
IMPAIRMENT STATEMENT

In addition to reviewing the list of significance criteria, the NPS has determined that implementation of the proposal will not constitute an impairment to the critical resources and values of the Park. This conclusion is based on a thorough analysis of the environmental impacts described in the EA, public comments, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in NPS Management Policies 2006. Overall, the plan results in benefits to Park resources and values, opportunities for their enjoyment, and it does not result in their impairment.

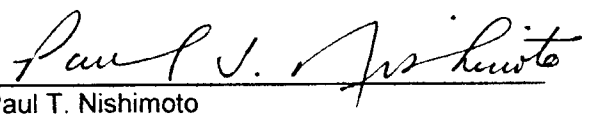
CONCLUSIONS

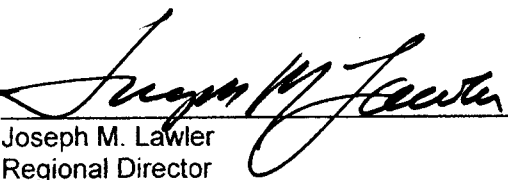
The Selected Alternative does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The Selected Alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are negligible or minor in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any Federal, State, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:  3-26-2009
John W. Howard
Superintendent
Antietam National Battlefield
Date

Recommended:  3/18/08
Kevin S. Rose
Environmental Compliance Specialist
Eastern Federal Lands Highway Division
Date

Approved:  3/19/08
Paul T. Nishimoto
Planning and Programming Engineer
Eastern Federal Lands Highway Division
Date

Approved:  4/21/08
Joseph M. Lawler
Regional Director
National Park Service, National Capital Region
Date