



Finding of No Significant Impact

REPLACEMENT OF BRIDGE NO. 10084 ON MD 355 OVER CSX MONOCACY NATIONAL BATTLEFIELD FREDERICK COUNTY, MARYLAND

INTRODUCTION

The Maryland Department of Transportation's State Highway Administration (MDOT/SHA) has evaluated the need for improvements and assessed the potential effects of various alternatives for the replacement of Bridge No. 10084 located on MD 355 (Urbana Pike) over CSX railroad in Frederick County, Maryland. MD 355 is bordered by the Monocacy National Battlefield on both sides. The Monocacy National Battlefield is a unit of the NPS, is designated as a National Historic Landmark (NHL, 1973) and is concurrently listed in the National Register of Historic Places. Implementation of the proposed action would be administered by MDOT/SHA and funded by the Federal Highway Administration (FHWA). Construction activities tied to the proposed bridge replacement will require permanent and temporary use of NPS lands through issuance of a Highway Deed Easement and Special Use Permit, respectively.

The purpose of the MDOT/SHA action at MD 355 over CSX railroad is to enhance the safety of the traveling public (vehicular and pedestrian) by replacing the structurally deficient bridge while minimizing impacts to the Monocacy National Battlefield. The NPS purpose of the proposed action is to respond to the applicant's expressed need to temporarily and permanently use land from the Monocacy National Battlefield to replace the structurally deficient bridge.

In March 2016, FHWA and MDOT/SHA in cooperation with NPS released the Environmental Assessment (EA) and Draft Section 4(f) Evaluation for the MD 355 over CSX bridge replacement project. This document analyzed the environmental consequences for the recommended alternative. The EA was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), and its amended implementing regulations by the Council on Environmental Quality (CEQ), at 40 CFR 1500-1508, and NPS Director's Order #12, *Conservation Planning, Environmental Impact Analysis and Decision-Making*, and accompanying Handbook (DO-12). Based on the analysis presented in the EA, the Selected Alternative, as described in the text that follows, does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS).

SELECTED ALTERNATIVE

The NPS, through coordination with the MDOT/SHA and the FHWA, and following the opportunity for public comment on the EA, agreed that Alternative 3: Replace Bridge on Existing Alignment and Provide Temporary Bridge for Maintenance of Traffic is the Selected Alternative for the MD 355 over CSX bridge replacement project. This alternative was developed to address safety concerns associated with the existing structurally deficient condition of the bridge.

Within the Monocacy National Battlefield boundary (NPS property), the Selected Alternative would replace the existing MD 355 Bridge over CSX on the same alignment with a temporary bridge to the west to address

maintenance of traffic during construction. As part of this action, the NPS will, in accordance with NPS Director's Order #87D: *Non-NPS Roads*, sign a Letter of Consent agreeing to a request from FHWA for 1.77 acres of NPS land for highway purposes, subject to terms, conditions, and stipulations, to be placed in a non-exclusive easement for highway purposes only, to be executed on behalf of the United States by FHWA, for the benefit of MDOT/SHA ("Highway Easement Deed").

Under the Selected Alternative, the replacement bridge would be a single span, steel girder structure approximately 150 feet long, and would follow the same alignment of the existing MD 355 Bridge over CSX. The replacement bridge would provide 23 feet of vertical clearance from the CSX tracks to the bottom of the bridge structure to meet CSX requirements. The proposed roadway surface just north of the bridge would be approximately 4 feet higher than the existing to accommodate the required clearance over the CSX tracks (due to a deeper bridge superstructure) and the vertical curve geometrics required by American Association of State Highway Transportation Officials (AASHTO). The replacement bridge would contain concrete parapets (bridge railings) that would be 42 inches in height. The parapets would be crash tested and would meet AASHTO, FHWA, and MDOT/SHA design safety standards. Fencing would be installed onto the parapets, as required by CSX, to prevent large objects from falling or being thrown onto the railroad tracks from the top of the bridge. The fencing would extend approximately 5 feet above the bridge parapet. A temporary bridge would be constructed to the west of the existing bridge to carry traffic while the existing bridge is being replaced. The temporary bridge would provide two 11-foot travel lanes with minimal (2-foot) shoulders. Once the replacement bridge is opened, the temporary bridge and roadway approaches would be removed and the area would be returned to park use.

The existing MD 355 roadway section between the Monocacy River Bridge and just south of the Best Farm entrance is 27 feet wide, consisting of two 12-foot wide travel lanes and 18-inch shoulders. The existing shoulders expand to about 10 feet just south of the Best Farm entrance to the Monocacy National Battlefield Visitor Center entrance. In order to provide for adequate shoulders, sidewalk, and bicycle lanes, the roadway approaches on MD 355 would need to be widened. Widening the roadway approaches within the project area to approximately 34 feet would accommodate two 11-foot wide travel lanes and two 6-foot wide shoulders. The proposed 6-foot shoulders would be wide enough to accommodate bicycle users and would tie into the existing wider shoulders north of the Best Farm entrance.

Under the Selected Alternative, the existing entrance to the 14th New Jersey Monument located on the west side of MD 355, just south of the bridge, would be permanently closed. This closure would eliminate the existing sight distance issue for vehicles entering and exiting the site. Access to the 14th New Jersey Monument would be redirected to an existing entrance on the east side of MD 355 with pedestrian access under the new bridge. The existing east side entrance would be improved as a right-in/right-out to further enhance safety and would be regraded and resurfaced.

To comply with current stormwater regulations, the new and redeveloped pavement would require water quality treatment. The Selected Alternative would include the implementation of water quality treatment using environmental site design consisting of construction of linear bio-swales and micro bio-retention facilities (rain gardens). The bio-swales would be constructed at the proposed toe (bottom) of the roadway slope. The bio-swales would be grassed depressions that would absorb low flows and stormwater runoff from heavy rains and would direct the water to storm sewer inlets or directly to surface waters. Larger facilities such as rain gardens would be required south of the new bridge and would include native plantings to blend in with the surrounding environment. Maintenance of the stormwater management facilities by MDOT/SHA on NPS property will be allowed through a Highway Deed Easement. The Selected Alternative would include the replacement of an existing water line that currently runs alongside the existing bridge. This would require the construction of a temporary waterline while the new bridge is being constructed. Overhead and underground utilities would be relocated to accommodate a wider bridge and minor roadway shifts.

In addition, pedestrian connectivity to various points of interest in the Monocacy National Battlefield would be included as part of the Selected Alternative. The various points of interest include the Monocacy National Battlefield Visitor Center located northeast of the bridge, the Best Farm in the northwest quadrant, the 14th New Jersey Monument in the southwest quadrant, and the Frederick Junction site to the east of the existing bridge. Although future trails are planned, only one trail currently exists which runs from the Monocacy National

Battlefield Visitor Center to a location in the northeast quadrant of the MD 355 over CSX crossing at a point that overlooks the Frederick Junction. The Selected Alternative would include the construction of pedestrian paths to tie into the existing trail to allow access to all points of interest noted above. From the terminus of the existing trail in the northeast quadrant, a path will be constructed under the new bridge that would provide access to the Best Farm site. This trail would be constructed to the limits of the project and NPS would be responsible for any trail connection beyond this point. A separate trail would be constructed from this point directing pedestrians to an 8-foot wide sidewalk that would run along the east side of MD 355 over the new bridge to the east side parking area, in the southeast quadrant. From this parking area, a trail would be constructed under the new bridge that would provide access to the 14th New Jersey Monument. The construction of all the trails in the project area would be done within the limits of the project and any connections to existing trails beyond this point would be the responsibility of the NPS. These improvements within the NPS property would enhance visitor use and access to the Monocacy National Battlefield and would accommodate the construction of a safer bridge crossing.

Rationale for Decision

In addition to the Selected Alternative described above, the EA analyzed a No-Action Alternative and three other build alternatives. Under the No-Action Alternative, all corrective actions would be limited to routine maintenance and spot improvements. In the case of the bridge, the maintenance activities would likely include: replacing the bridge deck and approaches; removing loose or missing sections of the concrete superstructure and replacing them using cast in place methods; replacing joint seals and gutters; and reinforcing the existing guardrail. Although these actions would slow the structure's deterioration, they would not address the underlying causes of the deficiencies. Beyond the bridge itself, routine maintenance activities would likely include: roadway resurfacing, sign replacement, drainage facility maintenance. This alternative did not address the purpose and need for the project. However, it served as a baseline for comparing the impacts and benefits associated with the other alternatives.

Other alternatives were considered including replacing the bridge east and west of the current alignment and replacing the bridge on existing alignment with phased construction; however, these alternatives were not implemented because they would move the new bridge closer to the Best Farm, the 14th New Jersey Monument, and the Frederick Junction or would impose significant safety and traffic operational issues during construction. NPS chose the Selected Alternative due to the least change in permanent use of property as the new bridge will use the existing alignment of MD 355. The Selected Alternative will not directly impact any contributing elements of the Monocacy National Battlefield however the introduction of a modern bridge into the battlefield historic district will directly impact the visual qualities of the 19th century rural character of the historic district and somewhat diminish the park's ability to interpret the 19th century battlefield. The Selected Alternative will have a beneficial impact on visitor use and experience through vehicular and pedestrian safety improvements and pedestrian access improvements.

MITIGATION MEASURES OF THE ACTION ALTERNATIVE

The NPS places a strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. To help ensure the protection of natural and cultural resources, and the quality of the visitor experience, protective measures would be implemented as part of the Selected Alternative. The following engineering refinements were investigated as methods to minimize impacts to the Monocacy National Battlefield:

Roadway design modifications

- MDOT/SHA lowered the approach roadway profile at its highest point from 9 feet 4 inches to 5 feet 8 inches which decreases the visual and physical impacts to the Monocacy National Battlefield.
- MDOT/SHA will provide mechanically stabilized embankments that will reduce the width of the side slopes. The typical section of the roadway was reduced from the initial design of 12-foot travel lanes and 8-foot shoulders to 11-foot travel lanes and 6-foot shoulders. In order to further reduce the amount of land needed from the Battlefield, the proposed stormwater management consists largely of bio-swales.
- Bio-swales are linear features that can be placed adjacent to roadways and are typically grassed areas thus minimizing visual impacts.

Bridge design modifications

- Under the Selected Alternative, the temporary bridge has been designed as close as possible to the existing structure to minimize additional disturbance to the Battlefield. In addition, MDOT/SHA has designed the structure to be a steel beam bridge as opposed to a concrete bridge which would allow for a lower profile thus minimizing the height of the bridge and width of the side slopes. MDOT/SHA, in coordination with NPS, will include bridge aesthetics, sidewalk, and roadway features that will minimize visual impacts to the Monocacy National Battlefield including painted guardrail, stained concrete, and textured trail and sidewalk surfaces.

Mitigation is considered for adverse impacts that cannot be avoided or further minimized. The efforts to mitigate and minimize the adverse effect to the Monocacy National Battlefield (as detailed in the Section 106 MOA) include:

- MDOT/SHA would provide funding to NPS for reconstruction of approximately 3,200 linear feet of a six-rail wood fence in the following areas of the Monocacy National Battlefield:
 - Along the Best Farm's east boundary on the west side of MD 355 from the CSX railroad cut to north of the Best Farm entrance;
 - On the east side of MD 355 from the Best Farm entrance to the Visitors' Center entrance; and
 - Along the 1864 road prism near the 14th New Jersey Monument.
- Restoration of the 1864 Georgetown Turnpike Prism and Vegetation Removal on the East Side of MD 355:
 - In order to reveal the remains of the 1864 Georgetown Turnpike prism adjacent to the 14th New Jersey Monument and return the landscape near the Monocacy Battlefield Visitor's Center on the east side of MD 355 between Station 20.00 and Station 27.00 to the Monocacy National Battlefield's 1864 appearance, MDOT/SHA shall provide funding the restoration of the prism and roadside areas.
- The NPS will be provided funds to design and fabricate an interpretive panel that interprets the significance of the Georgetown Pike during the Monocacy Battle, as well as during the 19th century.
- The NPS will be provided funds to complete a Cultural Landscape Report for the Gambrill Tract, located on the southeast side of MD 355 south of the Monocacy River.
- The MDOT/SHA will provide a parking area and driveway to replace the gravel parking lot on the southeast side of the bridge which is located on Monocacy National Battlefield. Plans for the lot will be included in the Undertaking's landscaping plans.
- The MDOT/SHA will provide an 8 to 10-foot wide pathway on graded benches beneath the bridge on the north and south sides of the CSX railroad tracks, but located on Monocacy National Battlefield, to facilitate pedestrian access. Plans for the trail will be included in the Undertaking's plans.
- If during construction, archeological resources are discovered, all work in the immediate vicinity of the discovery would be halted until the resources can be identified and documented and an appropriate mitigation strategy developed. Consultation with NPS, and/or the NPS Regional Archeologist, and if necessary, with MHT, would be coordinated to ensure that the protection of resources is addressed. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001) would be followed.

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

As documented in the EA, the NPS has determined that Alternative 3 can be implemented without significant adverse effects. As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS: Soils, floodplain, vegetation and wildlife habitat would experience minor adverse effects under the Selected Alternative. Cultural resources would experience moderate adverse impacts that would be mitigated to avoid significant adverse impacts. Under the Selected Alternative, visitor use and experience would result in long-term beneficial impacts. No significant impacts were identified that would require analysis in an EIS. Impacts to these resources were assessed for both the construction and operational phases of this project.

Soils: Under the Selected Alternative, soil fill materials would be placed to raise the approach roadway elevation to meet the new bridge elevation. The temporary bridge and roadway would also be built on fill materials. Minor excavation would be required to construct stormwater management facilities on either side of the new roadway slopes. The anticipated area of soil disturbance would be approximately 3.64 acres. The Selected Alternative would primarily impact previously disturbed soils associated with the existing MD 355 roadbed and slopes as well as the NPS parking areas on the east and west sides of the existing bridge. The change in permanently covered soils under the Selected Alternative as compared to the existing condition would be 0.38 acre. Erosion and sediment control measures and other best management practices (BMP) would be implemented for the Selected Alternative to minimize soil erosion and prevent soils from leaving the project area. Based on these practices to minimize disturbance to soils in the project area, use of areas previously disturbed, there would be short-term and long-term minor adverse impacts to soils.

Floodplains: Long-term effects of the Selected Alternative on the Monocacy River floodplain would be negligible to minor. The total floodplain area within the limits of disturbance for the Selected Alternative is 0.47 acre, of which 0.27 acre will be impacted due to moving slopes to accommodate the shoulder widening for the right-in/right-out, roadway resurfacing, minor grading, and adding rip rap for drainage. The floodplain elevation will not be increased. The total impacts increased from what was presented in the EA (0.13 acre) due to refinement of the stormwater management design. The total floodplain area in the Monocacy National Battlefield is estimated at 310 acres. Because there are broad floodplains to the east and west of the project area, effects of the proposed actions on floodplain functions and values are expected to be negligible. The changes in the ability of the floodplain to convey floodwaters would be detectable but not measurable. Disturbance during construction in the floodplain area outside of the existing right-of-way would be avoided to the extent possible. Staging would occur outside of the floodplain limits. In accordance with NPS Procedural Manual #77-2: Floodplain Management, and based on analysis that shows that there is no risk to human life or capital investment and that natural floodplain values will not be negatively impacted, NPS, through consultation with the NPS' Water Resource Division, has determined that no Floodplains Statement of Findings (FSOF) is necessary. Based on these considerations, there would be long-term negligible to minor adverse impacts to floodplains under the MDOT/SHA Preferred Alternative.

Wildlife and Wildlife Habitat: Under the Selected Alternative, forest habitats within the project construction area would be cleared as necessary to replace the bridge, construct the temporary structure, accommodate the wider roadway shoulders and raised roadway profile, relocate utilities, and construct stormwater management facilities. A total of 0.8 acre of forested wildlife habitat would be cleared or disturbed. Cleared or disturbed areas would be reseeded with turf grass and native vegetation at the end of the construction period and trees would be planted, where appropriate and in consultation with NPS. Because the habitat areas that would be disturbed are relatively small and of low quality and replanting of trees within the Battlefield would occur, the Selected Alternative would have short-term and long-term minor adverse impacts to wildlife and wildlife habitat.

Vegetation: Due to construction activities, the Selected Alternative would require vegetation clearing and disturbance. The total area of vegetation to be cleared would be approximately 0.8 acre and would include 10 large trees. After the construction period, cleared or disturbed areas would be seeded with turf grass and native vegetation would be planted, in consultation with the NPS.

Avoidance and minimization measures under the Selected Alternative consist of having construction staging areas located outside of forested areas and protective measures, such as tree protection fencing and critical root zone protection developed to avoid unintended impacts to vegetation. A certified arborist would be employed to assess individual trees and forest areas for retention. Practices to avoid and minimize impacts to vegetation are expected to be successful, and would help to limit impacts to the project area during the construction period. Overall, clearing would affect a relatively minor portion of the tree cover within the Monocacy National Battlefield. Total forest coverage within the Battlefield is estimated at 545 acres. However, the loss of vegetation and trees required by the construction

would be noticeable to the traveling public and Battlefield visitors. Based on these considerations, the Selected Alternative would result in short-term and long-term minor adverse impacts to vegetation.

Visitor Use and Experience: Raising the bridge and roadway profile, removal of vegetation and trees, and construction of stormwater management facilities under Alternative 3 would introduce permanent visual impacts. However, once constructed, the new bridge would enhance the safety of the traveling public and Battlefield visitors by providing a structurally improved bridge with wider shoulders for bike lanes and sidewalk for pedestrians to safely access the Battlefield features and existing trails. Based on these considerations, there would be short-term moderate adverse impacts and long-term beneficial impacts to visitor use and experience.

Water Quality: No impacts to wetlands or streams would occur within the vicinity of the Monocacy National Battlefield. Therefore, impacts to water quality within project area resulting from the implementation of the Selected Alternative will be negligible. Water quality will be protected by proper application of an approved Sediment Erosion/Sediment Control Plan and other Best Management Practices (BMP).

Cultural Resources: The Selected Alternative would require approximately 1.77 acres of permanent impact and 1.87 acres of temporary impact to the Monocacy National Battlefield. The permanent impacts have decreased since the EA (-0.65 acre) but the temporary impacts have increased (+1.62 acres) due to extending the new trail to the 14th New Jersey Monument overlook, sediment and erosion controls, and regrading the NPS water access path off of the east side parking area. No direct impacts to structures associated with contributing elements would occur, however the introduction of a modern bridge into the battlefield historic district will directly impact the visual qualities of the 19th century rural setting and somewhat diminish the park's ability to interpret the 19th century character of the landscape. Short and long-term moderate adverse impacts would occur to cultural resources including standing structures, archeology, and cultural landscapes from the Selected Alternative. However, mitigation actions are proposed to offset these adverse impacts.

Degree of effect on public health or safety:

The Selected Alternative would not result in a potential safety or health hazard to the public. Adding the sidewalk, bicycle compatible shoulder, and trail connections would allow visitors to safely access Battlefield areas of interest. In addition, any construction along MD 355 would require adequate signage and safety measures to protect the workers, and the traveling public. The bridge replacement would result in increased safety for travelers on MD 355 within the project area.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, wetlands, prime farmlands, wild and scenic rivers, or ecologically critical areas: The Monocacy River is located just south of the limits of disturbance for the Selected Alternative and is considered a state listed Wild and Scenic River. However, the Selected Alternative would not impact this resource. Aside from the Monocacy National Battlefield and Monocacy River, no other unique or critical resource areas are present.

The Selected Alternative would be constructed within and adjacent to the boundaries of the Monocacy National Battlefield which was listed on the National Register of Historic Places on November 8, 1973 and was concurrently listed as a National Historic Landmark. MHT concurred in December 2015 that the Selected Alternative would have an adverse effect on the Monocacy National Battlefield.

Degree to which effects on the quality of the human environment are likely to be highly controversial: No highly controversial effects in terms of scientific uncertainties as a result of the Selected Alternative were identified during the preparation of the EA, or by the public, during the public comment period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: No highly uncertain, unique, or unknown risks were identified during preparation of the EA, or through public comment.

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 neither establishes a NPS precedent for future actions with significant effects, nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: Implementation of the Selected Alternative would have no significant cumulative impacts. Future

actions and projects within the Battlefield that could affect soils, visitor use and experience, floodplain, vegetation, wildlife and habitat include the Monocacy National Battlefield Public Access Plan, installation of solar panels on NPS facilities within the Battlefield, Monocacy National Battlefield Wildland Fire Management Plan, Resource Stewardship Strategy, and the Monocacy National Battlefield General Management Plan.

The projects/plans listed above were included in the cumulative impact analysis as part of the EA and deal with management of resources within the Battlefield; therefore these impacts are typically beneficial in nature. Based on the analysis, the Selected Alternative does not induce cumulative impacts on soils, floodplains, wildlife and wildlife habitat, vegetation, or archeological resources. The Selected Alternative has beneficial cumulative impact on visitor use and experience when combined with the other Monocacy National Battlefield projects as it would improve long-term visitor use, accessibility, and safety. The Selected Alternative does have minor adverse cumulative impacts to historic structures and districts and cultural landscapes. Direct short-term and long-term moderate adverse impacts from the Selected Alternative in combination with the solar panels that will be installed on the roofs of the Battlefield's Maintenance Shop (Gambrill Mill Area) and the Monocacy National Battlefield Visitor Center will result in minor cumulative (visual) impacts to historic structures and districts and cultural landscapes.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: The Monocacy National Battlefield currently encompasses 1,647 acres, and consists of most of the lands upon which the Battle of Monocacy was fought. Six properties or farmsteads that existed during the battle are still extant within the Battlefield and retain essentially their Civil War era landscape appearance. The Monocacy National Battlefield is listed on the National Register of Historic Places and is a National Historic Landmark. The Selected Alternative would require 1.77 acres of permanent impact and 1.87 acres of temporary impact to the Monocacy National Battlefield. The permanent impacts have decreased since the EA (-0.65 acre) but the temporary impacts have increased (+1.62 acres) due to extending the new trail to the 14th New Jersey Monument overlook and to take into account sediment and erosion controls. There would be an adverse effect under Section 106 to the Monocacy National Battlefield.

In compliance with Section 106 of the National Historic Preservation Act of 1966, an Assessment of Effect was submitted to MHT (SHPO) on October 1, 2015. MHT concurred on November 4, 2015 with the determination that the four Action Alternatives, including the Selected Alternative, would have an adverse effect on historic properties. A Memorandum of Agreement (MOA) has been executed by NPS, FHWA, MHT, MDOT/SHA, and the State of New Jersey outlining measures to mitigate the adverse effect.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: The federally endangered Indiana bat (*Myotis sodalis*) and the threatened northern long-eared bat (*Myotis septentrionalis*) may occur in the project vicinity. Field reviews were conducted by MDOT/SHA in October 2013 and January 2014 to identify rare or unique habitats. Riparian forest exists along the Monocacy River, but no specialized habitats or rare species were observed. Coordination with the Monocacy National Battlefield staff indicated that a survey was completed in 2005 which identified the presence of the northern long-eared bat just over one mile from the project area. Also, acoustic detections by USGS in 2016 found no northern long-eared bat, but did find Indiana bat present in the park (one detection, 68 detector nights). Further coordination with the U.S. Fish and Wildlife Service (USFWS) was conducted in 2015 and again in November 2016 which concluded that because the removal of trees would not occur in summer and the trees are within 100 feet of existing disturbed roadway along a linear corridor with low quality habitat and that no known Indiana bat or northern long-eared bat roost trees or hibernacula are in Frederick County, the project is not likely to adversely affect the species. Monocacy will protect the Indiana bat by not removing trees during summer when the Indiana bat is expected to occur in the park. Therefore, the Selected Alternative would not adversely affect the viability of any endangered or threatened species.

Whether the action threatens a violation of federal, state, or local environmental protection law: The Selected Alternative does not violate federal, state, or local environmental protection laws.

PUBLIC INVOLVEMENT

Public scoping included a 30-day public comment period from December 5, 2013 through January 5, 2014. In addition to the public comment period, a public scoping meeting was held at the Monocacy National Battlefield

Visitor Center on December 5, 2013 to give the public the opportunity to provide input on the scope of the project, preliminary concepts, and areas of concern. Public notices were posted on the NPS's Planning, Environment and Public Comment website (PEPC), MDOT/SHA website, and advertised in the Frederick News-Post newspaper. The project team also sent mailings to adjacent property owners and individuals on the Monocacy National Battlefield mailing list. The public meeting was held in an open house format where the public was given the opportunity to view informational displays, including four concept plan alternatives. MDOT/SHA and NPS staff was present at the meeting and were available to discuss the project with the public and answer questions. A total of 12 comments were received via comment cards, emails, the MDOT/SHA project website, and phone calls during the scoping period. All comments were generally in support of the action alternatives (i.e. the replacement of the bridge).

Following the completion of the MD 355 over CSX EA and Draft Section 4(f) Evaluation (March 2016), the documents were circulated for formal public and agency comment for 45 days. The documents were made available for public review on the NPS Planning, Environment, and Public Comment (PEPC) website at <http://parkplanning.nps.gov/mono>. Limited hard copies were made available at the Monocacy National Battlefield administrative offices and the Monocacy National Battlefield Visitor Center. No public comments were received. The Final Section 4(f) Evaluation was submitted to FHWA for legal sufficiency on November 17, 2016. The Final Section 4(f) Evaluation will be submitted to Department of Interior upon approval by FHWA.

In a letter dated April 26, 2016 from the Maryland State Clearinghouse, Frederick County, MDP, and MDE found the project to be consistent with local and state plans, programs, and objectives. MDP noted that the project is located within a Priority Funding Area (PFA) and would, therefore, be consistent with the PFA law. EPA provided comments via letter dated April 28, 2016. EPA asked that MDOT/SHA consider climate change resiliency into the final design of the project. EPA also requested that the size, type, and location of the proposed stormwater management facilities be included in the final document for each alternative. A letter was received on May 5, 2016 from the Civil War Trust, a Section 106 consulting party, recognizing the need for the project and supporting the Selected Alternative with the comment that the design include context sensitive elements, minimization efforts to reduce the total footprint, and pedestrian crossings.

CONCLUSION

The NPS has selected Alternative 3, the Selected Alternative, for MDOT/SHA's implementation. In light of the impacts described in the EA and with guidance from NPS *Management Policies 2006*, natural and cultural resources information, professional judgment, and consideration of agency and public comments, the impacts that would result from the Selected Alternative would not impair any NPS property resources and values. The Selected Alternative does not constitute an action that would require the preparation of an EIS. The Selected Alternative would not have a significant impact on the human environment. Long-term, adverse environmental impacts that would occur are negligible to moderate in intensity. There are no significant impacts on soils, floodplain, vegetation, wetlands, wildlife and wildlife habitat, cultural resources, aesthetics, land use, human health and safety, and visitor use and experience. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative impacts, or elements of precedence were identified. Implementation of the Selected Alternative would not violate any federal, state, or local environmental protection law.

Based on the foregoing understanding, an EIS is not required for this action and thus will not be prepared. This is a finding of no significant impact.

Recommended:

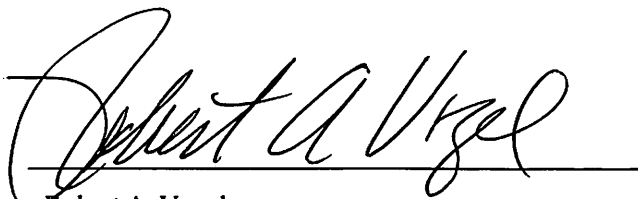


Chris Stubbs
Superintendent,
Monocacy National Battlefield

February 6, 2017

Date

Approved:



Robert A. Vogel
Regional Director
National Park Service, National Capital Region

2-21-17

Date

NON-IMPAIRMENT DETERMINATION

The determination on non-impairment has been prepared for the Selected Alternative. An impairment determination is not made for visitor use and experience, human health and safety, or neighborhoods because impairment findings relate back to park resources and values. These impact areas are not generally considered to be park resources and values, according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values.

While the purpose of the Selected Alternative is to protect both cultural and natural resources of the Monocacy National Battlefield from the impacts of the replacement of the MD 355 over CSX bridge, there would be short-term to long-term negligible to moderate adverse impacts on some of the park's resources (soils, floodplain, vegetation/wildlife habitat, or cultural resources). Adverse impacts would be mitigated to the greatest extent possible and do not reach the standard for impairment for the proposed roadway improvement. Those impacts that cannot be fully mitigated, however, are not key to the overall natural or cultural resources of the park, will not hinder opportunities to enjoy the park. In addition, the Selected Alternative would not adversely affect park resources identified in park management documents as being significant.

Soils: Under the Selected Alternative, the anticipated area of soil disturbance would be approximately 3.64 acres. The Selected Alternative would primarily impact previously disturbed soils associated with the existing MD 355 roadbed and slopes as well as the NPS parking areas on the east and west sides of the existing bridge. The change in permanently covered soils under the Selected Alternative as compared to the existing condition would be 0.38 acre. Construction activities would require the preparation of a sediment and erosion control plan in accordance with the Maryland Department of Environment's *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*. Based on Best Management Practices to minimize disturbance to soils in the project area, use of areas previously disturbed, there would be short-term and long-term minor adverse impacts to soils. Therefore, the impacts of the Selected Alternative would not constitute impairment to soils.

Vegetation/Wildlife Habitat: Due to construction of a temporary bridge and approach roadways, stormwater management facilities, and the relocation of utilities, the Selected Alternative would require vegetation clearing and disturbance, and impact to wildlife habitat. The total area of vegetation to be cleared would be approximately 0.8 acre and would include 10 large trees. After the construction period, cleared and disturbed areas would be seeded with turf grass and native vegetation would be planted, in consultation with NPS staff.

Avoidance and minimization measures under the Selected Alternative would consist of having construction staging areas located outside of forested areas and protective measures, such as tree protection fencing and critical root zone protection developed to avoid unintended impacts to vegetation. A certified arborist would be employed to assess individual trees and forest areas for retention. Practices to avoid and minimize impacts to vegetation are expected to be successful, and would help to limit impacts to the project area during the construction period. Overall, clearing would affect a relatively minor portion of the tree cover within the Monocacy National Battlefield. Total forest coverage within the Battlefield is estimated at 545 acres. However, the loss of vegetation and trees required by the construction would be noticeable to the traveling public and Battlefield visitors. Based on these considerations, the Selected Alternative would result in short-term and long-term minor adverse impacts to vegetation and wildlife habitat. Therefore, the impacts of the Selected Alternative will not constitute impairment to vegetation and wildlife habitat.

Floodplains: In accordance with NPS Procedural Manual #77-2: Floodplain Management, and based on analysis that shows that there is no risk to human life or capital investment and that natural floodplain values will not be negatively impacted, NPS has determined that no Floodplains Statement of Findings (SOF) is necessary.

Water Quality: No impacts to wetlands or streams would occur within the vicinity of the Monocacy National Battlefield. Therefore, impacts to water quality within project area resulting from the implementation of the Selected Alternative will be negligible. Water quality will be protected by proper application of an approved Sediment Erosion/Sediment Control Plan and other Best Management Practices (BMP). Therefore, the impacts of the Selected Alternative would not constitute impairment to water quality.

Cultural Resources: The Selected Alternative would require approximately 1.77 acres of permanent impact and 1.87 acres of temporary impact to the Monocacy National Battlefield. No direct impacts to structures would occur. Short and long-term moderate adverse impacts would occur to cultural resources including standing structures,

archeology, and cultural landscapes from the Selected Alternative. However, mitigation efforts are proposed to offset these adverse impacts.

Coordination with MHT, in consultation with FHWA and NPS, in December 2015 concluded that the Selected Alternative would have an adverse effect on cultural resources associated with the Monocacy National Battlefield. The Monocacy National Battlefield is listed on the National Register of Historic Places and is a National Historic Landmark. A MOA has been executed in consultation with NPS, MHT, FHWA, and MDOT/SHA to offset the adverse effects of the Selected Alternative. In addition, minimization measures as suggested by the NPS, FHWA, MHT and consulting parties were included in the design of the Selected Alternative.

The Selected Alternative would result in a long-term moderate adverse impact to the Monocacy National Battlefield however; the proposed mitigation and minimization techniques will offset the effect to the cultural characteristics of the Battlefield. Therefore, the impacts of the Selected Alternative would not constitute impairment to cultural resources.

Conclusion

The NPS has determined that the implementation of the Selected Alternative would not constitute impairment to the resources or values of the Monocacy National Battlefield. This conclusion is based on consideration of the thorough analysis of the environmental impacts described in the EA, relevant scientific studies, the opportunity provided to the public for comment, and the professional judgment of the decision-maker, guided by the NPS Management Policies 2006. As described in the MD 355 over CSX EA, implementation of the Selected Alternative would not result in impairment of park resources or values whose conservation is (1) necessary to fulfill specific purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park, or to opportunities for enjoyment of the park, or (3) identified in the park's management plan, or other relevant NPS planning documents as being of significance.

**REPLACEMENT OF BRIDGE NO. 10084 ON MD 355
OVER CSX MONOCACY NATIONAL
BATTLEFIELD
FREDERICK COUNTY, MARYLAND**

ENVIRONMENTAL ASSESSMENT-ERRATA

The following changes have been made to the Replacement of Bridge No. 10084 on MD 355 over CSX (March 2016) Environmental Assessment to update information. The updated information, also reflected in the Finding of No Significant Impact (FONSI), is identified by underlines and deletions are marked by strikeout, as shown below.

CHAPTER 1: INTRODUCTIONS

1.11.2 IMPACT TOPICS

Floodplains (Page 22)

DO-77-2: *Floodplain Management* applies to all proposed NPS actions that could increase flood risks, or adversely affect the natural function and values of floodplains. This includes actions that are functionally dependent upon water, where non-floodplain sites are not a practicable alternative (NPS 2003). Federal Emergency Management Agency (FEMA) Flood Insurance Rate Panel (FIRM) 24021C0435D shows that the MD 355 Bridge over CSX is outside of the 100-year regulated floodplain of the Monocacy River (FEMA 2007). However, the floodplain of the Monocacy River at the southern extent of the project area could be affected by improvements to the approach roadway to the bridge. Based on these considerations, floodplain impacts are analyzed in detail in this EA.

~~Under DO-77-2, the NPS requires the preparation and approval of a Statement of Findings (SOF) for any proposed action that is located within a defined regulatory floodplain "when it is not practicable to locate or relocate development or inappropriate human activities to a site outside and not affecting the floodplain (NPS 2003)." Even though the proposed action will likely result in minimal disturbances within the 100-year regulatory floodplain of the Monocacy River, no new structures would be constructed that would affect the floodplain functions and values; therefore, a Floodplain SOF has not been prepared for the project. Consultation with NPS Water Resource Division, confirmed that no SOF is required.~~

The total floodplain area within the limits of disturbance for the Selected Alternative is 0.47 acre, of which 0.27 acre will be impacted due to moving slopes to accommodate the shoulder widening for the right-in/right-out, roadway resurfacing, minor grading, and adding rip rap for drainage. The floodplain elevation will not be increased. The total floodplain area in the Monocacy National Battlefield is estimated at 310 acres. Because there are broad floodplains to the east and west of the project area, effects of the proposed actions on floodplain functions and values are expected to be negligible. The changes in the ability of the floodplain to convey floodwaters would be detectable but not measurable. Disturbance during construction in the floodplain area outside of the existing right-of-way would be avoided to the extent possible. Staging would occur outside of the floodplain limits. In accordance with NPS Procedural Manual #77-2: Floodplain Management, and based on analysis that shows that there is no risk to human life or capital investment and that natural floodplain values will not be negatively impacted, NPS, through consultation with the NPS' Water Resource Division, has determined that no Floodplains Statement of Findings (FSOF) is necessary.

Rare, Threatened and Endangered Species (Page 27)

Wildlife in the project area consists of terrestrial and avian species commonly found at the edges of agricultural and riverine environments. Based on project reviews completed by the U.S. Fish and Wildlife Service (USFWS) and the Maryland Department of Natural Resources (DNR) there are no federal or state listed rare, threatened, or endangered species known to inhabit the project area. Field reviews were conducted by SHA in October 2013 and January 2014 to identify rare or unique habitats. Riparian forest exists along the Monocacy River, but no specialized habitats or rare species were observed. Coordination with the Monocacy

National Battlefield staff indicated that a survey was completed in 2005 which identified the presence of the Northern Long-Eared Bat, a federally listed threatened species, just over one mile from the project area.

~~However, further coordination with the USFWS in 2015 concluded that because the removal of trees will occur within 100 feet of existing pavement along a linear corridor with low quality habitat and that no recent records of the species have been found, the project is not likely to adversely affect the species (Appendix A).~~

Further coordination with the U.S. Fish and Wildlife Service (USFWS) was conducted in 2015 and again in November 2016 which concluded that because the removal of trees would occur within 100 feet of existing disturbed roadway along a linear corridor with low quality habitat and that no known Indian bat or northern long-eared bat roost trees or hibernacula are in Frederick County, the project is not likely to adversely affect the species. Therefore, the build alternatives would not adversely affect the viability of any endangered or threatened species. Based on these considerations, impacts to rare, threatened, or endangered species were dismissed from further analysis in this EA.

CHAPTER 2: ALTERNATIVES

2.2.3 PREFERRED ALTERNATIVE; ALTERNATIVE 3: REPLACE BRIDGE ON EXISTING ALIGNMENT; PROVIDE TEMPORARY BRIDGE FOR MAINTENANCE OF TRAFFIC (Page 38)

Under Alternative 3, a temporary bridge would be constructed to the west of the existing bridge to carry traffic while the existing bridge is being replaced (Figure 2-3). The temporary bridge would provide two 11-foot travel lanes with minimal (2-foot) shoulders. The replacement bridge would be approximately 150 feet long, and follow the same alignment of the existing MD 355 Bridge over CSX. Once the replacement bridge is opened, the temporary bridge and roadway approaches would be removed and the area would be reseeded/replanted. The limits of the work would extend from the Monocacy River Bridge to approximately 150 feet north of the Best Farm driveway. The total construction duration under Alternative 3 would be approximately 24 to 28 months. Impervious surface within the project area would increase from 1.74 acres to approximately 2.12 acres under Alternative 3. In addition, a temporary increase in impervious surface of 1.38 acres would occur due to the construction of the temporary bridge and roadway approaches but would be removed and reseeded after completion. ~~Alternative 3 would require approximately 2.4 acres of permanent and 0.25 acre of temporary use of NPS land for the expanded MD 355 right-of-way and for construction activities. The Preferred~~ Alternative would require approximately 1.77 acres of permanent impact and 1.87 acres of temporary impact to the Monocacy National Battlefield.

CHAPTER 3: AFFECTED ENVIRONMENT

3.3 WILDLIFE AND WILDLIFE HABITAT (Page 60)

The agricultural and forest areas present within the Monocacy National Battlefield provide habitat for numerous wildlife species. Mammals commonly seen in the Battlefield include the white-tailed deer (*Odocoileus virginianus*), gray squirrel (*Sciurus carolinensis*), red fox (*Vulpes vulpes*), and groundhog (*Marmota monax*). Based on an inventory of avian species within the Monocacy National Battlefield conducted by Frostburg State University in 2000, the area provides excellent habitat for birds. The inventory resulted in the identification of 80 different bird species during the breeding season of 2000. Species diversity and richness are highest in the area's riparian forests, followed by fencerow habitats and forest interiors (NPS 2014). Common bird species include the red-tailed hawk (*Buteo jamaicensis*), northern cardinal (*Cardinalis cardinalis*), bluebird (*Sialis sialis*), wild turkey (*Meleagris gallopavo*), great blue heron (*Ardea herodias*), and red-winged blackbird (*Agelaius phoeniceus*) (NPS 2008). Bald eagles (*Haliaeetus leucocephalus*) are known to nest in the vicinity of the Monocacy National Battlefield but no bald eagles are known to nest within the boundaries of the Monocacy National Battlefield (Personal communication with

Andrew Banasik, January, 17, 2014). Coordination with the Monocacy National Battlefield staff indicated that a survey was completed in 2005 which identified the presence of the northern long-eared bat (*Myotis septentrionalis*), a federally listed threatened species, just over one mile from the project area. ~~However, further coordination with the USFWS in 2015 concluded that because the removal of trees will occur within 100 feet of pavement along a linear corridor with low quality habitat and that no recent records of the species have been found, the project is not likely to have an adverse effect on the species.~~ Further coordination with the U.S. Fish and Wildlife Service (USFWS) was conducted in 2015 and again in November 2016 which concluded that because the removal of trees would occur within 100 feet of existing disturbed roadway along a linear corridor with low quality habitat and that no known Indian bat or northern long-eared bat roost trees or hibernacula are in Frederick County, the build alternatives are not likely to adversely affect the species.

Within the extents of the project area, the land occupied by the road, railroad, and bridge over CSX provide little to no habitat that is suitable for wildlife. The agricultural fields adjacent to MD 355 and the forested riparian area along the Monocacy River, however, provide habitat for a wide range of wildlife, as noted above.

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

4.4.1 IMPACTS OF THE ACTION ALTERNATIVES

4.4.2.1 ALTERNATIVE 1-REPLACE BRIDGE WEST OF EXISTING BRIDGE

(Pages 93-94)

Long-term effects of Alternative 1 on the Monocacy River floodplain would be negligible to minor. ~~The total floodplain area within the limits of disturbance for all the action alternatives is 0.47 acre, of which 0.13 acre would be impacted due to new full depth pavement, roadway resurfacing, minor grading, and adding rip rap for drainage.~~ The total floodplain area within the limits of disturbance for Alternative 1 is 0.47 acre, of which 0.27 acre would be impacted due to new full depth pavement, roadway resurfacing, minor grading, and adding rip rap for drainage. Although Alternative 1 shifts the bridge and roadway to the west, the new approach would tie back into the existing roadway prior to the floodplain boundary.

4.4.2.2 ALTERNATIVE 2-REPLACE BRIDGE EAST OF EXISTING BRIDGE

(Pages 94-95)

Long-term effects of Alternative 2 on the Monocacy River floodplain would be negligible to minor. ~~The total floodplain area within the limits of disturbance for all the action alternatives is 0.47 acre, of which 0.13 acre would be impacted due to new full depth pavement, roadway resurfacing, minor grading, and adding rip rap for drainage.~~ The total floodplain area within the limits of disturbance for Alternative 2 is 0.47 acre, of which 0.27 acre would be impacted due to new full depth pavement, roadway resurfacing, minor grading, and adding rip rap for drainage. Although Alternative 2 shifts the bridge and roadway to the east, the new approach ties back into the existing roadway prior to the floodplain boundary.

4.4.2.3 ALTERNATIVE 3- REPLACE BRIDGE ON EXISTING ALIGNMENT, PROVIDE TEMPORARY BRIDGE TO THE WEST FOR MAINTENANCE OF TRAFFIC

(Pages 95-96)

Long-term effects of Alternative 3 on the Monocacy River floodplain would be negligible to minor. ~~The total floodplain area within the limits of disturbance for all the action alternatives is 0.47 acre, of which 0.13 acre would be impacted due to new full depth pavement, roadway resurfacing, minor grading, and adding rip rap for drainage.~~ The total floodplain area within the limits of disturbance for Alternative 3 is 0.47 acre, of which 0.27 acre would be impacted due to new full depth pavement, roadway resurfacing, minor grading, and adding rip rap for drainage. Alternative 3 includes a temporary structure and approach roadways to the west of the existing structure; however, the shifted roadway ties into the existing roadway prior to the floodplain boundary. The total floodplain area in the Monocacy National Battlefield is estimated at 310 acres. Because there are broad floodplains to the east and west of the project

area, effects of the proposed actions on floodplain functions and values are expected to be negligible. The changes in the ability of the floodplain to convey floodwaters would be detectable but not measurable. Based on these considerations, there would be long-term negligible to minor adverse impacts to floodplains under Alternative 3.

4.4.2.4 ALTERNATIVE 4 – REPLACE BRIDGE ON EXISTING ALIGNMENT WITH PHASED CONSTRUCTION (Pages 96-97)

Long-term effects of Alternative 4 on the Monocacy River floodplain would be negligible to minor. Alternative 4 uses the existing alignment; however, due to the need to grade, resurface, widen the existing pavement, and add rip rap, the impacts would be the same as the other action alternatives. The total floodplain area within the limits of disturbance for all the action alternatives is 0.47 acre, of which 0.13 acre would be impacted due to new full depth pavement, roadway resurfacing, minor grading, and adding rip rap for drainage. The total floodplain area within the limits of disturbance for Alternative 4 is 0.47 acre, of which 0.27 acre would be impacted due to new full depth pavement, roadway resurfacing, minor grading, and adding rip rap for drainage.

4.7 CULTURAL RESOURCES

General Methodology (Pages 109-111)

The National Park Service categorizes their cultural resources as archeological resources, cultural landscapes, historic structures and districts, museum objects, and ethnographic resources. Potential impacts on historic structures and districts, cultural landscapes, and archeological resources are of concern for this project. There would be no impacts to museum collections or ethnographic resources.

The analyses of impacts on cultural resources that are presented in this section respond to the requirements of both NEPA and Section 106 of the NHPA. Under NEPA, the analysis of impacts considers context and intensity of an action, whereas, under Section 106, a determination of effect is made based on whether the action will alter characteristics which qualify the historic resource for inclusion in the National Register of Historic Places.

In accordance with the Advisory Council on Historic Preservation (ACHP) Section 106 implementing regulations (36 CFR Part 800), impacts on cultural resources were identified and evaluated by (1) determining the APE; (2) identifying cultural resources present in the APE that are listed in or eligible to be listed in the National Register of Historic Places (NRHP); (3) applying the criteria of adverse effect to affected historic properties; and (4) considering ways to avoid, minimize, and mitigate adverse effects. An *adverse effect* occurs whenever an action directly or indirectly alters any characteristic that qualifies the cultural resource for inclusion in the NRHP. On November 4, 2015, MHT concurred with SHA and NPS' determination that the Action Alternatives proposed for the MD 355 Bridge over CSX would have an adverse effect on historic properties (see Chapter 6 *Consultation and Coordination*).

NPS Director's Order-12 and CEQ regulations call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact. Under NEPA, any resultant reduction in intensity of impact to renewable resources due to mitigation is an estimate of the effectiveness of the mitigation.

However, cultural resources are nonrenewable resources and adverse impacts generally diminish or destroy the original historic material or form, resulting in a loss in the integrity of the resource that can never be recovered. Therefore, although actions determined to have an adverse effect under Section 106 may be mitigated, the effect remains adverse.

~~Possible measures to mitigate the impacts of the Action Alternatives on the Monocacy National Battlefield include the following:~~

- ~~• Land transfer from SHA to NPS in an amount greater than impacted;~~
- ~~• Designing pedestrian connectivity to Battlefield areas of interest within the~~

- project limits and improving the east side parking area;
- Designing the bridge and roadway aesthetics to minimize visual impacts, including staining concrete, colored guardrail, and textured sidewalk surfaces;
- Restoring and interpreting the 1864 Georgetown Pike road prism;
- Completing the Gambrills Tract Cultural Landscape Report;
- Removing trees and vegetation along MD 355 within the project limits to restore the Civil War era viewshed.

MDOT/SHA, FHWA, NPS, and MHT have entered into a Memorandum of Agreement (MOA) to address the adverse effects of the MD 355 Bridge over CSX project. The Advisory Council on Historic Places (ACHP) declined to participate in resolving the adverse effect and is, therefore, not a party to the MOA. The efforts to mitigate and minimize the adverse effect to the Monocacy National Battlefield as outlined in the MOA include:

- The NPS would complete construction or reconstruction of approximately 3,200 linear feet of six-rail wood fence in the following areas of the Monocacy National Battlefield:
 - Along the Best Farm's east boundary on the west side of MD 355 from the CSX railroad cut to north of the Best Farm entrance;
 - On the east side of MD 355 from the CSX railroad cut to the existing 6-rail fence; and
 - Along the 1864 road prism near the 14th New Jersey Monument.
- Restoration of the 1864 Georgetown Turnpike Prism and Vegetation Removal on the East Side of MD 355:
 - In order to reveal the remains of the 1864 Georgetown Turnpike prism adjacent to the 14th New Jersey Monument and return the landscape near the Monocacy Battlefield Visitor's Center on the east side of MD 355 between Station 20.00 and Station 27.00 to the Monocacy National Battlefield's 1864 appearance, NPS will complete vegetation removal.
- The NPS will design and fabricate an interpretive panel that interprets the significance of the Georgetown Pike during the Monocacy Battle, as well as during the 19th century.
- The NPS will complete a Cultural Landscape Report for the Gambrill Tract, located on the southeast side of MD 355 south of the Monocacy River;
- The MDOT/SHA will provide a parking area and driveway to replace the gravel parking lot on the southeast side of the bridge which is located on Monocacy National Battlefield. Plans for the lot will be included in the landscaping plans.
- The MDOT/SHA will provide an 8 to 10-foot wide pathway on graded benches beneath the bridge on the north and south sides of the CSX railroad tracks, but located on Monocacy National Battlefield, to facilitate pedestrian access. Plans for the trail will be included in the project plans.

4.8.1 IMPACTS OF THE ACTION ALTERNATIVES

4.8.1.1 ALTERNATIVE 3- REPLACE BRIDGE ON EXISTING ALIGNMENT, PROVIDE TEMPORARY BRIDGE FOR MAINTENANCE OF TRAFFIC (Pages 117-119)

Under Alternative 3, the new bridge would be built on the existing alignment while a temporary bridge would be constructed to the west for maintenance of traffic during construction. Although Alternative 3 uses the existing alignment, this alternative includes design elements common to all including raising the bridge and roadway profile, widening for sidewalk and bicycle lanes, constructing stormwater management facilities, and relocating utilities. Because of these common elements, the actual impacts associated with Alternative 3 are comparable to Alternatives 1 and 2. However, the new bridge would remain on the existing alignment and would not be moved closer to contributing resources such as the 14th New Jersey Monument or the Frederick Junction.

The visual setting of 14th New Jersey Monument would be temporarily altered for the duration

of construction due to the temporary bridge. Once the new permanent bridge has been constructed, the temporary structure would be removed and the area would be reseeded/replanted with vegetation. The existing driveway and parking area adjacent to the 14th New Jersey Monument would be closed to improve visitor safety. These modifications would be barely noticeable because the existing driveway and parking area are only gravel and compacted soil.

Temporary construction staging may be required in the Battlefield. Materials and equipment would generally be confined to the existing MD 355 Bridge roadbed and previously disturbed areas such as the NPS east side parking area. Once the temporary structure is built, construction staging and activities can occur on the existing MD 355 alignment. To a degree, character defining features of the Battlefield would be temporarily diminished by the visual intrusion of the construction activities. The construction related activities associated with Alternative 3 would have short-term moderate adverse impacts to the Monocacy National Battlefield.

Under Alternative 3, the increase in size and height of the bridge and approach roadways between the Monocacy River Bridge and the Best Farm entrance would introduce new visual and physical elements out of character with the Battlefield. Although the current roadway is raised several feet above the grade of the Best Farm fields near the bridge, Alternative 3 calls for a higher grade for a greater distance. ~~Alternative 3 would permanently impact 2.15 acres from the Best Farm and 0.25 acre from the Frederick Junction. Due to the temporary structure, Alternative 3 would temporarily impact approximately 0.25 acre from the Best Farm. Alternative 3 would require the permanent use of 1.77 acres of land under the authority of NPS for the maintenance of slopes needed to support the bridge and roadway and for maintenance of stormwater management facilities. This permanent use of the land includes 1.76 acres from the Best Farm and 0.01 acre from the Frederick Junction, both contributing resources to the Monocacy National Battlefield. An additional 1.87 acres of temporary use would be needed from the Battlefield for construction of the temporary bridge and construction related items. The temporary use includes 1.74 acres the Best Farm and 0.13 acre from the Frederick Junction.~~

The direct impacts to the Best Farm would be to the farm fields that run adjacent to MD 355. Other design aspects that would introduce new visual elements include sidewalk, trail connections, wider shoulders, and stormwater management facilities. Although the proposed actions under Alternative 3 would alter the appearance of the Battlefield, it would not diminish the overall integrity of the resource. Alternative 3 would use approximately ~~2.65~~ 3.64 acres of land from within the Monocacy National Battlefield (inclusive of the permanent and temporary impacts to Best Farm and permanent impacts to the Frederick Junction). Therefore, there would be long-term moderate adverse impacts associated with the replacement bridge.

Design plans would be developed and reviewed by the SHPO and NPS to ensure consistency with the Civil War era appearance of the Battlefield, and to avoid encumbrance on the park's contributing elements to the extent possible. Mitigation strategies, such as those listed under

Section 4.8, would be considered to offset the total impact to the Battlefield. Based on these considerations, there would be short-term and long-term moderate adverse impacts to Monocacy National Battlefield.