



Harpers Ferry National Historical Park

Expand Existing Transit Maintenance Facility

Environmental Assessment

JULY 2012



National Park Service

**Harpers Ferry National Historical Park
Harpers Ferry, West Virginia**

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Environmental Assessment**

July 13, 2012

PROJECT SUMMARY

Introduction:

Harpers Ferry National Historical Park (the park) comprises approximately 3,645 acres at the confluence of the Shenandoah and Potomac Rivers, at the point where West Virginia, Virginia, and Maryland converge. The park was established to preserve historic resources that commemorate the events that occurred at Harpers Ferry for the benefit and enjoyment of all people.

Purpose and Need for the Action:

The National Park Service (NPS) is proposing to improve and expand the existing transit maintenance facility at the park. The existing facility provides shelter and maintenance space for only a portion of the park's bus fleet and includes a rudimentary office and storage area for the bus mechanic. The facility is the only fueling station and has no potable water or restrooms. The park's bus fleet provides public transportation from the park's visitor center to other areas throughout the park. The proposed transit maintenance facility expansion would provide increased capacity for indoor storage of buses and other maintenance equipment and operations, including an employee workspace consisting of a break room, restrooms, lockers, and an office.

Overview of the Alternatives:

The NPS has evaluated two options for the proposed action, as described in this Environmental Assessment (EA). A no-action alternative (alternative A) and an action alternative, improvement and expansion of the existing transit maintenance facility (alternative B), were examined. The NPS has chosen alternative B as the NPS preferred alternative because it meets the project's purpose to expand and improve the transit maintenance facility to meet the increased demands on the transportation fleet and to be fully functional as a bus garage, storage area, fuel depot, and an employee work place. Alternative B is consistent with the *Final General Management Plan/Environmental Impact Statement* (GMP/EIS) (NPS 2009a) for the park, as well as the *Alternative Transportation Study* (NPS 2012), which, when implemented, will expand the transportation system in the park.

Implementation of the NPS preferred alternative would result in short- and long-term, negligible, adverse impacts on soils and topography; short-term, negligible, adverse and long-term, minor, adverse impacts on vegetation; and long-term, beneficial impacts on park operations, management, and safety.

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How to Comment:

If you wish to comment on this Environmental Assessment, you may post your comments electronically at <http://parkplanning.nps.gov/hafe> or you may mail comments during the 30 day review period to the name and address below. It is the practice of the NPS to make all comments, including names and addresses of respondents who provide that information, available for public review following the conclusion of the National Environmental Policy Act (NEPA) process. Individuals may request that the NPS withhold their name and/or address from public disclosure. If you wish to do this, you must state this prominently at the beginning of your comment. Commenters using the website can make such a request by checking the box "keep my contact information private." The NPS will honor such requests to the extent allowable by law, but you should be aware that the NPS may still be required to disclose your name and address pursuant to the Freedom of Information Act.

Superintendent
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ACRONYMS AND ABBREVIATIONS

ABA – Architectural Barriers Act
ABAAS – Architectural Barriers Act Accessibility Standards
ADA – Americans with Disabilities Act
CEQ – Council on Environmental Quality
Director’s Order 12 - Director’s Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-making*
EA– Environmental Assessment
EPA – U.S. Environmental Protection Agency
FHWA – Federal Highway Administration
GMP/EIS – General Management Plan/Environmental Impact Statement
HVAC – Heating, ventilation, and air conditioning
MSL – Mean sea level
NAACP - National Association for the Advancement of Colored People
National Register – National Register of Historic Places
NEPA – National Environmental Policy Act
NHPA – National Historic Preservation Act
NPDES - National Pollution Discharge and Elimination System
NPS – National Park Service
the park - Harpers Ferry National Historical Park
SHPO – State Historic Preservation Officer
USFWS – U.S. Fish and Wildlife Service
VHB – Vanasse Hangen Brustlin, Inc.

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INTRODUCTION: PURPOSE AND NEED

INTRODUCTION

Harpers Ferry National Historical Park (the park) comprises approximately 3,645 acres at the confluence of the Shenandoah and Potomac Rivers, at the point where West Virginia, Virginia, and Maryland converge. The park, which is located within 50 miles of Washington, D.C., is 20 miles from nearby Frederick, Maryland and 35 miles from Winchester, Virginia. The park was established to preserve historic resources that commemorate the events that occurred at Harpers Ferry for the benefit and enjoyment of all people. Notable events that took place at Harpers Ferry include the establishment of the second Federal Armory in 1796, John Brown's abolitionist uprising in 1859, and numerous Civil War battles. A description of these events and other important events can be found later in this chapter.

The National Park Service (NPS) is proposing to improve and expand the existing transit maintenance facility at the park (figure 1). The existing facility provides shelter and maintenance space for only a portion of the park's bus fleet and includes a rudimentary office and storage area for the bus mechanic. The facility is the only fueling station and has no potable water or restrooms. The park's bus fleet provides public transportation from the park's visitor center to other areas throughout the park. The proposed transit maintenance facility expansion would provide increased capacity for indoor storage of buses and other maintenance equipment and operations, including an employee workspace consisting of a break room, restrooms, lockers, and an office.

This Environmental Assessment (EA) evaluates two alternatives, a no-action alternative and an action alternative, the NPS preferred alternative. The EA further analyzes the potential impacts these alternatives would have on the natural, cultural, and human environment. This document has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; regulations of the Council on Environmental Quality (CEQ) (40 CFR 1508.9); and the Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-making* (Director's Order 12) (NPS 2001). Compliance with section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), will be conducted separately, but concurrently.

PURPOSE OF AND NEED FOR ACTION

The purpose of this project is to expand and improve the transit maintenance facility to meet the increased demands on the transportation fleet and to be fully functional as a bus garage, storage area, fuel depot, and an employee work place.

In 1991, the park instituted a transit service to connect the park's visitor center with the Lower Town District in Harpers Ferry. The transit maintenance facility (4,708 square feet) was constructed in 1992 in an area of the park known as Cavalier Heights and is generally in poor condition, although it is believed to be structurally sound. The facility does not meet current industry safety standards and building codes or the park's existing and future transit maintenance needs. The current design of the facility access road and parking lot requires bus drivers to frequently back up vehicles in order to maneuver in the confined area, also creating a safety hazard. There is no employee parking available at the facility, which means employees park above in the visitor center parking lot and walk down to the entrance of the transit maintenance facility. There is often poor visibility for employees to walk down from the parking lot due to a lack of lighting, and the road can be icy in the winter, creating a safety issue.

Although the facility was originally designed as a parking facility for buses, the building currently serves as both a bus storage and maintenance facility (figure 1). Some basic facility features, such as building accessibility, a security system, restrooms, additional storage areas, office and meeting space, an employee break room and lockers, a loading dock, vehicle access/egress, a vehicle wash station, lighting, and utilities, are inadequate or completely lacking. The existing design of the roofline poses a safety hazard due to the tendency for icicles to develop along the roofline during the winter and for ice to build up in front of the door to the facility.



Figure 1: The view looking into the transit maintenance facility.

In addition, the existing facility can only store 6 vehicles and the current fleet is 10, leaving 4 vehicles exposed to the elements, thereby reducing their operational lifespan and inhibiting future expansion of the fleet, as directed in the *Alternative Transportation Study* (NPS 2012). The park would like to acquire three additional buses in the future. Thus, there is a need for the facility to be expanded and improved to meet the increased demands on the transportation fleet and to be fully functional as a bus garage, storage area, fuel depot, and an employee workplace.

The proposed action would be designed within the area surrounding the existing Harpers Ferry transit maintenance facility, which is located within the boundary of the park (figure 2). Its location within the park is an area known as Cavalier Heights, which consists of relatively undeveloped land southwest of the town of Bolivar, extending down the bluff to Shoreline Drive and the banks of the Shenandoah River. The project area includes the existing transit maintenance facility, bus maintenance pit, fuel tank area, and impervious surfaces (5.78 acres) including the paved parking areas at the facility and part of the visitor center lot, as well as the access road (figure 3).

Based on the purpose and need identified above, the specific objectives for the proposed action are as follows:

- Minimize safety risks for vehicles and workers/pedestrians
- Provide a logical sequence of bus circulation and operations
- Allow for future expansion of the facility, if needed
- Minimize impacts to park cultural and natural resources
- Minimize construction impact on ongoing park and transit operations

PROJECT BACKGROUND

In 1944, Congress authorized the Harpers Ferry National Monument, which gained National Historical Park status in 1963. The park was established in order to preserve historic resources and to commemorate the historic events that occurred at Harpers Ferry for the benefit and enjoyment of all people (NPS 2009a).

The town of Harpers Ferry was an important commercial and manufacturing town, due to its location at the confluence of the Shenandoah and Potomac Rivers for water power and transportation. Harpers Ferry became a significant site for the industrial revolution, especially once George Washington designated Harpers Ferry as the second Federal Armory on June 15, 1796. By the 1850s, Harpers Ferry was militarily significant because of the Armory and its geographic position in proximity to the B&O Railroad and C&O Canal. Prior to 1821, John Hall, the inventor of interchangeable rifle parts, was awarded a contract to manufacture 1,000 rifles at the U.S. Armory. Between 1821 and 1849, he helped lead the change from craft-based production to manufacture by machine.

In 1859, a prominent abolitionist, John Brown, was determined to seize 100,000 weapons from the U.S. Armory for slaves to use for guerrilla warfare in order to achieve freedom. Brown led a 21-man army to capture the armory. Brown was eventually captured by the U.S. Marines and found guilty of treason and murder. He was hanged on December 2, 1859, and although his short-lived raid failed, his trial and execution brought national attention to the moral issue of slavery. This significant event was a catalyst for the Civil War.

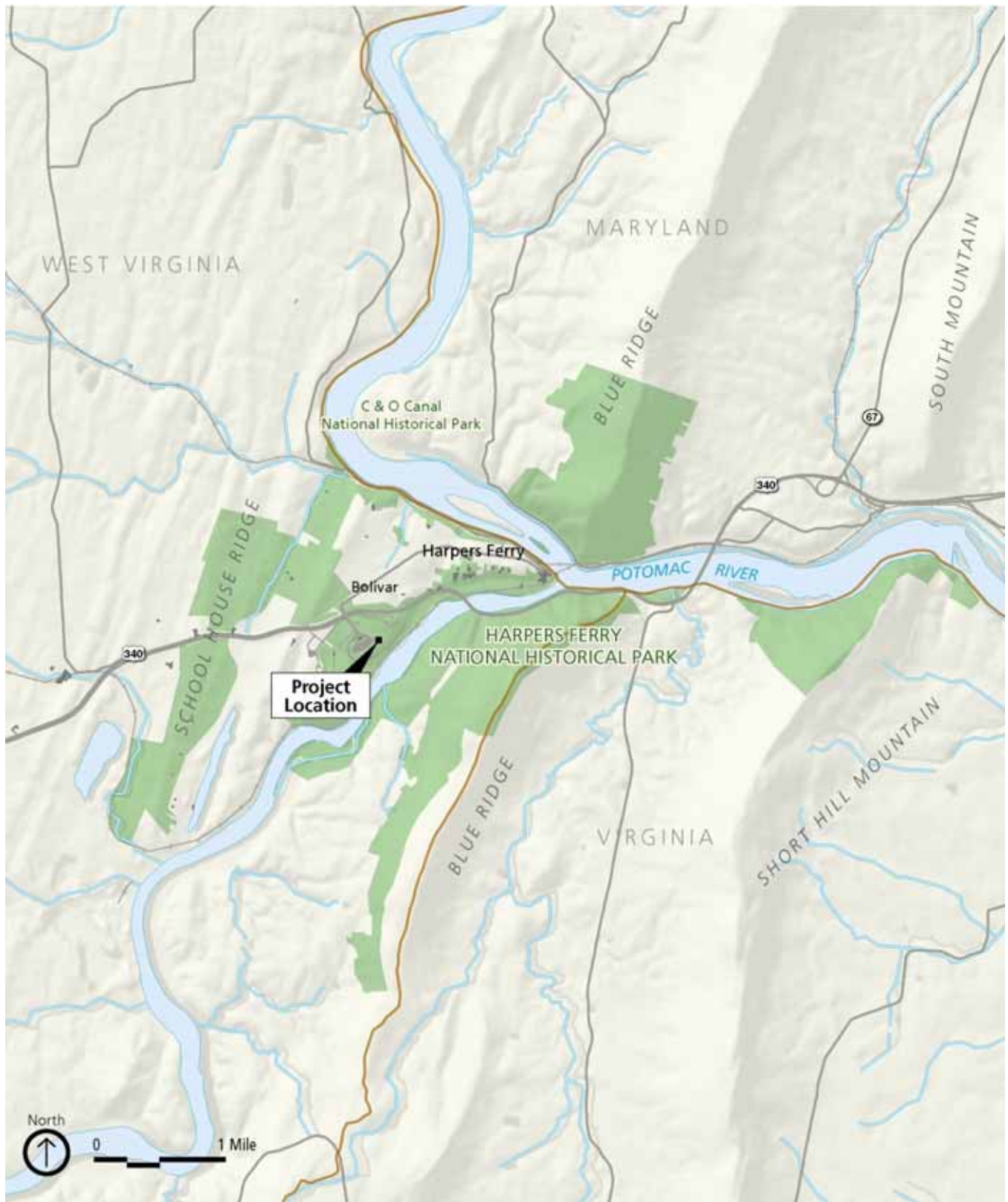


Figure 2: Project Location



Figure 3: Project Area

Due to its location at the gateway of the Shenandoah Valley, Harpers Ferry changed hands eight times during the war. The town was captured by the Confederate troops of General Thomas Jonathan “Stonewall” Jackson in 1862, which served as a prelude to the battle at Antietam Creek that ended the South’s first invasion of the North. The Union army quickly reoccupied Harpers Ferry and converted the area into a fortress with strong field fortifications. In July 1864, the Union repelled an attack by Lieutenant General Jubal Early’s Confederate army. The four-day attack and the later battle at Monocacy Junction provided the Union with time to reinforce Washington, D.C. and defend it from capture. From August 1864 to December 1864, the main base of operations and supplies for Major General Philip S. Sheridan’s Union army was positioned at Harpers Ferry, until the final campaign in which Sheridan defeated Early’s army as a fighting force and conquered the Shenandoah Valley for the Union. By the end of the war, Harpers Ferry was a ghost town. The mills and manufacturing plants in the area along the Potomac were destroyed. In addition, the U.S. Government decided not to rebuild the Armory and chose instead to dispose of its lands and buildings. Because of these actions, the town of Harpers Ferry never fully recovered its industrial importance.

From 1865 to 1955, events of national significance took place at Harpers Ferry, which were related to black history and education and the Niagra Movement. Storer College was founded and operated at Harpers Ferry through the efforts of the U.S. Freedmen’s Bureau, the Freewill Baptist denomination, and John Storer, a New England philanthropist. The school was one of the first to provide education to freed slaves. In addition, Harpers Ferry was the location of the second meeting of the Niagra Movement in 1906, which later established the National Association for the Advancement of Colored People (NAACP). Today, the park encompasses portions of the Lower Town, the former Storer College campus, and historic Civil War landscapes, including campgrounds, fortifications and battlefields, archeological preserves, streetscapes, and industrial landscapes.



Figure 4: Entrance sign to Harpers Ferry National Historical Park.

RELATIONSHIP TO LAWS, EXECUTIVE ORDERS, POLICIES, AND OTHER PLANS

Several plans and studies have contributed to the development of alternatives for expanding the existing transit maintenance facility at the park. These include Section 438 of the Energy Independence Security Act – Stormwater Management for Federal Facilities, Executive Order 13514 – Federal Leadership in Environmental, Energy, and Economic Performance, Executive Order 13508 – Chesapeake Bay Protection and Restoration, the *Final General Management Plan/Environmental Impact Statement* (GMP/EIS) (NPS 2009a), and the *Alternative Transportation Study* (NPS 2012).

Section 438 of the Energy Independence and Security Act outlines Stormwater Management for Federal Facilities and requires federal agencies to reduce stormwater runoff from federal development and redevelopment projects to protect water resources. Federal agencies comply with the requirements by using a variety of stormwater management practices, such as "green infrastructure" or "low impact development", in order to reduce impervious surfaces by using vegetative practices, porous pavements, cisterns, and green roofs. The park would comply with all of these requirements and work to implement a porous pavement as part of the proposed action.

Under **Executive Order 13514 – Federal Leadership in Environmental, Energy, and Economic Performance**, federal agencies are required to set a 2020 greenhouse gas emissions reduction target, increase energy efficiency, reduce fleet petroleum consumption, conserve water, reduce waste, support sustainable communities, and leverage Federal purchasing power to promote environmentally-responsible products and technologies. The park would comply with the requirements set forth under the Executive Order and would ensure that water is conserved and waste is reduced as part of the proposed action.

Under **Executive Order 13508 – Chesapeake Bay Protection and Restoration**, federal agencies are to protect and restore the health, heritage, natural resources, and social and economic value of the Chesapeake Bay, in addition to the natural sustainability of its watershed. The park would abide by all stipulations under the Executive Order as part of the proposed project.

The *Final General Management Plan/Environmental Impact Statement* (NPS 2009a) laid out planning and management policy for the park. The GMP/EIS includes a long-term planning framework that continues to guide park decision-making for management of the natural and cultural resources in the park, as well as transportation. This planning framework provides direction for the park as it relates to the financial and environmental impact of proposed facilities and programs. The plan identifies the need to provide enhanced visitor access to Camp Hill, Bolivar Heights, and newly acquired areas of North and South Schoolhouse Ridge and Murphy Farm. Currently, access to the various areas is provided to visitors by direction them to enter the park at the Cavalier Heights entrance near the visitor center, to park in the visitor parking lot, and to take a park bus or shuttle to their desired destination. Expansion of the existing transit maintenance facility would allow for the park to eventually expand their fleet of buses to provide improved and more efficient visitor access throughout the park.

The *Alternative Transportation Study* (NPS 2012) investigates the most efficient ways of providing transportation to Camp Hill, Bolivar Heights, and newly acquired areas of North and South Schoolhouse Ridge and Murphy Farm, as identified in the GMP/EIS. The study considers shuttles, bikes, trails, and personal vehicles, as well as route and network designs. The study proposes to expand the transportation system at the park to meet the increase in visitor demand, requiring more storage and maintenance space

than what is provided by the existing transit maintenance facility. Expansion of the existing transit maintenance facility would provide more indoor bus bays for vehicle storage and more efficient maintenance operations to provide adequate transportation options for visitors. The study was documented under a Categorical Exclusion under NEPA, and the section 106 determination was “No Historic Properties Affected”.

SCOPING PROCESS AND PUBLIC PARTICIPATION

Scoping is an early and open process to determine the breadth of environmental issues and alternatives to be addressed in a NEPA document. Scoping is used to identify which issues need to be analyzed in detail and which can be eliminated from in-depth analysis. It also allocates assignments among the interdisciplinary team members and/or other participating agencies, identifies related projects and associated documents, identifies permits, surveys, consultation, and other requirements, and creates a schedule that allows adequate time to prepare and distribute the environmental assessment for public review and comment before a final decision is made. Scoping efforts are directed at any public, staff, interested agency, or agency with jurisdiction by law or expertise.

A kick-off meeting for the project was held in May 2009, followed by a value analysis workshop in September 2009. The schematic design process was completed in November 2009. The park then distributed information on the project to the public in February 2012 and initiated scoping with multiple relevant agencies early in the planning process, including the United States Fish and Wildlife Service (USFWS), the Federal Highway Administration (FHWA), and the West Virginia State Historic Preservation Officer (SHPO). No comments were received during the public scoping period. For further scoping and public participation information, see “Chapter 5: Consultation and Coordination” and “Appendix A: Relevant Correspondence.”

ISSUES AND IMPACT TOPICS

During the scoping process, specific considerations and concerns were identified as critical to expanding the existing transit maintenance facility at the park. Along with the purpose and need for the proposed action, these topics guided the development of alternatives and contributed to the selection of impact topics, as identified in the next section.

Health/Life Safety. There are safety concerns associated with the current site design, because bus drivers have to make three point turns to enter and exit the facility and the parking area, as well as to refuel. The space is tight, and there are safety risks when drivers have to back up the buses. In addition, there is no known gutter system that is compatible with the roof of the facility. Water from the roof can form large icicles during the winter, although park staff knocks icicles down when necessary. There is no employee parking available at the facility, which means employees have to park above in the visitor center parking lot and walk down to the entrance of the transit maintenance facility. There is often poor visibility for employees to walk down from the parking lot due to a lack of lighting, and the road can be icy in the winter, creating a safety issue. Therefore, the proposed action seeks to improve safety within the project area.

ABA Compliance. The existing transit maintenance facility and site are not ABA-compliant. ABA (Architectural Barriers Act) parking is not adequate, and ABA accessibility for the facility has not been established. Therefore, the proposed action seeks to bring the transit maintenance facility into ABA compliance within the project area by adhering to Architectural Barriers Act Accessibility Standards (ABAAS).

Energy Efficiency. The existing electricity and utilities are outdated and inadequate. There is no reliable cooling system in the facility. Heating is provided through baseboard electric heat inside of the office in the facility. Therefore, the proposed action seeks to improve energy efficiency within the project area.

Access/Egress Safety. There is one entrance and exit driveway into the facility, as well as only one entrance into the building for employees. The site design creates numerous safety issues. The current single-lane entrance/exit access driveway causes vehicle and pedestrian conflicts. The bus drivers must back out of the existing garage. The existing facility has no life safety system to cover security, intrusion, or fire suppression. Therefore, the proposed action seeks to improve upon access/egress safety conditions within the project area.

Slope and Grade. The existing facility is situated with very little opportunity for a large-scale expansion of the entire facility, due to severe slope conditions that surround the site to the east, north, and south. Therefore, the proposed action seeks to make the best use of the limited space within the project area to facilitate expansion.

IMPACT TOPICS ANALYZED IN THIS EA

Impact topics are resources of concern within the project area that could be affected, either beneficially or adversely, by the range of alternatives presented in this EA. They were identified based on the issues raised during scoping, site conditions, federal laws, regulations, Executive Orders, NPS *Management Policies 2006* (NPS 2006), Director's Orders, and staff knowledge of the park's resources.

Impact topics identified and analyzed in this EA are listed below, along with a brief rationale for the selection of each impact topic. They include soils and topography; vegetation; and park operations, management, and safety. Each impact topic is further discussed in detail in "Chapter 3: Affected Environment" and "Chapter 4: Environmental Consequences" of this document.

Soils and Topography

NPS *Management Policies 2006* (NPS 2006) states that the NPS will strive to understand and preserve the soil resources of park units and to prevent, to the extent possible, the unnatural erosion, physical removal, and contamination of the soils or of other resources. These policies further state, "[m]anagement action will be taken by superintendents to prevent or at least minimize adverse, potentially irreversible impacts on soils." A variety of soil types exist within Harpers Ferry National Historical Park. The existing building rests on a fill pad supported by a medium density sandy/silt layer. The existing facility was built on a fill pad because of the steep topography that exists at the site. Soils and topography in the project area were heavily impacted during the construction of the existing facility. The proposed action would result in disturbance to soils from construction activities. Therefore, the impact topic of soils and topography is retained for analysis.

Vegetation

NPS policy is to protect the natural abundance and diversity of all naturally occurring communities. NPS *Management Policies 2006* (NPS 2006) and other NPS and park policies provide general direction for the protection of vegetation. Much of the vegetation in the project area has previously been disturbed and includes mostly lawn, planted screening vegetation, and some edge forest comprised of sugar maple (*Acer saccharum*), red oak (*Quercus rubra*), eastern redbud (*Cercis canadensis L.*), and eastern white pine (*Pinus strobus*). Vegetation could be further affected by the proposed expansion of the transit maintenance facility. Expansion of the facility would require earthwork to accommodate for the new facility, access drive, and employee parking areas. Removal of vegetation would take place in areas of the project area that are undisturbed, and new vegetation would be planted along a new berm to screen the expanded building. Therefore, the impact topic of vegetation is retained for analysis.

Park Operations, Management, and Safety

Part of providing a quality experience for those visitors to and users of the national park system is ensuring safe and efficient access to park resources without overly burdening park staff. The proposed action would result in changes to vehicle maintenance operations, management, and employee safety within the project area. Therefore, the impact topic of park operations, management, and safety is retained for analysis.

IMPACT TOPICS CONSIDERED BUT DISMISSED FROM FURTHER ANALYSIS

The following presents an overview of impact topics that were considered, but ultimately dismissed from further analysis. Impact topics were dismissed from further analysis if it was determined that the impact topic would not be affected or the potential for impacts would be negligible or minor. An outline of background information used in considering each topic is provided below along with the reasons for dismissing each topic from further analysis.

Geologic Resources and Hazards

NPS *Management Policies 2006* state that the NPS will “protect geologic features from the unacceptable impacts of human activity while allowing natural processes to continue” (NPS 2006). The project area is located in the Blue Ridge Mountain section of the extensive Appalachian Mountain Range. Weverton quartzite, phyllite (Harpers shale), and limestone are the predominant rock types in the park (NPS 2009a). Although some removal of bedrock may be necessary for construction of the expanded facility, no unique geologic formations exist beneath the project area. Therefore, the impact topic of geologic resources and hazards was considered but dismissed from further analysis.

Water Quality and Hydrology

NPS *Management Policies 2006* (NPS 2006) states that the NPS will “take all necessary actions to maintain or restore the quality of surface waters and ground waters within the parks consistent with the Clean Water Act and all other applicable federal, state, and local laws and regulations.” The proposed expansion of the transit maintenance facility would not affect any water resources within the park, because the site is located on the bluffs overlooking the Shenandoah River and there is no direct adjacency of the site to the river or to other bodies of water. Site and building drainage would be redesigned to effectively handle any increase in runoff from the increase in impervious surfaces under this

alternative. Stormwater run-off from proposed surfaces, including the new bus garage building and associated paved areas and employee parking area, would be collected via grass swales where possible, or if necessary, conveyed via concrete curb and gutter or pumped systems to low-impact treatment facilities such as a pre-fabricated Filterra stormwater treatment filter. Use of stormwater management systems under both alternatives minimizes impacts to existing downstream bodies of water to a level that impacts are no longer detectable. During construction, the park would abide by all West Virginia Water Quality Standards, including the West Virginia Antidegradation Rules and Procedures. Therefore, the impact topic of water quality and hydrology was considered but dismissed from further analysis.

Wetlands

Executive Order 11990, “Protection of Wetlands” and NPS Director’s Order 77-1: *Wetland Protection* (NPS 2002a) require an examination of impacts on wetlands. Wetland habitat does not exist within the project boundaries, so the proposed expansion of the transit maintenance facility would not affect any wetlands. Therefore, the impact topic of wetlands was considered but dismissed from further analysis.

Floodplains

Executive Order 11988, “Floodplain Management,” and NPS Director’s Order 77-2: *Floodplain Management* (NPS 2003a) require an examination of impacts on floodplains and potential risk involved in placing facilities within floodplains. All portions of the project area are outside of the 100-year floodplain. Therefore, the impact topic of floodplains was considered but dismissed from further analysis.

Air Quality

The Clean Air Act and NPS *Management Policies 2006* (NPS 2006) state that parks have a responsibility to protect air quality related values from adverse air pollution impacts. Comprehensive air quality data have been collected by the NPS Air Resources Division. According to this data, Loudoun County, VA had nonattainment of the National Ambient Air Quality Standard for ozone, which is 0.8 ppm for an 8 hour period (NPS 2003b). Jefferson County, WV and Washington County, MD were identified as Early Action counties, meaning agreements have been entered into with the U.S. Environmental Protection Agency (EPA) for more time to allow the counties to achieve compliance with air quality standards. The proposed action would have minimal short-term impacts on air quality. Hauling of material, operating of equipment, and other construction activities could result in temporary increases in vehicle exhaust and emissions. However, these activities would be consistent with other activities that have and would continue to occur in the immediate area. The increases in emissions that occur during these activities quickly dissipate in normal wind conditions. Therefore, there would be no perceptible impacts on air quality, although there may be a temporary increase in particulate matter and vehicle emissions associated with construction of the improvements. A dust abatement program would also be implemented, which could include the following elements: water or otherwise stabilize soils, cover haul trucks, employ speed limits, minimize vegetation clearing, and revegetate after construction. Therefore, the impact topic of air quality was considered but dismissed from further analysis.

Rare, Threatened, and Endangered Species

In addition to NPS policies and management guidelines, the Endangered Species Act of 1973, as amended, provides for the protection of rare, threatened, and endangered species (plant and animal). In a letter dated March 1, 2012, the USFWS stated that a “no effect” determination was made for the project since it would not affect federally listed endangered or threatened species. Therefore, the impact topic of rare, threatened, and endangered species was considered but dismissed from further analysis.

Wildlife

NPS policy is to protect the natural abundance and diversity of all naturally occurring communities. The *NPS Management Policies 2006* (NPS 2006) and other NPS policies provide general direction for the protection of wildlife and wildlife habitat. The wildlife present in the project area or on surrounding land would likely be habituated to high levels of disturbance and human use. Most of the area that would be impacted by construction have been previously disturbed and developed, and any loss of habitat would be negligible. Therefore, the impact topic of wildlife was considered but dismissed from further analysis.

Land Use

The land use of the park and surrounding area would not be impacted by the proposed project, and land use would remain consistent with the GMP. Therefore, the impact topic of land use was considered but dismissed from further analysis.

Scenic Resources

The Organic Act states that NPS units are charged with conserving park scenery, along with all the natural and cultural resources that contribute to important views. In the evaluation of scenic resources, both the visual character of the project area and the quality of the viewshed within the project area were considered. A viewshed comprises the limits of the visual environment associated with the proposed action including the viewsheds within, into, and out of the project area. There are no scenic resources located within the project area. Therefore, the impact topic of scenic resources was considered but dismissed from further analysis.

Soundscapes

The park provides a quiet escape from the hustle and bustle of metropolitan life. The NPS strives to maintain or reduce existing noise impacts within the park, so the park can continue to serve as a refuge from the surrounding urban environment. There may be a temporary increase in noise during construction required for the proposed expansion of the transit maintenance facility, but this would be short-term and negligible. Construction would be anticipated to last about nine to 12 months. The park would coordinate with the construction contractor to minimize impacts to soundscapes as much as possible during construction. The proposed action would not change the soundscapes at the park in the long term. Therefore, the impact topic of soundscapes was considered but dismissed from further analysis.

Lightscares

In accordance with *NPS Management Policies 2006* (NPS 2006), the NPS strives to preserve natural ambient landscapes and other values that exist in the absence of man-made light. Currently, there is no pole lighting within the project area; however, there is wall-mounted lighting attached to the existing transit maintenance facility. Proposed work would include the installation of pole lighting for the expanded transit maintenance facility parking lot in front of the building. The addition of these six pole lights would contribute a negligible adverse impact to lightscares; however, the preservation of natural ambient lightscares is a primary project objective. The park would continue to strive to limit the use of artificial outdoor lighting to that which is necessary for basic safety requirements and to ensure that all outdoor lighting is shielded to the maximum extent possible, to keep light on the intended subject and out of the night sky. Therefore, the impact topic of lightscares was considered but dismissed from further analysis.

Prime and Unique Farmland

Prime farmland is one of several designations made by the U.S. Department of Agriculture to identify important farmlands in the United States. It is important because it contributes to the nation's short- and long-range needs for food and fiber. In general, prime farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, an acceptable level of acidity or alkalinity, an acceptable content of salt or sodium, few to no rocks, and permeable soils (designated as prime farmland soils). There are no prime and unique farmland soils located in the project area (NRCS 2012). Therefore, the impact topic of prime farmland was considered but dismissed from further analysis.

Wilderness

The Wilderness Act (Public Law 88-577) defines wilderness as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor and does not remain." The intent of the act is to "secure for the American people of present and future generations the benefits of an enduring resource of wilderness." The management of wilderness areas within the national park system is guided by *NPS Management Policies 2006* (NPS 2006). There are no designated or potential wilderness areas in the park. Therefore, the impact topic of wilderness was considered but dismissed from further analysis.

Archeological Resources

Because the proposed expansion of the transit maintenance facility is located on previously disturbed sites, archeological resource impacts are not anticipated. No archeological resources have been identified within the project area (NPS 1988). Therefore, the impact topic of archeological resources is dismissed. In the unlikely event that previously unknown archeological resources or 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) and 36 CFR 800.13 would be followed.

Museum Collections

A museum collection is an assemblage of objects, works of art, historic documents, and/or history specimens collected according to a rational scheme and maintained so that they can be preserved, studied, and interpreted for public benefit (NPS 2002b). The proposed action would not increase or decrease museum collections, nor affect their storage. Therefore, the impact topic of museum collections was considered but dismissed from further analysis.

Ethnographic Resources

An ethnographic resource is defined as any “site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it” (NPS 2002b). There are no known ethnographic resources, including sacred sites, within the project area. Therefore, the impact topic of ethnographic resources was considered but dismissed from further analysis.

Historic Structures and Districts

A historic structure is defined by the NPS as “a constructed work, usually immovable by nature or design, consciously created to serve some human act” (NPS 2002b). To be listed on or eligible for listing on the National Register of Historic Places (National Register), a site, structure, object, or district must possess historic integrity of those features necessary to convey its significance, particularly with respect to location, setting, design, feeling, association, workmanship, and materials. The National Register Bulletin #15: *How to Apply the National Register Criteria for Evaluation* (NPS 1990) provides a comprehensive discussion of these characteristics. Activities proposed for the expansion of the transit maintenance facility would not take place within any historic district or impact any historic resources listed or eligible for listing in the National Register. Therefore, the impact topic of historic structures and districts was considered but dismissed from further analysis.

Cultural Landscapes

According to the NPS’s Director’s Order 28: *Cultural Resource Management Guideline* (NPS 2002b), a cultural landscape is

...a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions.

The proposed expansion of the transit maintenance facility would not take place in any park designated cultural landscapes. Therefore, the impact topic of cultural landscapes was considered but dismissed from further analysis.

American Indian Traditional Cultural Properties

Secretarial Order 3175 requires that any anticipated impacts on Indian Trust resources from a proposed project or action by U.S. Department of Interior agencies be explicitly addressed in environmental documents. The federal Indian Trust responsibility is a legally enforceable obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal laws with respect to Native American tribes. There are no known Indian Trust resources in the project area, and the lands comprising the park are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Therefore, the impact topic of American Indian Traditional Cultural Properties was considered but dismissed from further analysis.

Visitor Use and Experience

Enjoyment of park resources and values by the people of the United States is part of the fundamental purpose of all parks (NPS 2006). The NPS strives to provide opportunities for forms of enjoyment that are uniquely suited and appropriate to the natural and cultural resources found in parks. The proposed action would not enhance, nor detract, from the visitor experience, which encompasses interpretation, understanding, enjoyment, safety, circulation, and accessibility of the park. Visitors do not use the transit maintenance facility and should not be accessing the building for any reason. Occasionally, visitors may accidentally enter the facility parking lot and access road; however proposed improvements to the circulation of the site should further discourage continued accidental entrance. In addition, renovations to the visitor center parking lot would reconfigure parking spaces, resulting in up to 80 additional parking spaces. Short-term, adverse construction impacts to parking would be negligible under the proposed alternative, although the timing of construction activities would ensure that visitors are able to park. Future implementation of the *Alternative Transportation Study* (NPS 2012), which is addressed under Cumulative Impacts in Chapter 4 of this document, would result in an expansion in the park's bus fleet and an improved transit system for visitor use, and the proposed action to expand the existing transit maintenance facility would allow for the park to do so. Safety, circulation, and access impacts are addressed under the Park Operations, Management, and Safety and Transportation impact topics. Therefore, the impact topic of visitor use and experience was considered but dismissed from further analysis.

Transportation

The NPS strives to provide efficient transportation for park staff and visitors. The proposed action would not result in changes to the transportation systems providing access throughout the park. Therefore, the impact topic of transportation was considered but dismissed from further analysis.

Socioeconomic Resources

NPS *Management Policies 2006* (NPS 2006) requires the NPS to identify any impact to socioeconomic resources when determining the feasibility of a proposed action. Implementation of the proposed action could provide subtle short-term beneficial impacts on the local economy due to temporary jobs during construction for the expansion of the facility, but no noticeable long-term impacts would result. Therefore, the impact topic of socioeconomic resources was considered but dismissed from further analysis.

Environmental Justice

Executive Order 12898, “General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing the disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. According to the EPA, environmental justice is the “...fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.”

The goal of “fair treatment” is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts. Environmental justice was considered but dismissed from further analysis for the following reasons:

- The park staff and planning team solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Implementation of the proposed action would not result in any identifiable adverse human health effects. Therefore, there would be no direct or indirect adverse impacts on any minority or low-income population.
- The impacts associated with implementation of the proposed action would not disproportionately affect any minority or low-income population or community.
- Implementation of the proposed action would not result in any identified effects that would be specific to any minority or low-income community.

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ALTERNATIVES

INTRODUCTION

CEQ regulations for implementation of NEPA call for the alternatives considered in a document to include a no-action alternative. This EA examines two alternatives: alternative A (the no-action alternative) and an action alternative (NPS preferred alternative). The description and evaluation of the no-action alternative provides a baseline to which the action alternative can be compared. The alternative for the proposed action was designed to address health/life safety, ABA compliance, access/egress safety, and energy efficiency issues. The elements of these alternatives are described in the following sections. Impacts associated with the alternatives are described in “Chapter 4: Environmental Consequences.”



Figure 5: View of the northern bays of the existing transit maintenance facility and the adjacent maintenance pit.

DESCRIPTIONS OF ALTERNATIVES

ALTERNATIVE A: NO-ACTION

Under the no-action alternative, the park would use the existing transit maintenance facility, as is, for vehicle maintenance and storage (figure 7). In general, there would be no change to the existing building, including its size, utilities, and employee accommodations, which are described below. Access to and egress from the facility would take place via the existing entrance road, and the existing berm would screen the facility from the visitor center parking lot.

The existing building would remain at its current size, which is 4,721 square feet, and would offer space for bus storage and employee comfort. The park would continue to own and operate its transportation fleet of 10 vehicles. The building would provide bus bays for six vehicles, leaving four vehicles to be parked outside and exposed to the elements. In addition, under the *Alternative Transportation Study* (NPS 2012), the park is planning to expand the bus fleet, which would require additional buses to be parked outside, and space would remain tight. The bays would be used for multiple functions, including storage of the buses, washing, and maintenance. A bus maintenance pit located outside of the facility would provide an area for repairs and other mechanical operations necessary for keeping the buses operational. During inclement weather, any maintenance repairs have to be addressed inside the facility.



Figure 6: Maintenance equipment is stored between parked buses.

As mentioned above, employee accommodations would remain unchanged. Some maintenance and washing must take place inside the building, which does not allow for much space for mechanics to maneuver around the buses. Employees would also use a portable toilet located outside the facility. The facility would remain non-compliant with ABAAS guidelines, industry safety standards and building codes. The NPS would be unable to fix some of the existing safety problems because the existing roof is incompatible with known gutter systems.

Site and building drainage, heating, ventilation, and air conditioning (HVAC) system, air circulation, plumbing, utilities, landscaping, and fuel storage capabilities of the existing building would remain unchanged. The existing stormwater collection system and treatment tank would treat stormwater runoff from drainage areas, including the existing transit maintenance facility and paved area east of the building.

Employee parking would be in the main visitor lot up the hill and employees would walk down the unlighted driveway to access the facility. Buses would also use the driveway, which narrows from 24 feet to 15 feet at places, to access the facility. The paved area in front of the bus shelter, which is approximately 110 feet wide and 76 feet long, and its awkward pull in would mean that buses would have to back up to maneuver into the facility. Refueling would require buses to maneuver into difficult spaces, and snow removal would be challenging due to poor circulation and inadequate space.



Figure 7: Alternative A: No-action

An 8- to 10-foot earth berm and vegetated landscape buffer would help screen the facility from the visitor's view from the visitor center and parking lot. Visitors may inadvertently enter the bus facility parking area, because the existing entrance road and alignment does not clearly delineate the route for the incoming visitors to the visitor center. If the visitor parking lot would fill to capacity, visitors would park in the grass overflow area adjacent to the parking lot.

ALTERNATIVE B: EXPAND EXISTING TRANSIT MAINTENANCE FACILITY (NPS PREFERRED)

Under Alternative B: Expand Existing Transit Maintenance Facility, the NPS would construct a new addition to the existing building, renovate the existing building, and reconfigure the site to provide one-way bus traffic and employee parking (figure 8). New plantings, combined with a grade differential between the expanded facility and visitor center and parking area, would provide screening of the new facility.

The building would be expanded to a size of approximately 10,800 square feet. This expanded facility would provide indoor bays for the entire current bus fleet of 10 buses and would have the capacity to store a total bus fleet of 15 vehicles, should the park decide to expand its fleet in the future. In addition, the expanded facility would provide adequate space for maintenance operations to take place inside the facility. The existing bus maintenance pit would be demolished and removed from the facility site. Due to the limitations of an extreme slope on three sides of the facility, expansion would occur on the west side of the existing building. The existing earth berm adjacent to the building would need to be removed and reconstructed, and any excess fill generated could be used elsewhere within the project for new berms and grading or for other ongoing projects at the park. In net total, approximately 17,000 cubic yards of earth would be removed. In addition, a bus wash bay and improved maintenance and lift bays would also be included in the new facility. The renovated and expanded building would also include a new employee break room (365 square feet), lockers (78 square feet), and restrooms (194 square feet) for up to 15 employees, as well as an office (187.5 square feet) and storage space. The building would become ABA compliant and meet industry safety standards and building codes.

The park would design and implement improvements to the building and meet sustainability guidelines. Energy efficient utilities would be installed in the updated facility, including a new HVAC system, air circulation system, and plumbing. Sustainable site improvements would include enlargement of the stormwater control system (discussed in more detail below), use of vegetated swales along pavement areas, and consideration of low consumption or no consumption plumbing fixtures. The new wash bay would recycle and filter gray water for reuse in washing vehicles. Construction waste would be recycled, and materials with recycled content would be used to the extent possible.

Site and building drainage would be redesigned to effectively handle any increase in runoff from the increase in impervious surfaces under this alternative. Additional stormwater management systems would be incorporated in the design to treat and minimize any impacts to existing downstream bodies of water near the project area. The portion of the visitor parking lot and roadways within the project area may be paved using asphalt and/or pervious paving materials. The park would make an effort to use pervious pavers where able, due to the contaminants associated with asphalt paving. Chemicals in asphalt include toxic and carcinogenic compounds, and leaching of harmful compounds can impact rivers, streams, and other natural waters. Porous pavement would allow for efficient stormwater drainage, without the use of toxic chemicals such as those found in asphalt. Stormwater run-off would be collected via grass swales where possible, or if

necessary, conveyed via concrete curb and gutter or pumped systems to low-impact treatment facilities such as a pre-fabricated Filterra stormwater treatment filter. The roof on the existing building would remain the same, and because there is no known gutter system compatible with this roof, icicles would continue to form. However, employees would be provided with a new main entrance to the facility in the expanded portion and would no longer need to use the entrance prone to icy conditions.

Utilities would be updated, so that domestic and fire suppression water would be accessible at the improved facility, as well as a sanitary sewer. Because there currently is no sanitary sewer service provided at the building, a new sanitary grinder pump station would be required at the expanded facility, which would pump effluent from the transit maintenance facility to the existing pump station. In order to provide domestic water to the expanded facility, the existing water service line that runs into the building would likely need to be upsized from a 2-inch service line to a 6-inch service line. The existing line would be abandoned in-place after construction of the new water service line, which would be located on the south side of the road. Two fire hydrants and a water meter would also be constructed. An off-on loading dock would be installed as part of the new facility design to allow for ease in deliveries. Fuel would continue to be stored at the expanded transit facility. A new security system, lighting, and upgraded electrical and telephone/data system would be included in the building design. The new electric service would likely come from a connection near the visitor center and would require an upgrade to 3-phase power. The new service would be trenched alongside the existing line with cable in conduit.

The layout of the site also would be redesigned. The access to and egress from the site would be configured to allow for one-way traffic flow around the building. The entrance road would be approximately 24 feet wide where two-way traffic takes place, although the one-way segments of the driveway would be approximately 18 feet wide. The existing parking area associated with the facility would remain, but access would be gained from the south, while egress would take place to the north. Guardrail protection would continue to be provided for vehicles along the road where there are steep slopes. The proposed bus bay configuration would include pull-through bays to greatly reduce the need for 3-point turns. Employee parking would be provided separately from visitor parking, and a concrete pedestrian walkway would extend approximately 370 feet at 5 feet wide to connect the employee parking spaces to the building via an ABA accessible route. Employees and park staff would now enter the building through a new entrance constructed as part of the building addition. The new entrance would have appropriate lighting and easy accessibility so employees can safely enter the building.

A proposed landscape plan would recreate a mixture of indigenous plantings, which include sugar maple, red oak, eastern redbud, and eastern white pine, at the site. These species would be planted around the expanded facility and modified visitor parking area. The new plantings, combined with the grade differential between the expanded facility and visitor center and parking area, would provide screening of the new facility. The realignment of the access road would be designed to further aid in screening the facility from public view.



Figure 8: Alternative B: Expand Existing Transit Maintenance Facility (NPS Preferred)



Figure 9: Schematic of alternative B, from a perspective from the east, with the existing building in the foreground.

Facility expansion to the west would require encroachment onto the existing visitor overflow parking lot and the existing entrance road to the bus facility. Modifications to the existing visitor parking area and overflow parking area would be required to allow for the partial realignment of the access road to the transit maintenance facility. The visitor center parking lot is currently 490 to 500 feet above mean sea level (MSL). The desired finished floor elevation of the expanded facility is approximately 476 feet above MSL. Expansion of the building would require realignment of a portion of the visitor parking lot, because the addition would span out into the existing parking lot. With the reconfiguration of the parking lot, up to 80 additional parking spaces would be added to the visitor parking lot.

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, the following protective measures would be implemented as part of the selected action alternative. The NPS would implement an appropriate level of monitoring throughout the construction process to help ensure that protective measures are being properly implemented and are achieving their intended results. Although the exact mitigation measures to be implemented would depend upon the final design and approval of plans by relevant agencies, the following is a list of actions that could take place:

Soils and Topography:

- Minimize soil erosion by limiting the time that soil is left exposed and by applying other erosion control measures, such as erosion matting, silt fencing, and sedimentation basins in construction or demolition areas to reduce erosion, surface scouring, and discharge to water bodies.
- Reuse soils where possible through soil salvage.

- Implement a dust abatement program. Standard dust abatement measures could include the following elements: water or otherwise stabilize soils, cover haul truck, employ speed limits on unpaved roads, minimize vegetation clearing, and revegetate after construction or demolition.
- Acquire a General West Virginia/National Pollution Discharge and Elimination System (NPDES) Water Pollution Control Permit.
- Use porous pavement, where possible, in order to decrease the effect of hardened surfaces and allow for better drainage and less soil impacts as opposed to completely impervious surface.

General:

- Implement measures to reduce the adverse effects of construction or demolition on visitor safety and experience.
- Implement a spill prevention and pollution control program for hazardous materials. Standard measures could include hazardous materials storage and handling procedures, spill containment, cleanup and reporting procedures, and limitation of refueling and other hazardous activities to non-sensitive sites.
- Implement standard noise abatement measures during construction. Standard noise abatement measures could include the following elements: a schedule that minimizes impacts on adjacent landowners and noise-sensitive uses, the use of the best available noise control techniques wherever feasible, the use of hydraulically or electrically powered impact tools when feasible, or location of stationary noise sources as far from sensitive uses as possible.

ALTERNATIVES CONSIDERED BUT DISMISSED FROM FURTHER ANALYSIS

The options for expanding the existing transit maintenance facility at the park were narrowed through the Value Analysis process. This process considered the objectives of the project and the planning issues. Several alternatives were considered but dismissed from further analysis and are described below.

Build New Facility with Employee Parking Underground

This alternative would keep the existing transit maintenance facility as is, and a new facility would be built on piles to the east of the existing parking lot. Employee parking would be available beneath the new structure. This alternative would require a major interruption in use of the current facility during construction, as well as relocation of the underground fuel storage and delivery system. Costs would also be high, because the facility would be elevated and require enhancements to support a lifted building placed on a severe slope. Expansion in this direction would not meet the project objective to use the existing site location to the greatest extent possible and could also cause a relatively high visual impact to the viewshed for adjacent landowners. Due to financial infeasibility and the extent of environmental and operational impacts, this alternative was dismissed from further analysis.

Demolish Existing Facility and Build New Facility

This alternative would include demolition of the existing transit maintenance facility and the construction of a brand new facility on the site. Implementing this alternative would require a major disruption in current operations and relocation of the buses for a minimum of 12-15 months. Due to the potential for this alternative to severely affect park operations as well as visitor use and experience throughout the park, it would not meet the objective set forth for this project to minimize construction impact on ongoing park and transit operations. Therefore, this alternative was dismissed from further analysis.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The NPS is required to identify the environmentally preferable alternative in its NEPA documents for public review and comment (NPS 2001). According to the CEQ regulations implementing NEPA (43 CFR 46.30), the environmentally preferable alternative is the alternative “that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative.”

The no-action alternative, alternative A, best protects and preserves the natural resources of the park. Soils would remain compacted under the existing building, roads, and parking lots, and there would be no additional disturbance, as structures would remain in their current configuration. Topography and vegetation would remain the same. Earthwork would not be required under alternative A, as it is in alternative B. Alternative A would result in fewer environmental impacts than alternative B, and alternative A would result in a smaller footprint than that of alternative B. Based on the analysis of environmental consequences of each alternative as described in chapter 4, alternative A is the environmentally preferable alternative.

NPS PREFERRED ALTERNATIVE

NPS policy also encourages identification of a preferred alternative in the EA if one has been identified. The preferred alternative is the alternative that NPS believes would best accomplish the project’s goals, objectives, purposes, and needs. In selecting a preferred alternative, NPS must consider the associated impacts to natural, cultural, and social resources. The NPS chose Alternative B: Expand Existing Transit Maintenance Facility as its preferred alternative, because it best meets the objectives of the project and is consistent with NPS management policies, laws, regulations, and plans. Alternative B would include additional compaction and cut of soils due to expansion of the building, and some minor vegetation would be cleared. However, safety would be improved through the installation of sidewalks, guardrails, a security system, and efficient circulation, allowing for buses to minimize back-up maneuvers. The expanded facility would provide washing and maintenance stations separately from the storage bays and would also provide an improved environment for employees. These improvements result in beneficial impacts on park operations, management, and safety. Although alternative B is not the environmentally preferable alternative, it best meets the purpose and need of the project; and improvements to park operations, management, and safety would outweigh the minor environmental impacts associated with alternative B.

SUMMARY COMPARISON OF THE ALTERNATIVES

Table 1 provides a summary of the alternatives presented above.

Table 1: Summary of Alternatives		
Alternative Element	Alternative A: No-action	Alternative B: Expand Existing Transit Maintenance Facility (NPS Preferred)
Facility Overview	Park would continue to use existing transit maintenance facility for vehicle maintenance and storage.	Park would construct a new addition to the existing building, renovate the existing building within the existing footprint, and reconfigure the site to provide one-way bus traffic and employee parking.
Building Square Footage	4,721 square feet	10,824 square feet
Bus Bays and Use	Six bus bays with multiple functions, including storage, washing, and maintenance. Four buses are left outside. No room for an expanded fleet.	Fifteen bus bays, including bays specifically for washing and maintenance. Room for the park to expand their fleet from 10 to 15 in the future.
Employee Environment	Building would function without restrooms, storage areas, office and meeting space, an employee break room, lockers, and a loading dock. Employees would continue to use a portable toilet located outside the facility.	Renovated building would include a new employee break room, lockers, and restrooms for up to 15 employees, as well as office and storage space.
Safety/Noncompliance Issues	Building would remain non-compliant with ABA and industry safety standards and building codes.	Building would become compliant and meet industry safety standards and building codes.
Screening	An earth berm and vegetated landscape buffer would continue to help screen the facility from the visitor's view from the visitor center and parking lot.	Proposed landscape plan would recreate a mixture of indigenous plantings, which include sugar maple, red oak, eastern redbud, and eastern white pine, at the site. The new plantings, combined with the grade differential between the expanded facility and visitor center and parking area, would provide an adequate screening of the new facility.
Visitor Issues	Visitors may continue to inadvertently enter the bus facility parking area, since the existing entrance road and alignment does not clearly delineate the route for the incoming visitor to the visitor center.	The improved entrance road and alignment would clearly delineate the route for the incoming visitors to access the visitor center.
Parking	No employee parking at the facility. Visitor center parking lot would remain the same.	Employee parking included in renovations. Visitor center parking lot would be realigned due to expansions of the facility, and up to 80 additional parking spaces would be added.

Table 1: Summary of Alternatives (continued)		
Alternative Element	Alternative A: No-action	Alternative B: Expand Existing Transit Maintenance Facility (NPS Preferred)
Visitor Parking Lot	All visitors who park at the Cavalier Heights lot would still be required to take the transit system to Lower Town and other visitation areas of the park. If the visitor parking lot would fill to capacity, visitors would park in the grass overflow area adjacent to the parking lot.	Visitors would continue to park at the Cavalier Heights lot to take the bus transit system to Lower Town and other visitation areas of the park. Facility expansion to the west would require encroachment onto the existing visitor overflow parking lot and the existing entrance road to the bus facility. Minor modifications to the existing visitor parking area and overflow parking area would be required to allow for the partial realignment of the access road to the transit maintenance facility.
Site Access/Circulation	The transit maintenance facility would continue to be accessed by the entrance road. The entrance road leading into the transit maintenance facility would continue to experience frequent congestion and conflicts due to its narrow access. The existing entrance/exit road would remain a single lane road. All of the buses must continue to backup to maneuver within the existing area. No sidewalk or other pedestrian path to get to or from the bus facility, in addition to inadequate site lighting. Ice would also continue to form during the winter in front of the door to the facility, due to the lack of a roof gutter system.	Access and egress to the site would be configured to allow for one-way traffic flow around the building in order to eliminate vehicle and pedestrian conflicts currently experienced along the single-lane entrance/exit access driveway. Proposed bus bay configuration would include pull-through bays to reduce bus backing maneuvers and vehicle and pedestrian conflicts. Concrete pedestrian walkways would connect the employee parking spaces to the building via an ABA accessible route. In addition, guardrail protection for vehicles would be placed along the road. Ice would also continue to form during the winter in front of the existing entrance to the facility, due to the lack of a roof gutter system; however employees would no longer use this entrance prone to icy conditions and would access the building through the new entrance near the employee parking area.

Table 1: Summary of Alternatives (continued)		
Alternative Element	Alternative A: No-action	Alternative B: Expand Existing Transit Maintenance Facility (NPS Preferred)
Stormwater and Utilities	Existing stormwater collection system and treatment tank would be kept in service and continue to treat stormwater runoff from drainage areas. The HVAC system, air circulation, plumbing, utilities, landscaping, and fuel storage capabilities of the existing building would remain inadequate. Water from the roof would continue to form large icicles in the winter, due to the lack of a gutter system on the roof of the facility.	Site and building drainage would be redesigned to effectively handle any increase in runoff. NPS would try to implement the use of porous pavement where possible. Additional stormwater management systems would be incorporated in the design to treat and minimize any impacts to existing downstream bodies of water near the project area. Utilities would be updated, so that domestic and fire water would be accessible at the improved facility, as well as a sanitary sewer. An off-on loading dock would be installed as part of the new facility design to allow for ease in deliveries. The expanded facility would also be able to implement improved fuel storage and distribution. A new security system, lighting, and upgraded electrical and telephone/data system would be included in the building design. Water from the roof would continue to form large icicles in the winter, due to the lack of a gutter system on the roof of the existing facility. However, employees would no longer use the entrance prone to icy conditions and would access the building through the new entrance near the employee parking area.

SUMMARY OF PROJECT OBJECTIVES

Table 2 provides a summary of how each alternative meets the project objectives.

Table 2: Summary of Project Objectives		
Project Objective	Alternative A: No-action	Alternative B: Expand Existing Transit Maintenance Facility (NPS Preferred)
Minimize safety risks for vehicles and workers/pedestrians	Safety risks would remain the same due to the current site design. Bus drivers would continue to make three point turns to enter and exit the facility and parking area, as well as to refuel. Icicles would continue to form over the employee entrance, creating a safety hazard. Employees would have to park at the visitor parking lot and walk down the unlit path to the employee entrance.	Safety risks would be minimized under this alternative. Fire suppression water would become available at the site, as well as a new security system. New lighting would light the path between the new employee parking area and building entrance, via an ABA accessible route. The proposed bus bay configuration would include pull-through bays to greatly reduce the need for three point turns.
Provide a logical sequence of bus circulation and operations	Access and egress would remain disorganized. One entrance and exist driveway into the facility would be used, as well as only one entrance into the transit facility for employees. The single-lane entrance and exit access driveway would continue to experience vehicle and pedestrian conflicts. Bus drivers would continue to make three point turns to enter and exit the facility and the parking area, as well as to refuel.	The access and egress of the site would be improved to provide a more logical sequence of vehicle circulation. The new configuration would allow for one-way traffic flow around the transit building. The entrance road would be approximately 24 feet wide where two-way traffic takes place, and the one-way segments would be approximately 18 feet wide. This reconfiguration would minimize pedestrian and vehicle conflicts.
Allow for future expansion of the facility, if needed	The facility would remain in place and at its current size possessing six bus bays. Four buses would continue to be stored outside in the elements, and wear on them may take place. Although the building could be expanded in the future, the fleet could most likely not be expanded, due to lack of storage.	The facility would be expanded to the west and encroach upon the current visitor parking lot. All buses in the park's fleet would be stored inside the expanded transit facility and provide a longer lifespan for the vehicles, since all vehicles would be inside and out of the elements. The facility would be expanded enough to provide 15 bays, allowing for future fleet expansion.
Minimize impacts to park cultural and natural resources	No impacts to park cultural and natural resources would take place, since the existing transit facility would remain in place with no need for additional construction.	No impacts to park cultural and natural resources would take place since the area was previously impacted by construction of the facility in 1992. There are no cultural resources in the project area, and any vegetation or soil disturbance would be replaced or mitigated.
Minimize construction impact on ongoing park and transit operations	No construction impacts on ongoing park and transit operations since no construction would take place under this alternative.	Construction impacts would be minimized as part of this alternative through the use of mitigation and implementation of dust and noise abatement during construction. Construction would not impact park transit operations.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Table 3 provides a summary of the environmental consequences related to each alternative. A more detailed explanation of the impacts is presented in “Chapter 4: Environmental Consequences.”

Table 3: Summary of Environmental Consequences For a complete description of impacts, see “Chapter 4: Environmental Consequences”		
Resource	Alternative A: No-action	Alternative B: Expand Existing Transit Maintenance Facility (NPS Preferred)
Soils and Topography	Overall, there would be no new impacts of alternative A on soils and topography. There would be no cumulative impacts on soils and topography.	Overall, impacts of alternative B include short-term, minor, adverse impacts on soils due to exposure and/or movement of previously disturbed soils during construction and installation of utilities including exposure of up to 8 acres of soils and movement of 20,000 cubic yards of soils. These alterations would be detectable but small. Additionally, alternative B would result in long-term, minor, adverse impacts on soils and topography due to additional compaction and impervious surface within the project area as well as noticeable changes in topography. These changes would be detectable but would take place in an area where soils have previously been heavily impacted. In addition, the park would work to implement a porous pavement in order to minimize impacts to soils and topography.
Vegetation	Overall, there would be no new impacts of alternative A on vegetation within the project area. There would be no cumulative impacts on vegetation.	Overall, impacts of alternative B on vegetation include earthwork and long-term removal of 2 acres of vegetation, consisting primarily of lawn and a few trees. During construction, there would be short-term impacts to vegetation during utility installation and relocation of the berm. Alternative B would result in short-term, negligible, adverse impacts during construction and long-term, minor, adverse impacts on vegetation. Because the impacts to vegetation would affect several individual plants and would also affect a very small portion of that species' population, alternative B would result in long-term, minor, adverse impacts on vegetation. There would be no cumulative impacts on vegetation.

Table 3: Summary of Environmental Consequences (continued)

For a complete description of impacts, see “Chapter 4: Environmental Consequences”

Resource	Alternative A: No-action	Alternative B: Expand Existing Transit Maintenance Facility (NPS Preferred)
Park Operations, Management, and Safety	Overall, impacts of alternative A on park operations, management, and safety include long-term, minor, adverse impacts because continued issues associated with employee safety and maintenance of the park’s bus fleet would be detectable but would be of a magnitude that would not cause a noticeable change in park operations, management, and safety. Alternative A, in combination with other cumulative impacts, would result in long-term, minor, adverse impacts and long-term, beneficial impacts on park operations, management, and safety. Alternative A would contribute a noticeable, adverse increment to the cumulative impact on park operations, management, and safety.	Overall, impacts of alternative B on park operations, management, and safety include providing a safer environment for transit employees and allowing for a more fully operable bus fleet. Because the impacts would improve upon park operations, management, and safety, alternative B would result in long-term, beneficial impacts on park operations, management, and safety. Alternative B, in combination with other cumulative impacts, would result in long-term, beneficial impacts on park operations, management, and safety. Alternative B would contribute a noticeable, beneficial increment to the cumulative impact on park operations, management, and safety.

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3

AFFECTED ENVIRONMENT

Organized by resource topic, this chapter describes the resources that could be impacted by the proposed action. Resources examined in detail include soils and topography; vegetation; and park operations, management, and safety. Resources dismissed from further analysis are discussed in “Chapter 1: Purpose and Need.”

SOILS AND TOPOGRAPHY

When it was constructed in 1992, the existing transit maintenance facility was built upon a fill pad approximately 200 feet above the Shenandoah River and at a location within the park known as Cavalier Heights. The two primary soil types in the project area include the Sylvatus-Rock outcrop complex and the Urban land-Udorthents (NRCS 2012). Subsurface exploration and geotechnical engineering evaluations were completed when the transit maintenance facility was built. Four borings were performed to refusal depths ranging from 9.5 feet to 13.5 feet. According to the boring logs, the foundation of the existing building rests on a medium density sandy/silt layer (NPS 2009c). A stormwater collection system and treatment tank treats stormwater runoff from drainage areas at the site. Stormwater is treated prior to being released into the surrounding full wooded buffer. The drainage area includes 5.78 acres of impervious surface, which includes the existing transit maintenance facility, bus maintenance pit, fuel tank area, paved parking areas at the facility, part of the visitor center lot, and the access road.

The transit maintenance facility site is surrounded by severe slope conditions to the east, north, and south. Most of the slopes beyond the immediate building footprint are in excess of 25 percent. The finish floor elevation of the existing building is 470 feet, with an approximate range of elevation from 446 feet to 486 feet across the site. Artificial fill is located behind the existing facility and forms a berm (approximately 8 to 10 feet high) upon which trees were planted to visually screen the existing facility from the visitor parking lot. The site is further shielded from sight by a difference in 20 horizontal feet from the visitor parking lot and the entrance to the bus facility. The soils and topography in the project area were heavily impacted during the construction of the existing transit maintenance facility (NPS 2009b). In addition, construction of the visitor parking lot and transit facility parking lot also resulted in soil compaction to the soils located beneath the pavement. The current grass overflow parking area, adjacent to the visitor center parking lot, has been disturbed by the use of vehicles on days when the visitor parking lot is full.

VEGETATION

The majority of the existing transit maintenance facility is surrounded by a mixture of indigenous vegetation and some exotic species on the sharp slope to the north, east, and south of the building. Vegetation consists of numerous ferns, grasses, sedges, and rushes, as well as chestnut oak, tulip poplar, red maple, and hackberry tree species. Exotics of particular concern include approximately 100 Tree of Heaven (*Ailanthus altissima*) trees. This vegetation exists outside the area that was disturbed for the original construction of the facility in 1992. The vegetation on the berm on the west side of the facility was planted in 1992 and is composed of sugar maple, red oak, eastern redbud, and eastern white pine. Lastly, there is a lawn area at the back of the visitor center parking lot and at the back of the existing transit maintenance facility, which is often used for overflow parking during busy days.

PARK OPERATIONS, MANAGEMENT, AND SAFETY

In 1991, the park instituted transit service to connect the visitor center with the Lower Town District of Harpers Ferry. In 1992, the park constructed a bus parking facility in Cavalier Heights near the park's visitor center. This facility was built to house 6 buses and is in operation 12 months of the year. The building (4,708 square feet) serves as both a parking and maintenance facility, despite being originally designed to serve only the former purpose.

Within the last 10 years, the park increased the number of vehicles in its fleet from 6 to 10. This fleet includes six Gillig, 35 passenger low floor buses, which were purchased in 2005; two Ford 12 passenger cut away buses, which were purchased in 2006; one 17 passenger cut away vehicle, which was purchased in 2003; and one Americans with Disabilities Act (ADA) accessible van (NPS 2009b). The transit maintenance facility can accommodate six vehicles, so four vehicles must be stored outside with little to no protection from the elements. Maintenance and washing activities take place in extremely close quarters within the facility or outside in the concrete maintenance pit that provides access to the undercarriage of the buses.

In terms of safety, the existing facility does not have a functional security system installed or a fire suppression system. The building is not ABA compliant and does not meet industry safety standards or building codes. The roof of the facility currently has no gutter system. The park has had consultants inspect the roof, and they have determined that it is not possible to install a gutter system on the existing facility (NPS 2009b). Due to the lack of gutter system, large icicles form on the roof in the winter and must be knocked down by park staff when they become an issue. Buses and other vehicles, such as snow plows, must backup to maneuver and refuel within the existing parking area, which is approximately 110 feet wide (north to south) and 76 feet long (east to west).

The building's systems and utilities are outdated and/or deficient. The existing building is in poor condition generally, and specific cosmetic upgrades are necessary to compensate for the deferred maintenance over the last several years. The building also does not have domestic water available for employees. There is an existing 2-inch plastic water service line that runs to the building. There is no sanitary sewer service provided at the site. The nearest service connection is at the existing sanitary pump station located northeast of the visitor center. Employees use a portable toilet available on site. Single-phase electric service is available at the existing building. There are no light poles installed to illuminate the parking lot or access road to the facility, however there are some light units attached to the building.

There is an underground fuel tank and fuel dispensing system located along the east edge of the existing pavement. The building does not include HVAC or an air circulation system.

The transit maintenance facility is current accessed by continuing through the existing visitor center entrance off Shoreline Drive and proceeding down the entrance road, past the visitor center parking lot to the south. The road continues until the end of the double yellow line at the existing non-mechanized gate, which includes signs identifying the access for authorized vehicles only. At this point, the single-lane road continues past the overflow visitor parking lot and narrows from approximately 24 feet to 15 feet until reaching a larger asphalt area in front of the bus facility at the end of the road. The road accommodates two-way traffic.

There is no employee parking available at the existing facility, and employees must park up at the visitor center parking lot and walk down to the transit maintenance facility. There is often poor visibility for employees to walk down from the parking lot due to a lack of lighting, and the road can be icy in the winter.

Lastly, all visitors who park at the Cavalier Heights lot are required to take the transit system to Lower Town and other visitation areas of the park. The visitor parking lot frequently fills to capacity in the summer and for special events throughout the year, and when it does, visitors can park in the grass overflow area adjacent to the parking lot.



Figure 10: View of the concrete maintenance pit.

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4

ENVIRONMENTAL CONSEQUENCES

Environmental Consequences provide analysis of both beneficial and adverse impacts that would result from implementing any of the alternatives considered in this EA. This chapter also includes definitions of impact thresholds (e.g., negligible, minor, moderate, and major), methods used to analyze impacts, and the analysis methods used for determining cumulative impacts. As required by CEQ regulations implementing NEPA, a summary of the environmental consequences for each alternative is provided in table 2, which can be found in “Chapter 2: Alternatives.” The resource topics presented in this chapter, and the organization of the topics, correspond to the resource discussions contained in “Chapter 3: Affected Environment.”

GENERAL METHODOLOGY FOR ASSESSING IMPACT THRESHOLDS AND MEASURING EFFECTS BY RESOURCE

GENERAL ANALYSIS METHODS

As required by NEPA, potential impacts are described in terms of type (beneficial or adverse), context (site-specific, local, or regional), duration, and level of intensity (negligible, minor, moderate, or major). Both indirect and direct impacts also are described; however, they may not be identified specifically as direct or indirect. These terms are defined below. Overall, these impact analyses and conclusions are based on the review of existing literature and studies, information provided by on-site experts and other government agencies, professional judgments, and park staff insight.

IMPACT THRESHOLDS

Impacts can be beneficial or adverse. Beneficial impacts would improve resource conditions, while adverse impacts would deplete or negatively alter resources.

Beneficial: A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.

Adverse: A change that moves the resource away from a desired condition or detracts from its appearance or condition.

Direct: An impact that is caused by an action and occurs at the same time and place.

Indirect: An impact that is caused by an action but is later in time or farther removed in distance, but still reasonably foreseeable.

Context

Context is the setting within which an impact occurs and can be site specific, local, parkwide, or regional. Each of these categories is defined below.

Site Specific: The impact would affect the project area.

Local: The impact would cause an effect outside the project area yet within the park.

Parkwide: The impact would affect a greater portion outside the project area yet within the park.

Regional: The impact would affect localities, cities, or towns surrounding the park.

Duration

Impacts can be either short-term or long-term. A short-term impact would be temporary in duration and would be associated with the construction process. Depending on the resource, impacts would last as long as construction was taking place, or up to one year after construction is completed. Long-term impacts last beyond the construction period, and the resources may need more than one year after construction to resume their preconstruction condition. If the impact duration is different for a specific resource topic, the duration definitions are provided in the methodology for that impact topic.

Level of Intensity

Impact intensity is the degree to which a resource would be adversely affected. Because level of intensity definitions (negligible, minor, moderate, major) vary by resource, separate definitions are provided for each impact topic analyzed. Level of intensity will not be provided for beneficial impacts, as it is not required.

CUMULATIVE IMPACTS ANALYSIS METHOD

The CEQ regulations that implement NEPA require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as impacts which result when the impact of the proposed action is added to the impacts of other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions (40 CFR 1508.7).

To determine the potential cumulative impacts, existing and anticipated future projects within the project area and in the surrounding area were identified. The projects and plans identified include the *Alternative Transportation Study*.

Implementation of the Alternative Transportation Study

The *Alternative Transportation Study* (NPS 2012) investigates the most efficient ways of providing transportation to identified park resources. The *Final General Management Plan/Environmental Impact Statement* (NPS 2009a) identified the need to provide enhanced visitor access to Camp Hill, Bolivar Heights and newly acquired areas of North and South Schoolhouse Ridge, and Murphy Farm. The Alternative Transportation Study calls for additional buses to be added to the park's fleet. The goals of the study are to improve visitor experience by making it easier for visitors to understand and access park resources, reduce the number of vehicles on roads serving the park, and provide sustainable and cost effective access to park resources. Implementation of this study would potentially impact park operations, management, and safety.

Cumulative Impact Contribution Methodology

In defining the contribution of each alternative to cumulative impacts, the following terminology is used:

Imperceptible: The incremental effect contributed by the alternative to the overall cumulative impact is such a small increment that it is impossible or extremely difficult to discern.

Noticeable: The incremental effect contributed by the alternative, while evident and observable, is still relatively small in proportion to the overall cumulative impact.

Appreciable: The incremental effect contributed by the alternative constitutes a large portion of the overall cumulative impact.

SOILS AND TOPOGRAPHY

METHODOLOGY AND ASSUMPTIONS

In order to assess impacts on soils and topography within the project area, information on local soil classification was gathered from the existing conditions within the project area and examined. Following establishment of the existing conditions, impacts are described related to the proposed action under each potential alternative.

IMPACT THRESHOLDS

The thresholds for the intensity of an impact are defined below.

Negligible: Impacts on soils and topography would be below or at the lower levels of detection.

Minor: The impacts on soils and topography would be detectable and small. Mitigation may be needed to offset adverse impacts and would be relatively simple to implement and likely be successful.

Moderate: The impacts on soils and topography would be readily apparent and result in a change to soils and topography over a relatively wide area. Mitigation measures would be necessary to offset adverse impacts and likely be successful.

Major: The impacts on soils and topography would be readily apparent and would substantially change the character of the soils and topography over a large area in and out of the park. Mitigation measures to offset adverse impacts would be needed, extensive, and their success could not be guaranteed.

IMPACTS OF ALTERNATIVE A: NO-ACTION

Impacts

Under the no-action alternative, the existing transit facility would remain in place and continue to serve as a maintenance and storage facility for the park's fleet of buses. The soils and topography within the footprint of the entrance roadway, the visitor center parking lot, the grassy parking overflow area, and the existing facility were previously impacted by construction of these facilities and would remain compacted under the weight of the structures. The existing topography would remain the same, with severe slopes to the east, north, and south of the existing facility. Impacts on soils and topography include no new changes in impervious surface.

Soils in the project area have been permanently lost or compacted, and the topography has been altered by site grading to construct the existing facilities. No new construction or ground disturbance would occur under alternative A, so there would be no new impacts to soils and topography within the project area.

Cumulative Impacts

Implementation of the *Alternative Transportation Study* (NPS 2012) would not impact soils and topography in the project area because the study calls for the park to increase its bus fleet and make other transit-related changes that do not involve impacts on soils and topography within the project area. No cumulative impacts on soils and topography were identified.

Conclusion

Overall, there would be no new impacts of alternative A on soils and topography. There would be no cumulative impacts on soils and topography.

IMPACTS OF ALTERNATIVE B: EXPAND EXISTING TRANSIT MAINTENANCE FACILITY (NPS PREFERRED)

Impacts

Under alternative B, the NPS would construct a new addition to the existing building, renovate the existing building, and reconfigure the site to provide one-way bus traffic and employee parking. The facility expansion and associated site requirements would require some earthwork to accommodate the addition, a new access drive, and employee parking areas. The reconfiguration and expansion of the site would require removal of the existing entrance road to the bus facility (and its associated berm) and a portion of the existing visitor parking lot.

During construction, a total of up to 8 acres of soils would be exposed during removal of soils and pavement. This includes the area required to construct the expanded facility, reconfigure the associated driveway, reconfigure the visitor parking lot, and other improvements such as utility installations. Activities related to utilities improvements include installation of the following elements:

- Sanitary grinder pump station
- Two fire hydrants
- 6-inch domestic water line
- New electric line
- New bus fuel storage, pump, and pipe delivery line system

Soils would be temporarily exposed during installation of these improvements; however, there would be no long-term impacts. Best management practices would be employed to minimize erosion of exposed soils during construction. All of this area was previously disturbed during the construction of the existing transit maintenance facility in 1992 and the visitor center parking lot in early 1989.

Additionally, 20,000 cubic yards of soils and pavement would need to be removed from the visitor center parking lot in order to achieve the necessary grading and/or a small amount of bedrock excavation to accommodate a floor elevation that can tie into the existing facility and remain hidden from the surrounding landscape. During design of the site, an effort would be made to balance the cut and fill required for site preparation. For instance, the existing earth berm adjacent to the existing building would need to be removed, and any excess fill generated could be used onsite for new berms. Disturbance of soil would be short term; however, the resulting changes in topography within the project area would long term.

Following grading and construction of the expanded facility and associated improvements, soils would become compacted in the long term under the new impervious surface areas required for the building addition and reconfiguration of the visitor parking lot. The portion of the visitor parking lot and roadways within the project area may be paved using asphalt and/or pervious paving materials. The park would make an effort to use pervious pavers where able, due to the contaminants associated with asphalt paving. Chemicals in asphalt include toxic and carcinogenic compounds, and leaching of harmful compounds can impact rivers, streams, and other natural waters. Porous pavement would allow for efficient stormwater drainage, without the use of toxic chemicals such as those found in asphalt. Despite the type of pavement used, soils beneath this parking lot would continue to be subject to compaction. Site and building drainage would be redesigned to effectively handle any increase in runoff from increased impervious surfaces produced as part of the project. An addition of 2 acres of impervious surface would increase runoff in the project area, with the total area of impervious surface totaling up to 8 acres.

As described above, impacts of alternative B include short-term, minor, adverse impacts on soils due to exposure and/or movement of previously disturbed soils during construction and installation of utilities including exposure of up to 8 acres of soils and movement of 20,000 cubic yards of soils. These alterations would be detectable but small. Additionally, alternative B would result in long-term, minor, adverse impacts on soils and topography due to additional compaction and impervious surface within the project area as well as noticeable changes in topography. These changes would be detectable but would take place in an area where soils have previously been heavily impacted.

Cumulative Impacts

Implementation of the *Alternative Transportation Study* (NPS 2012) would not impact soils and topography in the project area because the study calls for the park to increase its bus fleet and make other transit-related changes that do not involve impacts on soils and topography within the project area. No cumulative impacts on soils and topography were identified.

Conclusion

Overall, impacts of alternative B include short-term, minor, adverse impacts on soils due to exposure and/or movement of previously disturbed soils during construction and installation of utilities including exposure of up to 8 acres of soils and movement of 20,000 cubic yards of soils. These alterations would be detectable but small. Additionally, alternative B would result in long-term, minor, adverse impacts on soils and topography due to additional compaction and impervious surface within the project area as well as noticeable changes in topography. These changes would be detectable but would take place in an area where soils have previously been heavily impacted. There would be no cumulative impacts on soils and topography.

VEGETATION

METHODOLOGY AND ASSUMPTIONS

All available information on plants and vegetative communities potentially impacted by the expansion of the existing transit maintenance facility was compiled for this document. Predictions about short- and long-term site impacts were based on previous projects with similar vegetation.

IMPACT THRESHOLDS

The thresholds of change for the intensity of an impact are defined as follows:

- Negligible:* No vegetation would be affected, or a very limited number of individual plants could be affected as a result of the alternative, but there would be no impact to native species populations. The impacts would be on a small scale.
- Minor:* The alternative would affect several individual plants and would also affect a very small portion of that species' population. Mitigation to offset adverse impacts could be required and would likely be successful.
- Moderate:* The alternative would affect numerous individual plants and would also affect a sizeable segment of the species' population over a relatively large area. Mitigation to offset adverse impacts could be extensive but would likely be successful.
- Major:* The alternative would affect a very large number of plants over a relatively large area of the park and would affect a relatively large portion of that species population. Mitigation to offset the adverse impacts would be required and extensive, and success of the mitigation measures would not be guaranteed.

IMPACTS OF ALTERNATIVE A: NO-ACTION

Impacts

Under the no-action alternative, the park would continue to use the existing transit maintenance facility, as is, for vehicle maintenance and storage. The earth berm located behind the existing facility would continue to support vegetation for screening purposes.

On the occasions that the visitor parking lot fills to capacity, visitors would continue to park in the grass overflow area adjacent to the parking lot. The compaction of vegetation during use of the grass area for parking is generally limited to a few days per year. The grass in this area is stabilized turf and would be impacted by cars parking in these unpaved areas; however, few plants are likely to die as a result of this infrequent use. As described above, there would be no new impacts of alternative A on vegetation within the project area.

Cumulative Impacts

Implementation of the *Alternative Transportation Study* (NPS 2012) would not impact vegetation in the project area because the study calls for the park to increase its bus fleet and make other transit-related changes that do not involve any action on vegetation within the project area. No cumulative impacts on vegetation were identified.

Conclusion

Overall, there would be no new impacts of alternative A on vegetation within the project area. There would be no cumulative impacts on vegetation.

IMPACTS OF ALTERNATIVE B: EXPAND EXISTING TRANSIT MAINTENANCE FACILITY (NPS PREFERRED)

Impacts

Under alternative B, the NPS would construct a new addition to the existing building, renovate the existing building, and reconfigure the site to provide one-way bus traffic and employee parking. These improvements would require removal of some existing vegetation; however, a revegetation plan would be implemented following construction.

Expansion of the building to the west would require encroachment onto the existing visitor overflow parking lot, the existing entrance road to the bus facility, and the vegetated areas associated with these features. The expansion and associated site requirements would require some earthwork and cut to accommodate a finished floor elevation for the new facility, a new access drive, and employee parking areas. A total of 2 acres of vegetation, including mostly lawn and approximately 150 existing trees and shrubs, would be removed as part of the facility expansion project and would be replaced by 75 to 100 new trees and shrubs and improved infrastructure, a long-term impact.

The existing earth berm adjacent to the building would need to be removed, which would require that the associated trees also be removed; however, vegetation would be planted along the replacement berm to screen the expanded building according to a revegetation plan, which would recreate a mixture of indigenous plantings, including sugar maple, red oak, eastern redbud, and eastern white pine. Some digging and trenching would also be required to install the following elements related to upgraded utilities:

- Sanitary grinder pump station
- Two fire hydrants
- 6-inch domestic water line
- New electric line
- New bus fuel storage, pump, and pipe delivery line system

Any loss of vegetation associated with utility upgrades would be limited to small areas of lawn. Thus, impacts on vegetation associated with the berm relocation and utility upgrades would be short-term and would be limited.

As described above, impacts of alternative B on vegetation include earthwork and long-term removal of 2 acres of vegetation, consisting primarily of lawn and a few trees. During construction, there would be short-term impacts to vegetation during utility installation and relocation of the berm. A revegetation plan, which would replant a mixture of indigenous species, would then replace the lost vegetation required for utility installation. Alternative B would result in short-term, negligible, adverse impacts during construction and long-term, minor, adverse impacts on vegetation.

Cumulative Impacts

Implementation of the Alternative Transportation Study would not impact vegetation in the project area because the study calls for the park to increase its bus fleet and make other transit-related changes that do not involve any action on vegetation within the project area. No cumulative impacts on vegetation were identified.

Conclusion

Overall, impacts of alternative B on vegetation include earthwork and long-term removal of 2 acres of vegetation, consisting primarily of lawn and a few trees. During construction, there would be short-term impacts to vegetation during utility installation and relocation of the berm. Alternative B would result in short-term, negligible, adverse impacts during construction and long-term, minor, adverse impacts on vegetation. Because the impacts to vegetation would affect several individual plants and would also affect a very small portion of that species' population, alternative B would result in long-term, minor, adverse impacts on vegetation. There would be no cumulative impacts on vegetation.

PARK OPERATIONS, MANAGEMENT, AND SAFETY

METHODOLOGY AND ASSUMPTIONS

Impact analyses are based on the current description of park operations, management, and safety presented in this document. Park operations, management, and safety includes quality of effectiveness of the infrastructure and the ability to maintain the infrastructure used in the operation of the park in order to adequately protect and preserve vital resources and provide for an effective and safe employee environment.

IMPACT THRESHOLDS

The thresholds of change for the intensity of this impact are defined as follows:

- Negligible:* Park operations, management, and safety would not be affected, or the impacts would be at or below levels of detection and would not have a noticeable impact on park operations, management, and safety.
- Minor:* The impact would be detectable but would be of a magnitude that would not cause a noticeable change in on park operations, management, and safety. If mitigation was needed to offset adverse impacts, it would be simple and likely successful.
- Moderate:* The impacts would be readily apparent and would result in a substantial change in park operations, management, and safety in a manner noticeable to staff and the public. If mitigation measures are necessary to offset adverse impacts, they would likely be successful.
- Major:* The impacts would be readily apparent, would result in a substantial change in park operations, management, and safety in a manner noticeable to staff and the public, and be markedly different from existing park operations, management, and safety. If mitigation measures are necessary to offset adverse impacts, they would be extensive, and their success could not be guaranteed.

IMPACTS OF ALTERNATIVE A: NO-ACTION

Impacts

Under the no-action alternative, the park would use the existing transit maintenance facility, as is, for vehicle maintenance and storage. The park would operate its transportation system of 10 vehicles. In 1992, the park constructed a bus parking facility in Cavalier Heights near the park's visitor center. This facility was built to house 6 buses and is in operation 12 months of the year. The building (4,708 square feet) serves as both a parking and maintenance facility, despite being originally designed to serve only the former purpose.

The existing building would remain non-compliant with ABA and industry safety standards and building codes. As such, it would continue to offer uncomfortable, inaccessible, and sometimes hazardous conditions for employees working at the transit maintenance facility. Water from the roof would form large icicles in the winter, due to the lack of a gutter system on the roof of the facility, and would continue to be knocked down by park staff when necessary. Although there have been no recorded incidents to date, falling icicles have the potential to cause injury. Due to icicles forming over the main employee entry to the transit maintenance facility, employees must use other entries. The building would continue to provide basic levels of amenities and accommodations for staff and their regular maintenance activities by continuing to lack a security system, restrooms, storage areas, office and meeting space, an employee break room, lockers, a loading dock, and a vehicle wash station. The HVAC system, air circulation, plumbing, utilities, landscaping, and fuel storage capabilities of the existing building would remain inadequate, which causes inefficiencies in park operations. The existing stormwater collection system and treatment tank would be kept in service and would continue to treat stormwater runoff from drainage areas, which include the existing transit maintenance facility and the paved area east of the existing building. The building would remain non-compliant with life safety elements and would put park employees at risk for accidents or other hazards.

Bus service would be provided through a contract with a local transit operator to provide on-site operations and daily and seasonal vehicle maintenance. The park would use and service 10 vehicles, leaving 4 vehicles outside in the elements, since the transit maintenance facility can only accommodate 6 vehicles. The exposure of the vehicles would result in long-term, adverse impacts to park facilities. Inadequate bus maneuvering space requires drivers to make a three-point turn in order to refuel and/or park the buses. The three-point turn requires drivers to back the bus up, which creates a safety issue due to blind spots.

There would continue to be no employee parking at the facility and no sidewalk or other pedestrian path to get to or from the bus facility, in addition to inadequate site lighting. Park infrastructure related to the transit maintenance facility would remain inefficient and put vehicle operators at risk for accidents or other safety hazards. The lack of parking at the facility means that staff often must park at the visitor parking lot and walk down to the transit maintenance facility, sometimes in icy and/or dark conditions. The steep slopes and sharp turns of the existing infrastructure make it difficult for vehicle operators to see pedestrians in advance on the narrow roadway along which there are no pedestrian accommodations such as a sidewalk. The slopes, turns, and narrow width (approximately 15 feet) of the existing access road would also continue to experience frequent congestion and result in conflicts due to use for both access to and egress from the site as well as a use for a pedestrian walkway. Snow removal would continue to be challenging due to poor circulation and inadequate space.

Visitors would continue to accidentally access the existing transit maintenance facility due to confusion upon entering the park, even though there are signs posted identifying the access to the transit facility for authorized vehicles only.

As described above, impacts of alternative A on park operations, management, and safety include long-term, minor, adverse impacts because continued issues associated with employee safety and maintenance of the park's bus fleet would be detectable but would be of a magnitude that would not cause a noticeable change in park operations, management, and safety. Specifically, there would be little change in the burden to the park's overall operations and management. Park vehicles would continue to be left outside in the elements, resulting in a decreased lifespan for the buses. Little accommodation would be offered for employee comfort and issues associated with employee health and safety would persist.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions have and continue to contribute to the cumulative impact on park operations, management, and safety. The *Alternative Transportation Study* (NPS 2012) would improve park transportation operations by providing more buses for visitor transit, thus decreasing the amount of vehicles that are on the roads within the park. This then allows more efficient travel for park-related purposes.

Implementation of the study would result in a long-term, beneficial impact on park operations, management, and safety. Alternative A, in combination with other cumulative impacts, would result in long-term, minor, adverse impacts and long-term, beneficial impacts on park operations, management, and safety. Alternative A would contribute a noticeable, adverse increment to the cumulative impact on park operations, management, and safety.

Conclusion

Overall, impacts of alternative A on park operations, management, and safety include long-term, minor, adverse impacts because continued issues associated with employee safety and maintenance of the park's bus fleet would be detectable but would be of a magnitude that would not cause a noticeable change in park operations, management, and safety. Alternative A, in combination with other cumulative impacts, would result in long-term, minor, adverse impacts and long-term, beneficial impacts on park operations, management, and safety. Alternative A would contribute a noticeable, adverse increment to the cumulative impact on park operations, management, and safety.

IMPACTS OF ALTERNATIVE B: EXPAND EXISTING TRANSIT MAINTENANCE FACILITY (NPS PREFERRED)

Impacts

Under alternative B, the NPS would construct a new addition to the existing building, renovate the existing building, and reconfigure the site to provide one-way bus traffic and employee parking. The building would be expanded in order to include bays for parking a total bus fleet of 15 vehicles, to include vans and buses. The renovated and expanded building would also include a new employee break room, lockers, and restrooms for up to 15 employees, as well as office and storage space. In addition, a bus wash bay and improved maintenance and lift bays would also be included in the new facility. These alterations would allow for the park to better protect their property, more efficiently tend to maintenance of the fleet, and therefore better meet visitor demand.

Upgraded utilities (electrical, telephone/data, sewer, water) would provide needed restroom facilities, domestic water, security-lighting, and fire-fighting capacity, improving the health and safety conditions for workers, as well as providing protection for the facility and buses. Improvements to worker parking and bus circulation would reduce the need for three-point turns in cramped spaces, improve refueling operations, make snow removal more efficient, and separate pedestrian and vehicular traffic. ABA and code compliant upgrades would address the outstanding life safety issues in the existing structure. Energy efficient utilities and sustainable site improvements would keep increases in overall operating costs of the new larger facility low and improve some of the current safety conditions, such as pedestrian use of steep, icy roadways and the buildup of icicles on the roof. A new fuel storage, pump, and pipe line system would also contribute to an improvement in current safety conditions and efficiency of the existing fuel tank. Additionally, the separation of employee work space from the bus garage would help drivers and maintenance workers do their jobs more efficiently and safely.

The enlarged facility would be able to hold the entire park fleet with room for expansion. Having the whole fleet indoors would help increase the longevity of the buses and make maintenance work more comfortable and more efficient. It would also allow workers to access individual buses easier, rather than having to move multiple buses around to be able to work on one.

The entrance road into the new facility would be improved and new signage would help visitors find parking in the main lot more efficiently. Additionally, an increase of up to 80 additional parking spaces would be better designed to enable large vehicles to pull through and make overflow parking easier to control, thus making operations on the days when the parking lot fills to capacity easier to direct.

As described above, impacts of alternative B on park operations, management, and safety include providing a safer environment for transit employees and allowing for a more fully operable bus fleet. Alternative B would result in long-term, beneficial impacts on park operations, management, and safety because park vehicles could be more effectively and efficiently sheltered, maintained, and operated at the facility. This alternative would also offer improved accommodations for employee comfort, and issues associated with employee health and safety would be addressed.

Cumulative Impacts

Past, present, and reasonably foreseeable future actions have and continue to contribute to the cumulative impact on park operations, management, and safety. These actions include the *Alternative Transportation Study* (NPS 2012), described under alternative A. Alternative B, in combination with other cumulative impacts, would result in long-term, beneficial impacts on park operations, management, and safety. Alternative B would contribute a noticeable, beneficial increment to the cumulative impact on park operations, management, and safety.

Conclusion

Overall, impacts of alternative B on park operations, management, and safety include providing a safer environment for transit employees and allowing for a more fully operable bus fleet. Because the impacts would improve upon park operations, management, and safety, alternative B would result in long-term, beneficial impacts on park operations, management, and safety. Alternative B, in combination with other cumulative impacts, would result in long-term, beneficial impacts on park operations, management, and safety. Alternative B would contribute a noticeable, beneficial increment to the cumulative impact on park operations, management, and safety.

5

CONSULTATION AND COORDINATION

NPS Director's Order 12 requires the NPS to make "diligent" efforts to involve the interested and affected public in the NEPA process. This process, known as scoping, helps to determine the important issues and eliminate those that are not; allocate assignments among the interdisciplinary team members and/or other participating agencies; identify related projects and associated documents; identify other permits, surveys, consultations, etc. required by other agencies; and create a schedule that allows adequate time to prepare and distribute the environmental document for public review and comment before a final decision is made. This chapter documents the scoping process for the proposed action, identifies future compliance needs and permits, and includes the list of preparers for the document.

THE SCOPING PROCESS

The scoping process is initiated at the beginning of a NEPA project to identify the range of issues, resources, and alternatives to address in the EA. Typically both internal and public scoping is conducted to address these elements. State and federal agencies were also contacted in order to uncover any additional planning issues and to fulfill statutory requirements. The planning process for the proposed action was initiated during the internal, agency, and public scoping in 2009. This process introduced the purpose and need of the project and potential actions that could be included with the expansion of the existing transit maintenance facility. Discussions with interested agencies and individuals were initiated at this time.

INTERNAL SCOPING

A kick-off meeting for the project was held on May 19 and 20, 2009 and attended by park staff, NPS Denver Service Center staff, the bus service vendor (Eastern Panhandle Transit Authority), and its mechanic. A nine person study team conducted a value analysis workshop on September 2, 3, and 4, 2009, in which four design alternatives were evaluated (NPS 2009c), followed by a Choosing by Advantages analysis for three of the alternatives. The schematic design process was completed in November 2009 and the design package (NPS 2009b) examines the preferred alternative selected during the value analysis from the Choosing by Advantages process for the expansion of the existing transit maintenance facility. The design provides a starting point for determining the estimated cost of ownership of the expanded facility, including operations and maintenance costs.

PUBLIC SCOPING

The park distributed a press release and newsletter in February 2012 to the public describing the purpose and need for expansion of the transit maintenance facility and opportunities for public comment (appendix A). The newsletter was also sent to over 35 various interested organizations and to adjacent landowners. No public comments were received by the park.

AGENCY CONSULTATION

The NPS initiated scoping with multiple relevant agencies early in the planning process. The park sent scoping information to the USFWS, FHWA, the West Virginia SHPO, and others. This consultation is discussed in more detail below.

Endangered Species Act

Section 7 of the Endangered Species Act requires federal agencies to consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. The NPS sent a scoping letter on February 7, 2012 inviting the USFWS West Virginia Field Office to provide comments on the proposed project (appendix A). In a letter dated March 1, 2012, the USFWS stated that a “no effect” determination was made for the project because it would not affect federally listed endangered or threatened species (appendix A).

National Historic Preservation Act

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. This EA evaluates impacts on cultural resources according to NPS *Management Policies 2006*. Compliance with section 106 of the NHPA will be conducted separately, but concurrently. This information and any additional relevant information, as necessary, will be supplied to the West Virginia SHPO with the NPS Assessment of Effect on historic properties for concurrence. The NPS will continue to coordinate with the SHPO as necessary to ensure compliance with the NHPA.

Additional State and Local Agencies

As part of the scoping process, the NPS sent scoping letters to various representatives from the following state and local agencies to provide comments on February 6, 2012 (appendix A):

- Town of Harpers Ferry
- Town of Bolivar
- Jefferson County Sheriffs
- Jefferson County Convention and Visitor’s Bureau
- West Virginia State Police
- West Virginia Department of Transportation
- West Virginia State Rail Authority
- Governor Earl Ray Tomblin
- Congresswoman Shelly Moore Capito

TRIBAL CONSULTATION

No federally recognized American Indian tribes are known to have an interest in the undertakings at Harpers Ferry National Historical Park.

FUTURE COMPLIANCE NEEDS/PERMITS

Implementation of the NPS preferred alternative would require that the NPS comply with laws and regulations. Prior to any ground disturbance, the proper authorities would obtain a NPDES Stormwater Permit and local erosion and sediment control permits, as appropriate.

LIST OF PREPARERS AND CONTRIBUTORS

This document was prepared by Vanasse Hangen Brustlin, Inc. (VHB) with input from staff at Harpers Ferry National Historical Park, the NPS Denver Service Center, and the NPS National Capital Region Office.

Vanasse Hangen Brustlin, Inc.		
Tricia Wingard	NPS Program Manager	Guidance of NEPA process; document preparation and review; and project management
Tracy Hamm	Project Manager	Guidance of NEPA process; document preparation and review; and project management
Diane Ditzel	Environmental Planner	Document preparation; natural resources review and analysis
Vikrant Desai	Project Engineer	Alternatives development
Margaret Beavers	Environmental Scientist	Graphics/GIS analysis

CONTRIBUTORS AND REVIEWERS

Harpers Ferry National Historical Park	
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Peter Dessauer	Architect
Dennis Ebersole	Maintenance Mechanic Supervisor
Steve Lowe	Historical Landscape Architect
Mia Parsons	Resources Manager

NPS Denver Service Center	
Margo Muhl Brooks	Cultural Resource Specialist
Elaine Rideout	Natural Resources Specialist

NPS National Capital Region	
Joel Gorder	Regional Planning & Environmental Coordinator
Shannon Beston	Biologist Technician
Doug Curtis	Hydrologist

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- 2002b Director's Order 28: *Cultural Resource Management.*
- 2003a Director's Order 77-2: *Floodplain Management.*
- 2003b "Non Attainment and Early Action Counties." Interactive map at Air Resources Division intranet site (www2.nrintra.nps.gov/website/NonAttainandEA/viewer.htm) accessed on 8/1/03. NPS Air Resources Division, Lakewood, Colorado.
- 2006 *Management Policies 2006.*
- 2009a *Final General Management Plan/Environmental Impact Statement.*
- 2009b *Expand Existing HAFE Transit Maintenance Facility Final Schematic Design Package.*
- 2009c *Expand Existing HAFE Transit Maintenance Facility Value Analysis Study.*
- 2012 *Alternative Transportation Study.*

National Resource Conservation Service (NRCS)

- 2012 Web Soil Survey. Available online at: <http://websoilsurvey.nrcs.usda.gov>. Accessed on March 26, 2012.

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APPENDIX A: RELEVANT CORRESPONDENCE

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Harpers Ferry National Historical Park News Release

February 2, 2012

For Immediate Release

Contact: Peter Dessauer, 304-535-6040, Peter_Dessauer@nps.gov

Public Scoping for Expand Existing Transit Maintenance Facility Environmental Assessment (EA)

Harpers Ferry, WV - Harpers Ferry National Historical Park (the park) is proposing to improve and expand the existing transit maintenance facility. The existing facility provides shelter and maintenance for six passenger buses and includes a single office and storage area for the bus mechanic. The bus fleet provides public transportation from the park's visitor center to other areas throughout the park. As park attendance has continued to increase so has use of the bus transit system and the number of buses needed.

The transit maintenance facility was constructed in 1992 and is generally in poor condition. The facility does not meet current industry safety standards and building codes or the park's existing and future transit maintenance needs. Although the facility was originally designed as a parking facility for buses, the building currently serves as both a bus storage and maintenance facility. Some basic facility features such as building accessibility, a security system, restrooms, additional storage areas, office and meeting space, an employee break room and lockers, a loading dock, vehicle access/egress, vehicle wash station, site and building drainage, lighting, and utilities are inadequate or completely lacking. In addition, the existing facility can store six vehicles and the current fleet is ten, leaving four vehicles exposed to the elements, thereby potentially reducing their operational lifespan. Thus the facility needs to be expanded and improved to meet the increased demands on the transportation fleet and to be fully functional as a bus garage, storage area, fuel depot, and an employee work place.

The idea to expand the transit maintenance facility is consistent with the 2010 General Management Plan for the park, as well as the 2012 Alternative Transportation Systems Plan, which, when implemented will expand the transportation system in the park.

The NPS is preparing an Environmental Assessment (EA) that will evaluate the environmental effects of this proposal to improve and expand the existing transit maintenance facility. The EA process is expected to take several months to complete. We are currently in the scoping phase of this project and are seeking public input on the proposal. Comments received during this initial scoping period will be used to help define the issues and concerns to be addressed in the EA. There will also be another opportunity to comment when the EA is completed.

We welcome your input on the transit maintenance facility project. To share your thoughts, ideas, and concerns with us, we encourage you to comment electronically via the NPS website at <http://parkplanning.nps.gov/hafe>. You are also welcome to mail comments directly to the park at:

Harpers Ferry National Historical Park
P.O. Box 65
485 Fillmore Street
Harpers Ferry, WV 25425

Your comments would be most helpful to us if we receive them no later than March 9, 2012. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment, including personal identifying information, may be made publicly available at any time. Although you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that this will be possible.



Expand Existing Transit Maintenance Facility Environmental Assessment

Winter 2012 Public Scoping

Harpers Ferry National Historical Park (the park) is proposing to improve and expand the existing transit maintenance facility. The existing facility provides shelter and maintenance for six passenger buses and includes a single office and storage area for the bus mechanic. The bus fleet provides public transportation from the park's visitor center to other areas throughout the park. As park attendance has continued to increase so has use of the bus transit system and the number of buses needed.

Purpose and Need for Action

The transit maintenance facility was constructed in 1992 and is generally in poor condition. The facility does not meet current industry safety standards and building codes or the park's existing and future transit maintenance needs. Although the facility was originally designed as a parking facility for buses, the building currently serves as both a bus storage and maintenance facility. Some basic facility features such as building accessibility, a security system, restrooms, additional storage areas, office and meeting space, an employee break room and lockers, a loading dock, vehicle access/egress, vehicle wash station, site and building drainage, lighting, and utilities are inadequate or completely lacking. In addition, the existing facility can store six vehicles and the current fleet is ten, leaving four vehicles exposed to the elements, thereby potentially reducing their operational lifespan. Thus the facility needs to be expanded and improved to meet the increased demands on the transportation fleet and to be fully functional as a bus garage, storage area, fuel depot, and an employee work place.

The idea to expand the transit maintenance facility is consistent with the 2010 General Management Plan for the park, as well as the 2012 Alternative Transportation Systems Plan, which, when implemented will expand the transportation system in the park.

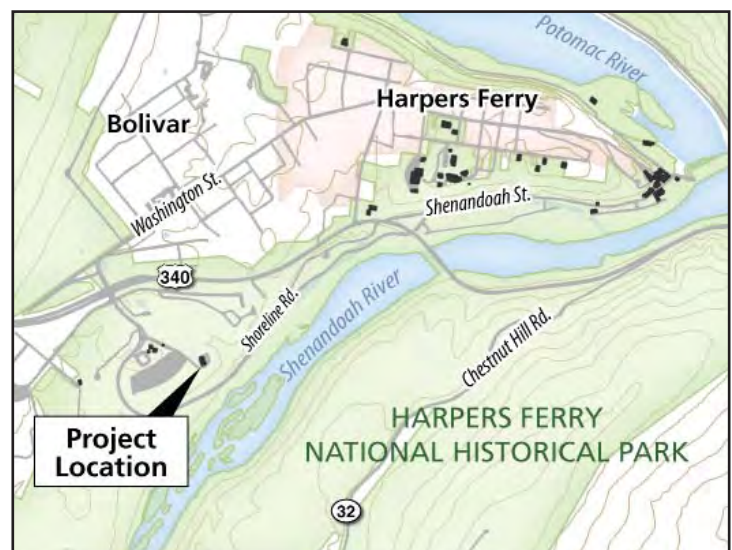
Project Objectives

- Minimize safety risks for vehicles and workers/pedestrians
- Provide a logical sequence of bus circulation and operations
- Maintain a low visual impact to the surrounding viewsheds
- Allow for future expansion of the facility, if needed
- Utilize existing site location to the greatest extent possible
- Minimize construction impact on ongoing park and transit operations



Project Area

The Harpers Ferry transit maintenance facility is located in Harpers Ferry, West Virginia within the boundary of the Harpers Ferry National Historical Park. Its location within the park is an area known as Cavalier Heights, which also includes the park's visitor center. The project area is accessed via the existing visitor center entrance road. A vegetated earth berm helps screen views of the facility from the visitor center and associated parking lot. The project area includes the existing maintenance facility/bus barn, bus maintenance pit, fuel tank area, paved parking, and access road.





IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Harpers Ferry National Historical Park
P.O. Box 65
Harpers Ferry, West Virginia 25425

D24 (HAFE)

February 7, 2012

Ms. Deborah Carter
U.S. Fish and Wildlife Service
694 Beverly Pike
Elkins, WV 26241

Dear Ms. Carter:

Re: Harpers Ferry National Historical Park
Expand Existing Transit Maintenance Facility
Environmental Assessment
Harpers Ferry, West Virginia

The National Park Service is initiating the preparation of an Environmental Assessment (EA) for expansion of the park's existing transit maintenance facility. The idea to expand the transit maintenance facility is consistent with the 2010 General Management Plan for the park, as well as the 2012 Alternative Transportation Systems Plan, which, when implemented will expand the transportation system in the park.

The transit maintenance facility was constructed in 1992 and is generally in poor condition. The facility does not meet current industry safety standards and building codes or the park's existing and future transit maintenance needs. Although the facility was originally designed as a parking facility for buses, the building currently serves as both a bus storage and maintenance facility.

Some basic facility features such as building accessibility, a security system, restrooms, additional storage areas, office and meeting space, an employee break room and lockers, a loading dock, vehicle access/egress, vehicle wash station, site and building drainage, lighting, and utilities are inadequate or completely lacking. In addition, the existing facility can store six vehicles; and the current fleet is ten, leaving four vehicles exposed to the elements, thereby potentially reducing their operational lifespan. Thus the facility needs to be expanded and improved to meet the increased demands on the transportation fleet and to be fully functional as a bus garage, storage area, fuel depot, and an employee work place. Proposed site work would take place on 3 to 3.5 acres.

As a part of the planning process, the project is being developed in conjunction with NPS requirements under the provisions of the National Environmental Policy Act (NEPA) and related laws. This letter serves as notification that we have begun the compliance process and are proposing to have an Environmental Assessment available for public and regulatory review in the summer of 2012. This letter also serves as a record that the NPS is initiating informal

consultation with your agency pursuant to the requirements of the 1973 Endangered Species Act, as amended. As part of the scoping for this project, we request any information regarding listed or proposed threatened or endangered species or critical habitats that might occur in the project vicinity, and any special management considerations for such species. The project area is depicted on the enclosed sections of the Charles Town and Harpers Ferry, West Virginia USGS Quadrangles. We look forward to receiving any guidance or comments you may have regarding the process or the project itself.

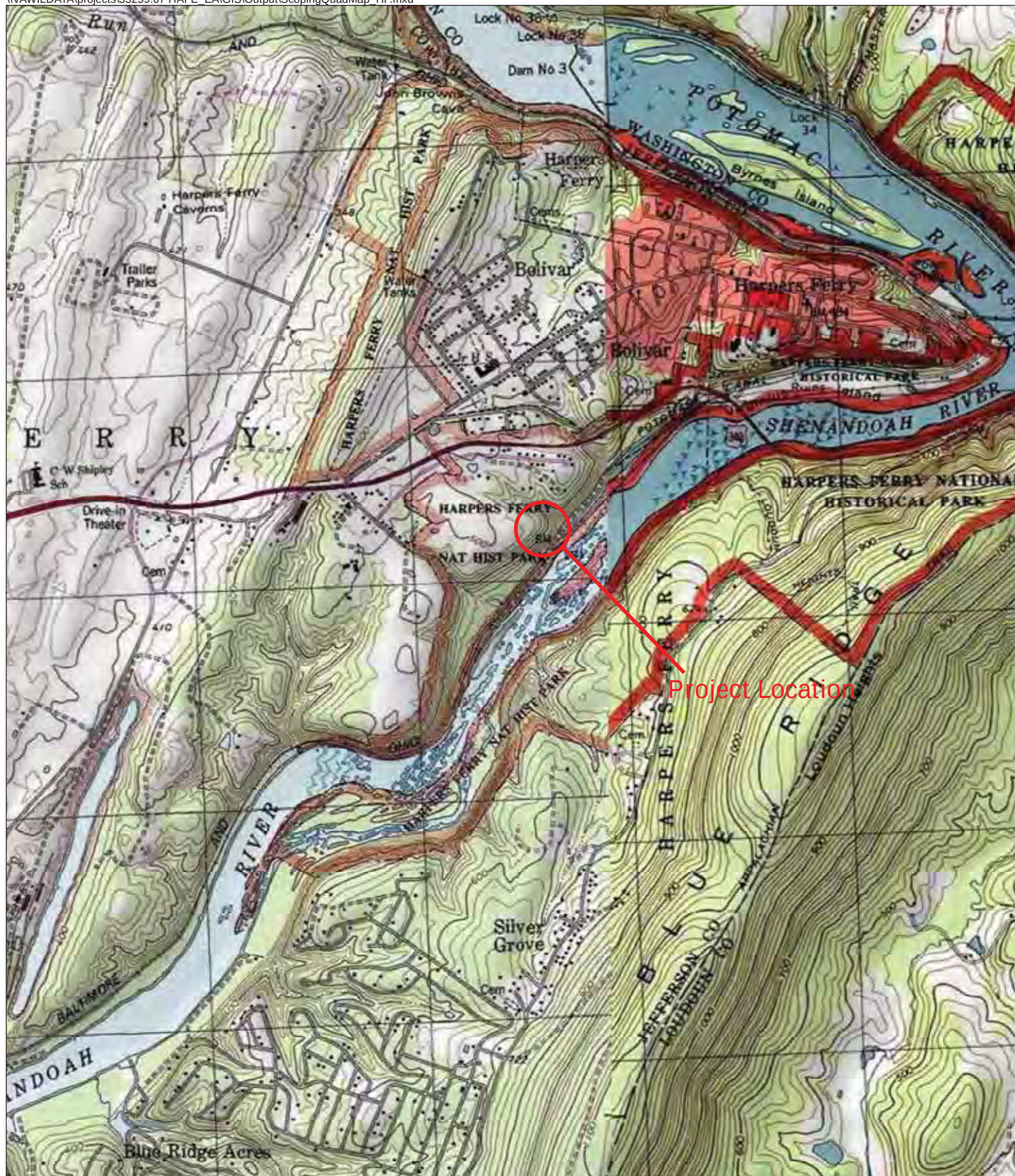
Thank you for your interest in this project. If you need any additional information or have any questions regarding this matter, please feel free to contact Mia Parsons at (304) 535-6167 or by email (Mia_Parsons@nps.gov).

Sincerely,

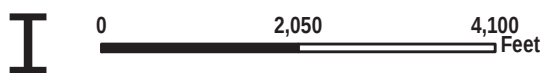
A handwritten signature in cursive script that reads "Rebecca L. Harriett". The signature is written in dark ink and is positioned above the printed name and title.

Rebecca L. Harriett
Superintendent

Enclosure



Source: USGS 7.5 minute Charles Town and Harpers Ferry, WV Quadrangles



Expand Existing Transit Maintenance Facility Harpers Ferry National Historical Park West Virginia

**Figure 1
Project Vicinity Map**

January 24, 2012



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Harpers Ferry National Historical Park
P.O. Box 65
Harpers Ferry, West Virginia 25425

February 7, 2012

D24 (HAFE)

Ms. Deborah Carter
U.S. Fish and Wildlife Service
694 Beverly Pike
Elkins, WV 26241

RECEIVED
FEB 10 2012
WVFO

Dear Ms. Carter:

Re: Harpers Ferry National Historical Park
Expand Existing Transit Maintenance Facility
Environmental Assessment
Harpers Ferry, West Virginia

The National Park Service is initiating the preparation of an Environmental Assessment (EA) for expansion of the park's existing transit maintenance facility. The idea to expand the transit maintenance facility is consistent with the 2010 General Management Plan for the park, as well as the 2012 Alternative Transportation Systems Plan, which, when implemented will expand the



United States Department of the Interior



FISH AND WILDLIFE SERVICE
West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

In response to your letter above, we have made a "no effect" determination that the project will not affect federally-listed endangered or threatened species. Therefore no biological assessment or further section 7 consultation under the Endangered Species Act is required with the Fish and Wildlife Service. Should project plans change, or if additional information on listed and proposed species becomes available, this determination may be reconsidered.

Definitive determinations of the presence of waters of the United States, including wetlands, in the project area and the need for permits, if any, are made by the U.S. Army Corps of Engineers. They may be contacted at U.S. Army Corps of Engineers, Baltimore District, P.O. Box 1715 Baltimore, Maryland 21203-1715, Phone: 410-962-8024

Lamar S. Jones
Reviewer's signature and date
March 2012

Laura Hill 3-1-12
FOR Field Supervisor's signature and date



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

U.S. Government Printing Office
July 2012

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United States Department of the Interior – National Park Service