

AMENDMENT TO THE 1968 MASTER PLAN
and
ENVIRONMENTAL ASSESSMENT

FORT McHENRY NATIONAL MONUMENT AND HISTORIC SHRINE
Maryland

September 1988

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

CONTENTS

PURPOSE OF AND NEED FOR THE PLAN	1
AFFECTED ENVIRONMENT	3
The National Monument	3
Cultural Resources	5
Natural Resources	5
Visitor Use	5
THE PROPOSED PLAN AND ALTERNATIVES	7
Alternative A--Status Quo	7
Alternative B--Visitor Center Addition (Minimum Requirements)	7
Alternative C--New Visitor Center Construction (Proposed Action)	7
Facility Development	7
Landscape Treatment	8
Implementation Schedule	10
ENVIRONMENTAL CONSEQUENCES	11
Alternative A	11
Alternative B	11
Alternative C	12
CONSULTATION AND COORDINATION WITH OTHERS	15
PLANNING TEAM	16

PURPOSE OF AND NEED FOR THE PLAN

In 1968 a Master Plan was approved for Fort McHenry National Monument and Historic Shrine, and it sets forth a basic management philosophy and provides strategies for achieving management objectives. Typically a master plan (now called a general management plan) is valid for five to 10 years. Because the plan for Fort McHenry is now 18 years old, it is time to examine its recommendations in light of present conditions and values. The purpose of this current planning effort is to ensure that the recommendations of the 1968 Master Plan are consistent with federal policies and that they are still appropriate for addressing the objectives and needs of the park today and into the future.

The park's general management objective is to commemorate in a respectful manner the events of the Battle of Baltimore and the writing of the national anthem, the "Star-Spangled Banner"; to preserve, restore, and protect for historical purposes all category A and B structures on the List of Classified Structures and the objects in the museum collection; and to facilitate public enjoyment and understanding of the historic events and people connected with the site. To accomplish this, the following specific objectives have been defined:

Restore, preserve, and maintain Fort McHenry as a national monument and memorial to the Battle of Baltimore and the writing of the "Star Spangled Banner." This requires preserving all category A structures and the objects in the museum collection. In order to interpret the continuum of historic events that occurred, preservation of category B structures is also necessary.

Provide visitors with an atmosphere and information that instills in them appreciation of the significance of Fort McHenry as a memorial to the events that occurred here. This requires providing an interpretive program accessible to all visitors, adequate and appropriate visitor facilities, a visitor and resource protection program, a visitor and employee safety program, and a concession gift shop selling interpretive literature, theme-related items, and souvenirs.

Manage the natural resources of the park in a manner that complements the purpose of the park. This requires developing an overall landscape plan that complements the park's interpretation and achieves effective and efficient maintenance operations.

These objectives will be accomplished through cooperation with the federal, state, local, and private organizations that propose and carry out activities and projects which affect Fort McHenry. This includes working with agencies, such as port of Baltimore planning and development agencies, environmental health agencies, tourism agencies, historical organizations, and civic associations, as well as federal, state, and local law enforcement and fire agencies. Specific cooperative efforts include working with adjacent landowners to help maintain existing views and uses

that are architecturally and functionally compatible with the monument, and cooperating with the Patriots of Fort McHenry in order to raise funds that support park programs.

The concepts of the 1968 Master Plan that relate to facility needs at Fort McHenry are generally still valid, and the proposed action presented in this plan amendment represents a more detailed development concept.

Other directions established by the 1968 plan, however, are no longer valid. The two major actions not now considered appropriate relate to land acquisition and the management of cultural resources. The 1968 plan proposed the acquisition of adjacent properties. The National Park Service, however, maintains a good relationship with neighboring property owners, and the sale of properties near Fort McHenry is not likely in the foreseeable future. Consequently, there is no apparent threat to the monument, and the acquisition of these properties is not proposed. The 1968 Master Plan also directed a complete restoration of the fort to its 1814 appearance. But in accordance with current NPS policies, the fort will be preserved as it looks now rather than being completely restored.

The following issues and concerns are addressed in this plan amendment:

Visitor use at the monument has increased by 46 percent since 1979, and visitation in 1985 was nearly 800,000 visitors. The visitor center was built in 1962 for approximately 250,000 visitors per year. It is now too small to serve existing and projected use levels and also to provide adequate administrative support facilities.

Over three-quarters of the Fort McHenry landscape looks like a well-maintained city park. Because of its inviting appearance, visitors often engage in recreational activities that are not compatible with the historical scene or the monument's memorial purpose.

Certain ornamental statuary and markers that have been added to the site over the years do not relate to the interpretive themes at the monument, and they intrude on the historical scene.

AFFECTED ENVIRONMENT

THE NATIONAL MONUMENT

Fort McHenry National Monument and Historic Shrine is on Whetstone Point, within the city limits of Baltimore, Maryland. The site is bounded on three sides by the Patapsco River and on the remaining side by facilities of the U.S. Naval Reserve and lands owned by the Maryland Port Authority and Southern States Grain Cooperative. The site covers 43.26 acres. Access is by way of Interstate 95 and other highway systems in Baltimore. Water access from Harbor Place to Fort McHenry was recently established.

The purpose of Fort McHenry National Monument and Historic Shrine is to preserve the star fort that was the key to the defense of Baltimore during the Battle of Baltimore, September 13-14, 1814. When Francis Scott Key saw the American flag still flying after the 25-hour bombardment by the British, he knew that the fort had been successfully defended, and he was inspired to write the "Star-Spangled Banner."

For nearly a century after the battle, Fort McHenry continued in active military service. Eventually the fortification became obsolete as a unit of the coastal defense system because of changing military strategies and technology. To ensure the preservation of its significant features, the fort and its 43 acres were set aside in 1925 as Fort McHenry National Park, under the administration of the War Department. In 1933 the National Park Service assumed management, and in 1939 the designation was changed to Fort McHenry National Monument and Historic Shrine.

Over the years the landscape has been modified in various ways. Several ornamental trees have been planted randomly throughout the site, and the overall effect has been to diminish the fort itself as the focal point of visitors' attention. Some of the trees were planted to honor important people, and bronze plaques were installed to mark the location. However, many of the trees have died and have not been replaced, so the plaques no longer serve a useful function. Additional plaques along the entrance drive commemorate the dates that states entered the Union.

In 1963 a hedge was planted to delineate the 1814 boundary line of the site. However, this interpretive device does not work well and is a maintenance nuisance. Currently, the lawn is mowed weekly and the grounds are maintained to present a manicured appearance. This is both time-consuming and costly, and the grounds do not resemble their appearance in 1814.

DOCK

VISITOR CENTER

STAR FORT

PARKING

PARK HOUSING

BOUNDARY HEDGE

STATUE OF ORRHEUS

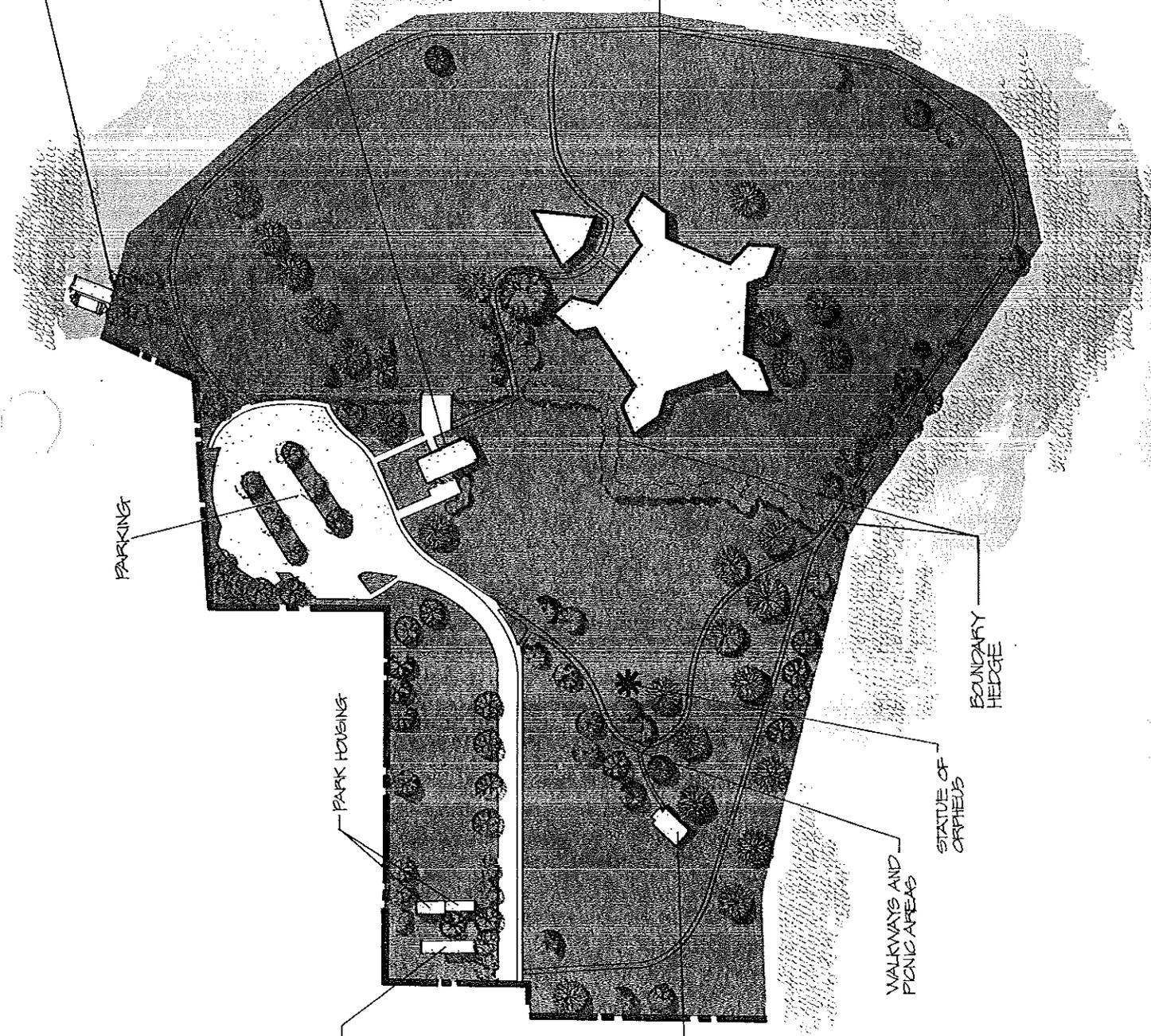
WALKWAYS AND PICNIC AREAS

MAINTENANCE

CIVIL WAR POWDER MAGAZINE

EXISTING CONDITIONS

FORT MCHENRY NATIONAL MONUMENT AND HISTORIC SHRINE
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
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CULTURAL RESOURCES

Fort McHenry is listed on the National Register of Historic Places as a nationally significant site. A cultural resource base map, using information from historic site maps and data collected from archeological excavations, has been programmed.

NATURAL RESOURCES

The terrain of Fort McHenry has been modified from its 1814 condition, and no historic vegetation remains from that period. The national monument resembles an urban park with lawns, flowers, shrubs, and shade trees, including native black locust trees and ornamental fruit trees. The lawns are regularly mowed to retain an attractive appearance.

Animal species include birds such as robins, crows, starlings, and pigeons, as well as squirrels, rats, and mice. The green open space of the monument and the waters off Fort McHenry attract birds during spring and fall migrations, and several species of waterfowl and shorebirds winter nearby. The U.S. Fish and Wildlife Service has indicated that no federally listed or proposed endangered or threatened species is known to exist in or near the monument, except for occasional transient individuals.

The Baltimore area has a moderate climate, abundant precipitation, and relatively high humidity. The area is also subject to periodic tropical storms and hurricanes with high winds and waves. Most of the monument is out of the 100-year flood boundary. The north part of the monument, including a portion of the parking area, is in the coastal high hazard area. The parking lot is necessary to meet the minimum needs for visitor use. Mitigating measures will be developed to protect life and property. Neither the existing visitor center nor the proposed new facility is within the hazard area.

The actions of this plan amendment are consistent with the Maryland coastal zone management program, specifically objective 7, "to protect coastal cultural, historical and archeological resources."

VISITOR USE

Fort McHenry is open daily except for Christmas and New Year's Day. Since the early 1900s it has been used like a city park by Baltimore residents because of its proximity to the metropolitan area. The fort is also prominent in local history and is an element of local pride. Approximately 25 percent of the visitors who watch the park film are from Baltimore, 25 percent from Maryland but outside Baltimore, and 50 percent from other states and countries. A significant portion of those from other states are from Washington, D.C., Virginia, Pennsylvania, New York, and New Jersey. Foreign visitors account for approximately 8 percent of the visitors.

An analysis of visitor use over the past 10 years indicates a trend common to other national park system areas--increased visitation during the Bicentennial, a post-Bicentennial decrease, and then increased visitation by local residents because higher gas prices forced more people to take vacations closer to home. However, visitor use at Fort McHenry has increased more sharply than at other areas because of the redevelopment of the inner harbor and the general revitalization of Baltimore. There has also been an increase in group visitation (both school groups and tours). In 1985 there were 2,022 groups with 90,000 visitors, compared to 1,800 groups with 70,000 visitors in 1983. The visitation for Fort McHenry totaled 796,472 visitors in 1985.

This present trend in visitor use is likely to continue because the Baltimore Convention Bureau is trying to attract more conventions to the city, and the Baltimore Office of Promotion and Tourism is publicizing the city as a vacation center in the Northeast and is trying to attract more tour operators.

THE PROPOSED PLAN AND ALTERNATIVES

During the course of the planning effort several alternatives were considered. The alternatives all basically concern the existing visitor center and include status quo (alternative A), building an addition to the existing visitor center (alternative B), and constructing a new visitor center (alternative C). The additional actions that would be taken are grouped with the most appropriate visitor center action.

ALTERNATIVE A--STATUS QUO

Under this alternative the National Park Service would continue to manage Fort McHenry as it has in the past. No major actions would be taken to correct the problems associated with overuse and crowding in the existing visitor center. For the foreseeable future Fort McHenry would remain much as it is today.

ALTERNATIVE B--VISITOR CENTER ADDITION (MINIMUM REQUIREMENTS)

This alternative would attempt to resolve the critical problems associated with the visitor center by constructing an addition to the existing building. The addition would approximately double the size of the existing facility to help meet the existing visitor demand and staff needs. Otherwise, this alternative would be considered the minimum requirements alternative, and no other actions would be undertaken.

ALTERNATIVE C--NEW VISITOR CENTER CONSTRUCTION (PROPOSED ACTION)

Facility Development

The facilities would be designed to accommodate as many as 1,000 visitors at any one time. Assuming that the average length of stay was 1½ hours, the site could handle over 3,000 visitors during the daily high visitor use period (10 a.m. to 3 p.m.). This would more than accommodate the current monthly peak of 85,400 visitors.

A new visitor center would be constructed slightly east of the present facility. This location would offer a view downriver to the site where the British fleet anchored during the bombardment as well as a view of the fort and the flag. The 9,000-square-foot visitor center would be approximately twice the size of the present building so that existing and future levels of visitation could be accommodated. However, the new building would actually be less obtrusive than the present visitor center because it would be 5 feet lower in elevation and constructed partially underground. The statue of Maj. George Armistead, the major who commanded the fort during the attack, would be used in the new complex.

Like the present building, the new structure would provide information services, restrooms, concession sales, and administrative offices. An auditorium and exhibit area would continue to be the focus of a structured educational program. The present interpretive film explains the historical significance of the battle and the role of Francis Scott Key in commemorating that event, and it would also be used in the new center.

Two other development actions would be recommended. First, a restroom facility would be provided east of the parking area and would be accessible to picnickers and water-shuttle users. Second, the parking area would be reconstructed to accommodate tour and school buses, and safer pedestrian access would be provided to the visitor center. The capacity of the parking area would not change substantially; space for 150 cars would be retained, while space for buses would be increased from six to 12.

Because Fort McHenry is listed on the National Register of Historic Places, it is subject to the requirements of section 106 of the National Historic Preservation Act of 1966, as amended. In accordance with those requirements, the public involvement document and this environmental assessment will be submitted to the Maryland state historic preservation officer and the Advisory Council on Historic Preservation for their concurrence. Upon such concurrence, proposed actions could be implemented without further consultation pending completion of an "assessment of actions" form documenting effects of implementation on the site's cultural resources. The state historic preservation officer has requested that a copy of the preliminary drawings for the visitor center be sent to his office for informal review.

Caution would be exercised during any ground-disturbing activities, and the advice of an archeologist would be sought to determine the need for additional testing before proceeding with construction.

Landscape Treatment

To enhance the experience for all visitors, several landscaping actions would be undertaken. Many of the trees and commemorative markers between the entrance gate and the fort would be removed because they detract from the monument's significant features and block views of the fort, and because they do not contribute directly to the story of the fort. Their removal would help draw visitor attention to the fort and the oversized flag. The bronze plaques would be stored on site.

An open space near the front entrance to the monument would be provided for some limited recreational activities. Allowing activities here would continue to meet visitor demand and would prevent intrusions on the historical scene or conflicts with educational programs at the fort and visitor center.

DOCK PLAZA
WITH COMFORTABLE
SEATING AND SHADE

PICNIC SITE WITH
SHADE TREES

RESTROOM

VISITOR CENTER

STAR FORT

PARKING AREA REDESIGNED
FOR SAFETY AND EASY
PEDESTRIAN ACCESS

PARK HOUSING

BOUNDARY SCREENED
WITH TREE PLANTINGS

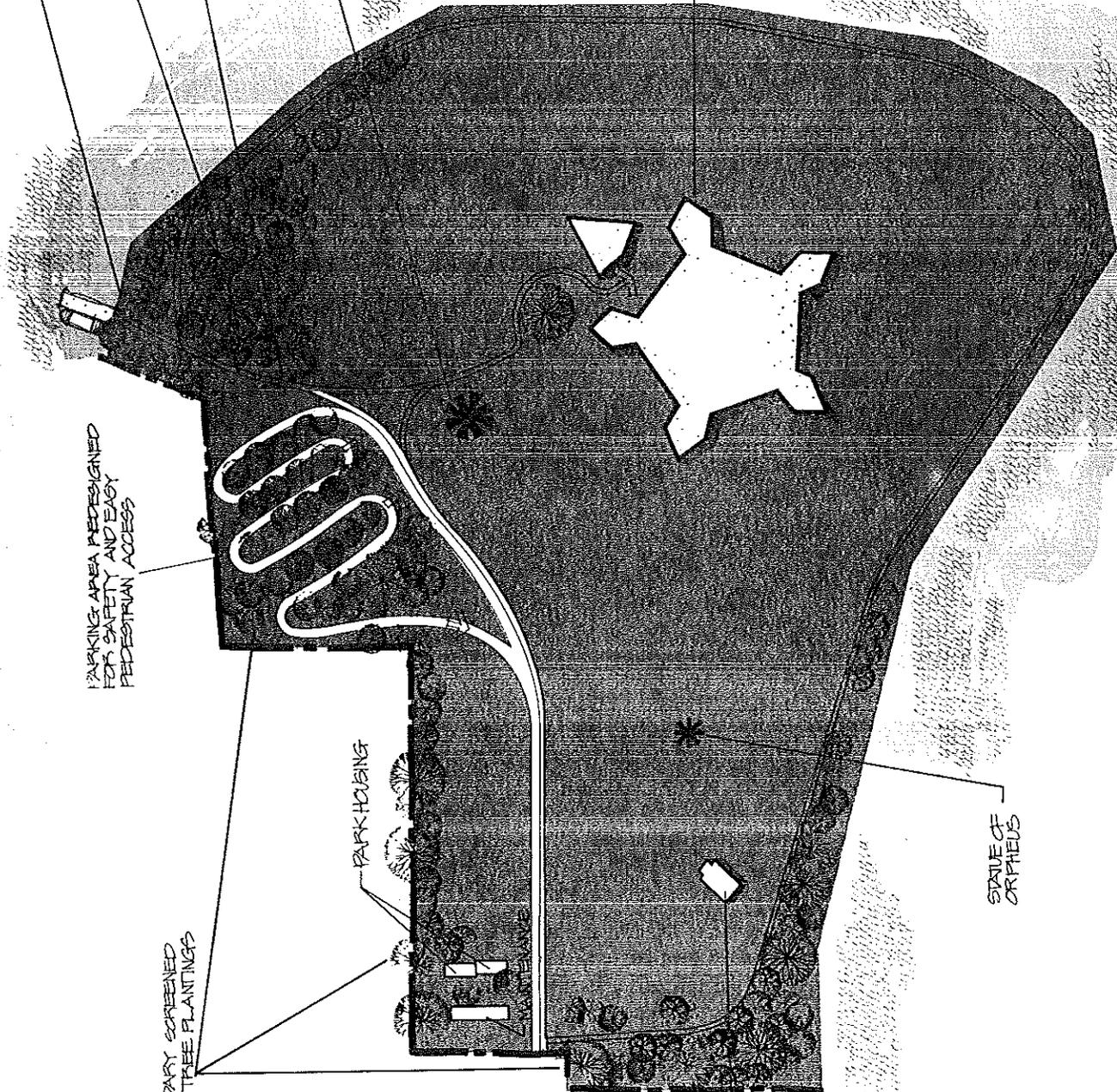
STATUE OF
ORPHEUS

CIVIL WAR
POWDER
MAGAZINE

CONCEPT FOR FACILITY DEVELOPMENT AND LANDSCAPE TREATMENT

FORT MCHENRY NATIONAL MONUMENT
AND HISTORIC SHRINE
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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The picnic area would be moved closer to the parking area and to take advantage of river views, making the site more convenient and pleasant for visitors. Shade trees would be planted.

To reduce the cost of maintaining a manicured lawn and to create a setting more compatible with the site's historical significance, grass would be cut every other week, and the earthworks would be cut three times annually.

The water shuttle would probably become increasingly important at Fort McHenry, especially with the continuing conversion of the Baltimore waterfront to residential and commercial uses. To accommodate visitors arriving on the shuttle, the site next to the pier would be converted to a small plaza, and comfortable seating and shade trees would be provided.

Other actions would include the removal of the hedge delineating the 1814 boundary line. It would be replaced with discreet boundary markers level with the ground. Finally, masses of trees would be planted along the northern and western boundaries to screen land uses that are outside the park and that intrude on the historical scene.

Implementation Schedule

The first action to be undertaken would be the construction of the restroom near the parking area in order to reduce congestion at the present visitor center.

The second action would be the planting of shade trees at the new picnic area. At the same time, masses of trees would be planted along the northern and western boundaries of the site to screen adjacent uses. Once the shade trees were established, the new picnic area and dock plaza would be completed. Then the old picnic area, ornamental trees throughout the site, and the hedge would be removed.

The construction of the new visitor center and the redesigned parking area, plus the removal of the present visitor center, would most likely be undertaken as a single action. The implementation of this major phase would depend on the availability of funds.

Funds for the landscaping actions, the picnic area, and the dock plaza would be provided by the National Park Service. Funds for the new exhibit and educational center would be solicited from private sources, under the auspices of the Patriots of Fort McHenry.

ENVIRONMENTAL CONSEQUENCES

ALTERNATIVE A

Effects on Cultural Resources

No cultural resources would be affected by construction activities under this alternative. The continued presence of scattered ornamental trees would detract from the star fort and would remain a visual intrusion on the historical scene.

Effects on Natural Resources

Natural resources would not be affected by this alternative.

Effects on Visitor Use

Present visitor use trends would probably continue. The visitor experience would remain much as it has in the past, with a heavy reliance on the current visitor center film to explain the significance of Fort McHenry. The other principal uses would involve continued tours of the star fort, picnicking, and other unstructured recreational uses. With growing visitation, the experience at the visitor center could become unpleasant because of the crowded auditorium and long waits. As a result many visitors could decide to bypass the visitor center and miss the interpretive programs.

Effects on Management and Operations

The existing visitor center would have to continue to accommodate more visitors than it was designed to handle. As a result of the excessive wear and tear, the building would probably require continuous rehabilitation and maintenance to remain operational. Landscape maintenance operations would continue to be time-consuming because of the required mowing and trimming around markers and ornamental vegetation, replacement plantings of dead ornamental trees, and other routine activities.

ALTERNATIVE B

Effects on Cultural Resources

Before construction was started on the visitor center addition, a site-specific archeological evaluation would be undertaken to ensure that cultural resources were not inadvertently destroyed. As described under alternative A, the ornamental trees would continue to intrude on the historical scene. However, the addition to the visitor center would result in an even larger visual intrusion.

Effects on Natural Resources

An additional one-sixth of an acre of the 43-acre site would be committed to development under this alternative. During construction increased vehicle emissions and noise levels would result in slight adverse impacts. Some soil erosion in the vicinity of construction could occur; however, disturbed areas would be seeded, stabilized, and landscaped. The development action would have no impact on floodplains or wetlands.

Effects on Visitor Use

This alternative would resolve many of the problems of overcrowding associated with the current visitor center. Use would be less congested, and the quality of the visitor experience would therefore be improved. Other visitor activities would not be changed by this alternative, and the present interpretive programs would be continued. During the period required for construction of the building addition, visitors would be inconvenienced.

Effects on Management and Operations

NPS administration and management activities would be improved because additional office space would be provided. Maintenance activities would remain costly because portions of the visitor center would remain obsolete and would require frequent maintenance.

Landscape maintenance would remain inefficient and costly, as described under alternative A, because of frequent mowing and trimming, maintenance of ornamental vegetation, and other time-consuming activities.

The estimated cost of constructing an addition is \$2,092,000.

ALTERNATIVE C

Effects on Cultural Resources

An archeological evaluation would prevent the destruction of any cultural resources. However, archeological surveys have already been conducted, and the Park Service is aware of all known resources. The site of the new visitor center has been impacted by previous activities, but no known archeological resources are located there. The new visitor center, although larger than the present one, would actually be less intrusive on the historical scene because it would be constructed partially underground to lower its profile. The historical scene would be enhanced by removing the various ornamental trees and commemorative markers and by relocating recreational activities such as kite flying to an area near the entrance.

Effects on Natural Resources

As described for alternative B, construction activities would result in increased noise and minor air quality degradation. Approximately 1/3 acre total would be occupied by a new visitor center and a new comfort station. The number of trees planted for shade and screening would approximately equal the number of ornamental trees removed from around the fort. After construction, disturbed areas and the site of the existing visitor center would be stabilized, seeded, and landscaped to reduce soil erosion. No development actions would affect floodplains or wetlands.

Effects on Visitor Use

Constructing a larger visitor center would meet current and projected visitor use needs. This would alleviate the present crowded conditions, long lines, and other inconveniences that visitors now experience. Adequate space would also be provided for interpretive services and programs.

Removing the ornamental trees and markers would enhance the sense of history visitors often experience at Fort McHenry.

Moving the picnic area closer to the parking area and taking advantage of river views would make the site both convenient and pleasant for picnickers. Developing a small plaza for water-shuttle users would make this area more attractive and would provide comfortable seating for people waiting for the boat.

Generally, this alternative would enhance the overall quality of the visitor experience more than the other alternatives. The main emphasis of the present interpretive program, however, would remain the same as under alternatives A and B.

Effects on Management and Operations

The new visitor center would provide sufficient office space for administrative functions, and it would probably require less frequent maintenance. The larger visitor center would not require increased staffing. The removal of ornamental trees, statues, and commemorative markers would simplify landscape maintenance. Generally, this alternative would result in the most efficient management and operation of Fort McHenry.

The estimated total cost of the proposed action is \$4,924,179 (see table 1). However, only \$173,576 would be required by the National Park Service because funding for the new visitor center and related actions would be solicited from the private sector.

Table 1: Cost Estimates, Alternative C

<u>Development Item/Phase (include size, quantity, etc.)</u>	<u>Gross Construction Costs</u>	<u>Advance and Project Planning Costs</u>	<u>Total Project Costs</u>
New visitor center			
Construction (9,000 sq ft at \$200/sq ft)	\$2,808,000*	\$ 535,880*	\$3,343,880*
Site work, including rehabilitation of existing visitor center site (15% of construction)	421,200*	60,382*	481,582*
Furnishings (10% of construction)	280,800*	53,588*	334,388*
Utilities	23,400*	4,466*	27,866*
Subtotal	\$3,533,400	\$ 654,316	\$4,187,716
Demolition of existing visitor center (72,000 cu ft @ \$.30/cu ft)	\$ 34,320*	\$ 6,550*	\$ 40,870*
Comfort station construction	124,800*	23,817*	148,617*
Parking area realignment (150 cars, 12 buses)	313,560*	59,840*	373,400*
Dock plaza construction (600 sq ft)	24,080	4,595	28,675
New picnic area (10 sites)	14,040	2,679	16,719
Landscaping			
Shade plantings	39,000	7,443	46,443
Boundary plantings	39,000	7,443	46,443
Removal of markers, statues, walkways, hedge, and ornamental trees	29,640	5,656	35,296
Total	\$4,151,840	\$ 772,339	\$4,924,179

*Private funding would be solicited for these costs.

CONSULTATION AND COORDINATION WITH OTHERS

The following is a list of those agencies, organizations, officials, and individuals who are being asked to review this document.

FEDERAL AGENCIES

Advisory Council on Historic Preservation

Department of the Interior
Fish and Wildlife Service

STATE AGENCIES

Maryland State Historic Preservation Officer
Maryland Department of Natural Resources, Coastal Resources Division

PLANNING TEAM

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Karen Wade, Former Superintendent
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Craig Cellar, Cultural Resource Management Specialist
Robert Rothweiler, Natural Resource Specialist
Dennis Piper, Landscape Architect
John Ochsner, Landscape Architect

As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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