

JOINT BASE MYER-HENDERSON HALL

Ft Myer Fence VIEWSHED STUDY





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Part 1 – Introduction and Project Description

Introduction:

Joint Base Myer-Henderson Hall (JBMHH) was established in 1861 as part of the ring of defenses for Washington DC during the American Civil War. It shares almost its entire history with Arlington National Cemetery, where fallen US soldiers were first buried in 1864. Through this 150-year association, indelible images from a shared mission to honor our heroes resonate in our Nation's memory.

This poignant reminder of the cost of freedom repeats approximately 30 times daily nearly every day of the year in the; four honor services are held in the Old Post Chapel within JBMHH most days. The two entities are thus connected with overlapping missions as well as proximity, as the base veritably wraps its arms around the cemetery's nearly two-mile long western boundary. A simple, four-foot stone wall serves as the boundary, and for over 125 years has served more as a symbolic separation rather than a true barrier to intruders.

Circumstances are such that unfortunately a four-foot tall wall no longer provides adequate protection for the people and property on the base. The US Army Corps of Engineers Baltimore District is therefore erecting an eight-foot tall, anticlimb decorative metal fence connecting the Wright Gate to the north with the Henderson Gate to the south, a difficult undertaking considering the potential impact such a structure has on both the imagery and the function of both entities.

Project Scope:

In addition to the eight-foot decorative metal fence, improvements include 5 vehicular access gates of varying widths, eight-foot wide maintenance access gates at approximately 300' intervals, a five-foot wide trail that follows the path of countless runners and walkers that will be made from permeable pavement, small seating areas with benches and detailed planting along the trail, and landscaping consisting of trees, shrubs and groundcovers.

Project Goals:

- Secure the perimeter of JBMHH to protect its occupants and assets through the use of a non-vehicular rated anticlimb fence and K8-rated vehicular barriers where necessary
- Mitigate the possible deleterious effects of the fence on views both from the base and from the cemetery
- Preserve cultural and natural resources of the base
- Preserve and enhance the functionality of the base in support of Arlington National Cemetery Services
- Maintain Base infrastructure and relocate assets as necessary to preserve current utilization

Fence Location:

The location of the fence relative to the historic boundary wall varies at it wends its way across JBMHH; for security purposes, a gap of ten-feet is desirable so that the boundary wall cannot be used as a launch point to scale the fence. In order to achieve the goals listed above, smaller gaps are sometimes necessary; in these areas, a gap of at least four-feet is preferred for maintenance of the area between fence and the wall.

Fort Myer Historic District (NHL)

JBM-HH holds a central place in the history of the United States Army as numerous significant individuals and events are associated with the post. Part of the installation is listed as a Historic District in the National Register of Historic Places and was designated a National Historic Landmark (NHL) in 1972 (USACE 1998).

Arlington National Cemetery (ANC) National Register of Historic Places (NRHP) District

ANC is the country's premier national cemetery and the final resting place of numerous people who have played a role in our country's history. With its period of significance from 1864 to the present, ANC retains its integrity and significance relative to several NRHP Criterion (USACE 2012) including:

- Criteria A and B Association with important events or persons
- Criterion C Construction

The ANC boundary is also the boundary of the ANC NRHP historic district; (USACE 2013).

Arlington House

Arlington House, the Robert E. Lee Memorial, was the home of Robert E. Lee and his family prior to the Civil War but has played a significant role in American History beyond just this purpose in the past 200 years. The Arlington House served as a plantation estate and home to 63 enslaved persons, a monument honoring George Washington, a military headquarters, a community for emancipated slaves and a national cemetery (NPS 2001 and 2013). Today, it is under the jurisdiction of the National Park Service and is on the NRHP.

Arlington House Contributing Forest

When George Washington Parke Custis inherited the property in 1802, most of the hillsides, except those sloping down toward the river were covered with large oaks, hickories and chestnuts. To farm the estate, clearing began to the east toward the river. Custis started with a more modest house at a prominent location at the top of the hill with views east toward Washington over a pastoral landscape with the backdrop of dense forested area to the west. This forested area included the ravine west of the house which was unsuitable for farming due to the steep slopes.

The earliest sketch extant (NPS 2001, Illustration 17) of the expanded Arlington House in 1824 shows the more open landscape at the front with the house backed by a forest, a design approach which was common to English estates at that time. The wooded backdrop was a key feature of the design of the estate. "The dark trees provided a beautiful, imposing backdrop to the pale colored classical architecture of Arlington House – a characteristic of the estate commented on throughout its history." (NPS 2001).

During the Civil War thousands soldiers occupied the grounds and the forested area lost many trees. In addition, the construction of a fort northwest of the house further reduced the forested area. The landscape of meadows and forest was of course transformed beginning in 1864 with the burial of Union soldiers. Despite the impact of the Civil War on the Arlington Estate, the wooded ravine behind the house remained largely intact because the steep slopes were unusable. In the early twentieth century, the Arlington House Contributing Forest remained intact until the construction of the stable, greenhouses and parking west of the house.

Today, this forested area is located west of Arlington House and consists of an old growth area that dates back approximately 235 years and relatively younger area that dates back 145-165 years. The latter did not survive the Civil War but has since grown back to visually resemble the 1864-1966 period of significance for the historic landscape design of ANC (ANC 2013). The area of old growth is under the jurisdiction of NPS whereas the area that dates back 145-165 years is under the administrative control of the ANC. A 20.7 acre portion of both areas contribute to the historic significance of the Arlington House and is referenced herein as the Arlington House Contributing Forest.

Part 2 – Task Objective and Methodology

Purpose of the Task

A defined Visual Area of Potential Effect (APE) for the Ft Myer Security Fence Project has been established to assess the extent of visual effects to adjacent historic properties as well as the length of the border between ANC and JBM-HH:

- Fort Myer Historic District (NHL)
- Arlington House, the Robert E. Lee Memorial (NRHP listed)
- Arlington National Cemetery Historic District (NRHP listed)
- Arlington House Contributing Forest (a contributing feature to the ANC historic district)

The Visual APE for the project has been delineated to include those areas from which the post- construction landscape and fence structure would be visible. This task provides several views from within the APE and provides existing conditions photographs and proposed renderings of the Ft Myer Security Fence Project from those viewpoints. The existing views were taken in winter (December 2017) prior to the appearance of any foliage. The renderings delineate a mid to long term vision of the completed project based on the Concept Design submittal.

Due to the topography in and around the length of the project site as well as the existing stone wall, the areas from which the security fence would be visible are limited.

Task Objective

The renderings, along with a supporting narrative that describe the general assessment of the visual impact, support the assessment of the nature of the visual effects.

Task Methodology

The project team and consulting parties identified several locations in and around JBM-HH and the ANC from which the completed security fence project may be visible following construction. These locations were chosen based on their sight lines toward the project site and their proximity to historic resources and/or cultural landscapes.

Photographs of the existing vantage points were taken in December of 2017 at points identified.

The timing of the photography yielded favorable views with sparse vegetative cover, as the majority of trees are deciduous. Similar views toward the site would not have been possible during the spring, summer, and fall as the views toward the Ft Myer would be nearly fully obscured by trees.

Part 3 – Viewshed Analysis

Viewsheds Overview

Views 1-23 are organized sequentially, starting with View 1 located at the Wright Gate, and proceeding somewhat clockwise around the Ft Myer ANC border, and ending with View 23 at the Henderson Gate 3 The Overall Site Plan shows the 23 views throughout ANC and JBM-HH that are analyzed within this Visual Effects Study.

Views 1, 8, 9, 10, 11, 15, 16, 19, 21, 23 are located within JBM-HH. View 8 is specifically located within the Fort Myer Historic District (NHL). Views 2, 3, 4, 5, 7, 12, 13, 14, 17, 18, 20, 22 are located within Arlington National Cemetery with view 7 specifically is located within the Arlington House NRHP boundary. View 5 is located within the National Park Service (NPS) Property.

Part 4 - Project Summary and Recommendations

Summary

Distant views from the within ANC yielded virtually no visibility of the Security Fence Project for a variety of factors, including distance and the height of the existing red sandstone wall, dense vegetation, and the visual presence of architectural features such as buildings, walls, and grave markers. These factors, when viewed cumulatively from vantage points 5, 13, and 17 completely obscure the visual presence of the Security Fence. Views toward the site from views 4, 6 and 7 would yield a tenuous view of the Security Fence in winter months, but the view would be consistent with the overall image of ANC.

Views 8, 9, 10, 11, 15, 16, 19, 21 and 23 represent the most noticeable change from existing conditions. The visual character of the existing area would be altered and new fence elements would be introduced. However, the design would be consistent with the overall image of the JBM-HH.

Recommendations

Based on the visual analysis presented in this report, the implementation of the proposed Security Fence Project and it's resultant indirect or visual effect would be slight within the context of the overall visual environment due to a variety of factors including: the presence of vegetation and topography; the visual consistency of the proposed actions with the existing visual context of ANC and JBM-HH; and the preservation of the broader context of dense forest as the visual backdrop to the Arlington House.

Impacts to views from the Fort Myer Historic District (NHL), including the Old Post Chapel would be significant, but the proposed design is consistent and compatible with the setting and historic associations of this historic property.

Impacts to views from Arlington National Cemetery (NHL), along the boundary wall on Garfield Drive would be significant overlooking the historic stone wall, but the proposed design is consistent and compatible with the setting and historic

associations of this historic property. The views from ANC at the Old Post Chapel during operational hours of the day would be slightly impacted and at night or non-operational hours would be in the background of the existing historic gate.

Views from Arlington House or further away from the stone boundary wall would not be affected.

References

NPS 2001 National Park Service. Arlington House, The Robert E. Lee Memorial Cultural Landscape Report, History, Volume I. United States Department of the Interior, National Park Service, National Capital Region Cultural Landscape Program, 2001. Prepared by Jennifer Hanna, Historic Landscape Architect.

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USACE 2012 U.S. Army Corps of Engineers. Historic Resources Inventory for Arlington National Cemetery, Arlington, Virginia. U.S. Army Corps of Engineers, 2012.

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OVERALL SITE PLAN















VIEW 2 – ANC View along Ord & Weitzel

The new fence is located approximately 30' from the historical boundary wall through this view from ANC. Existing vegetation and the wall will screen views for most of this length. This area will also have invasive plants removed (mainly the ivy seen growing on the trees) and will be enhanced with additional native plant landscaping.

 Existing Wall to proposed Fence distance at this location is 33', and the wall height varies in this view from 6' to 7.5' along ANC/JBM boundary.













VIEW 4 – ANC View into JBM-HH maintenance area

The fence is located approximately 14' behind the Historic Boundary Wall in this view, and is screened by existing vegetation on both sides of the wall. The maintenance area in this photo consists mainly of a stormwater management storage facility, with the motor pool further to the left beyond the large oak trees. The distance across the burial field and the change in elevation help the fence recede in the view, allowing the trees, the wall and the burial markers to be the focal points.

 Existing Wall to proposed Fence distance at this location is 24', and the wall height varies in this view from 5' to 6' along ANC/JBM boundary.



Arlington House is located on one of the most prominent topographical features in Arlington. Thousands of commuters who cross the Memorial Bridge see it as the terminus of the axis starting at the Lincoln Memorial every day. The views from Arlington House towards Washington are equally dramatic, with the city's horizontal orientation creating an understated elegange. From the rear of Arlington House understated elegance. From the rear of Arlington House, the main view is across the oldest sections of graves, and towards Arlington Woods, a mature wooded area with trees exceeding 150 years in age. Even during the winter, the fence is not visible from Arlington House regardless of the viewpoint.

• Existing Wall to proposed Fence distance at this location is 32', and the wall height on the ANC side is 13' or 4' from the JBM side.









VIEW 6 – From Humphry Dr Within ANC to JBM-HH

This view across the Millennium site towards the fence as it runs along McNair Road on JBM-HH illustrates how dramatic topographic changes, existing trees, and distance help mitigate the impact of the fence. The hillside to the columbaria that form a loop around the existing stream drops approximately 30', with another 25' down to the stream. A 15' stone retaining wall is visible across the creek, with the roadway, wide interment areas, and the 15' niche wall creating a buffer of about 650' before the fence is reached. The hills of JBM-HH rise beyond, so that while the fence is visible from this location, it is a minor element in this dramatic tableau.

• Existing Wall to proposed Fence distance at this location is 28', and the wall height on the ANC side is 13' or 4' from the JBM side.



VIEW 7 – From ANC Millennium to JBM-HH

This view is similar to the previous View 6, but is much closer to the fence from the middle of the new Millennium site, a distance of about 330'. The rise in elevation across the interment area combined with the 15' niche wall help to screen the view of the fence as it runs parallel with McNair Road. New trees planted within the interment area as well as behind the niche wall will further mitigate views to the fence in years to come.

 Existing Wall to proposed Fence distance at this location is 26', and the wall height on the ANC side is 13' or 4' from the JBM side.











VIEW 8 – Typical from JBM-HH Historic Residential Area

The view from the historic residential area sweeps down across an open lawn, over the Millennium site and beyond to Washington. The fence, which is located 4' from the edge of McNair Road, blends in with the linear boundary wall marking the back of the niches. The pathway wending its way across the lawn area is the new jogging trail, whose gentle curves react to the natural contours and create pockets for new canopy trees.

Existing Wall to proposed Fence distance at this location is 22', and the wall height on the JBM side is 4'.



VIEW 9 – OPC Overview of Millennium

Limited space is available at the convergence of McNair Road, Biddle Lane and the driveway to the rear of the Old Post Chapel, providing approximately 5' between the fence and the Historic Boundary Wall. The view at this location is across the entire Millennium site, although the boundary wall hinders views of the foreground for drivers. The close proximity of the fence to the wall is partially screened by proposed landscaping, which will include a continuation of the canopy trees used along McNair Road, along with lower shrubs featuring seasonal displays of flowers and fall color.

 Existing Wall to proposed Fence distance at this corner location varies from 5' on the right to 18' on the left, and the wall height on the JBM side is 4'.











VIEW 10 – From OPC entrance towards Gate

This view illustrates how several activities occur in front of the Old Post Chapel for a large funeral service, and how important the preservation of the open view into the cemetery is. With the beam-type vehicular barrier in the open position, which will be its status during the day when the OPC is in use, the view is generally unaltered from the current condition. A new parking lot configuration will enhance vehicular movement and provide a better-defined approach to the chapel for pedestrians.













VIEW 11B – OPC Gate towards ANC when closed

At night and during hours when the OPC gate is closed, a sliding, beam-type barrier arm will be slid into place across the vehicle pathway to the stanchion on the opposite side providing anti-ram security. As shown in the rendering, the gate is closed and is directly behind the existing wrought iron fence and brick piers.



VIEW 12A – Closeup of OPC Gate from Meigs Dr

As in views from the base side of the OPC Gate, the new fence and vehicular barrier do not alter this view appreciably. With the gate in the open position, as it will be whenever visitors are within the cemetery, only the fence is visible above the Historic Boundary Wall.











VIEW 12B – Closeup of OPC Gate from Meigs Dr when closed

At night and during hours when the OPC gate is closed, a sliding, beam-type barrier arm will be slid into place across the vehicle pathway to the stanchion on the opposite side providing anti-ram security. As shown in the rendering from the ANC side, the gate is closed and is directly behind the existing wrought iron fence and brick piers.













VIEW 14 – ANC side along Garfield Dr toward JBM-HH

This image is a view from the ANC side of the boundary wall along Garfield Drive, just north of the Selfridge Gate, as it approaches The Old Post Chapel in the distance. Through this area the fence varies from 18' to 28' away from the wall, in a weaved and gently deflected alignment to avoid almost all tree impacts on the JBM-HH side. This faces on the JBM-HH side the Tri-Service parking lots. The new fence which is screened at the bottom half by the boundary wall is visible behind, with approximately the upper 4' visible from this position. Where new tree and landscaping locations are possible on the JBM-HH side, where space allows between the fence and wall, or as part of the planned parking area islands improvements, they will be added to enhance the visual buffering.

Existing Wall to proposed Fence distance at this location varies from 16' to 32', and the wall height on the ANC side is 3' to 3.5'.



 For this area at the Selfridge gate, the existing Wall to proposed Fence distance is 16' before the returns along the gate driveway, and the wall height also varies from 6' at the gate to 3.5' from grade on the ANC side.











VIEW 16 – Typical from JBM-HH

This more detailed view is an image of the improvements proposed from the JBM-HH side along the new trail at the Tri-Service parking area. The fence is located approximately 20' from the boundary wall, and is gently deflecting in an alignment to avoid almost all tree impacts on the JBM-HH side. The new pathway also sets the edge of the parking.

Existing Wall to proposed Fence distance at this location is 24', and the wall height on the JBM side is 4'.



VIEW 17 – From ANC USS Maine Memorial to JBM-HH

As located at a position on the west side of the ANC Tomb of the Unknown Soldier, the view provided in this image is much longer towards the existing boundary wall and proposed fence. With the varying mix of mature trees and cemetery features in the foreground, the evident exposure of the new fence behind the wall is not easily recognized. The new fence would be fully screened at the bottom half by the boundary wall, with at most only the upper 4' visible; it's darker finish helping it 'fade' into the background of the distant view.

 Existing Wall to proposed Fence distance at this location is 30', and the wall height on the ANC side is 3' to 3.5'











VIEW 18 – ANC side along boundary wall

The proposed new fence line in this image is between the southern end of the Memorial Chapel (which is outside the image to the right) and towards the section of Carpenter Road that parallels the historic wall, including the area on the ANC side of the Memorial Chapel gate. In the background you can see the top of the on-base Child Development Center. The Argonne Cross location is off this image to the far left. Through this area the fence varies from 14' to 50' away from the wall, in a weaved and gently deflected alignment to avoid all tree impacts on the JBM-HH side. This area also slopes away from the historic wall, which screens most of the view of the fence with only approximately the upper 2-3' visible from this position. Where new tree locations are possible on the JBM-HH side, where space allows between the fence and wall, they will be added to enhance the visual buffering.

Existing Wall to proposed Fence distance at this location varies from 14' to 20', and the wall on the ANC side is 5' to 6' height.



 For this area at the Memorial gate, the existing Wall to proposed Fence distance is 14' before the returns along the gate driveway, and the wall height also varies from 5' to 6'.











VIEW 20 – From ANC Argonne Cross to JBM-HH

For this landmark location inside ANC, this view is directly towards the boundary wall centered on the Argonne Cross. In the background you can see the top of the on-base Child Development Center. Through this area the fence varies from 12' to 14' away from the wall in a green strip generally parallel to Carpenter Road (a few feet from the curb line). This is also the location, just to the right of the Cross in this view, where the transition from the 1870-1878 portion of the ANC historic boundary wall to the post-1888 construction is made. The red stone is clear at the right of this image, and the newer gray stone is towards the left. The new fence which is screened at the bottom half by the boundary wall is visible behind, with approximately the upper 4' visible from this position.

 Existing Wall to proposed Fence distance at this location is 12', and the wall on the ANC side is 4' height.



towards the terminus at Southgate Road (Gate 3), also referred to as US Military Road. This gate is no longer in use, and the existing ornamental gates will remain. The ANC side of this gate is used for construction staging and storage. The new fence line will be installed aligning with the boundary wall sections on either side. This is possible because the parking rows on the outside of Hobson drive will be removed so there is sufficient room for the new fence line. The old driveway apron to the gate will be removed and the corner fence section will be installed at 45 degrees to both fence lines as a permanent installation. The ground area is kept clear (grassed) in case the gate ever needs to be temporarily re-opened. This corner also allows for a new landscape area, with trees and shrubs possible on either side as illustrated in this image.

• For this area at the closed Hobson gate, the existing Wall to new Fence distance varies from 13' on the east side of the corner & 10' to the west. The wall height varies from 5' to 6' around this corner.











VIEW 22 – ANC from Clayton Dr to Henderson Hall at Section 18

This view from the ANC side of the boundary wall at Clayton Drive and towards the wall and proposed new fence is very close to the end of the project at Southgate Road (Gate 3). The fence line here straightly parallels Hobson Drive (US Military Road) again where parking along the boundary wall will be removed so there is sufficient room for the new fence line. The fence is set approximately 13' from the wall, a few feet from the curb line. The building in the foreground is Henderson Hall, with the Sheraton Hotel tower visible in the upper right-center which is actually situated off-base. The new fence which is screened at the bottom half by the boundary wall is visible behind, with approximately the upper 4' visible from this position.

 Existing Wall to proposed Fence distance at this location is 13', and the wall on the ANC side is 4' height.



on U.S. Military Rd to Gate 3

This image depicts the view from the end of US Military Road, inside Gate 3, right before the Southgate Road intersection. The existing guard house and gate will remain with the new fence line tying into the crossing fence section just past the gate corner, and following the curb line as it proceeds northward. Several of the diseased and withered trees in this section on the JBM-HH side will be removed and replaced with screening shrubs under the canopy of the much larger mature (and healthy) trees on the ANC side. New Canopy trees will also be added to the area between the fence and wall in the open areas north of this image, to enhance the screening from the ANC side.

• For this area near Gate 3, the Fence is set 13' from the existing Wall, and the wall height varies from more than 5' outside the Gate to a low point of only 2' above grade at the center of this image.





