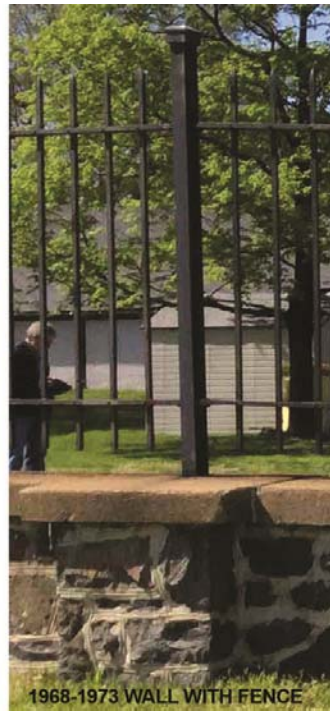




1897 WALL



1897 WALL WITH FENCE



1968-1973 WALL WITH FENCE



2010 WALL WITH FENCE

Arlington National Cemetery Southern Expansion – Boundary Wall Evaluation

October 28, 2016

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Arlington National Cemetery Southern Expansion – Boundary Wall Evaluation

Introduction

Arlington National Cemetery is proposing to expand onto the former Navy Annex/FOB #2 Property known as the Southern Expansion Site. The proposed expansion may affect the existing boundary wall of the cemetery. The boundary wall is within the Arlington National Cemetery Historic District. Historic resources, including those within historic districts, are protected under Section 106 of the National Historic Preservation Act of 1966 (NHPA). Section 106 of the NHPA outlines a historic preservation review process and requires Federal agencies to consider the effects of their projects on historic resources.

Purpose

The purpose of this study is to evaluate portions of the existing southern boundary wall and adjacent features for historic significance and integrity in support of the Section 106 process being undertaken by the United States Army Corp of Engineers (USACE). The results of this study will also inform the design of the proposed expansion of the Arlington National Cemetery.

Methodology

The evaluation of the boundary wall included visual survey, document review, and resource evaluation. Representatives from BELL Architects conducted on-site observations on April 23 and 24, 2015, with follow-up visits on August 18 and 29. Visual surveys were conducted on both sides of the boundary wall within the study area (**Figure 1**). Materials and conditions of the wall were observed and recorded with digital photographs and limited notations. While the primary focus was on contributing structures (walls, fences and gates), an area of approximately 30 feet on each side of the wall was surveyed for the potential of additional historic resources and relative grade conditions.

Relevant documentation was reviewed and pertinent information was correlated with on-site observations of the southern boundary wall and immediate environs.

Resources within the study area were evaluated by applying the National Register criteria for significance to determine if those resources are contributing or non-contributing within the context

of the nationally significant Arlington National Cemetery Historic District. Then the ability to convey the significance or integrity was evaluated.

The boundary wall evaluation did not include investigation of below grade resources nor measurements or testing to evaluate conditions or determine likely dates of construction.

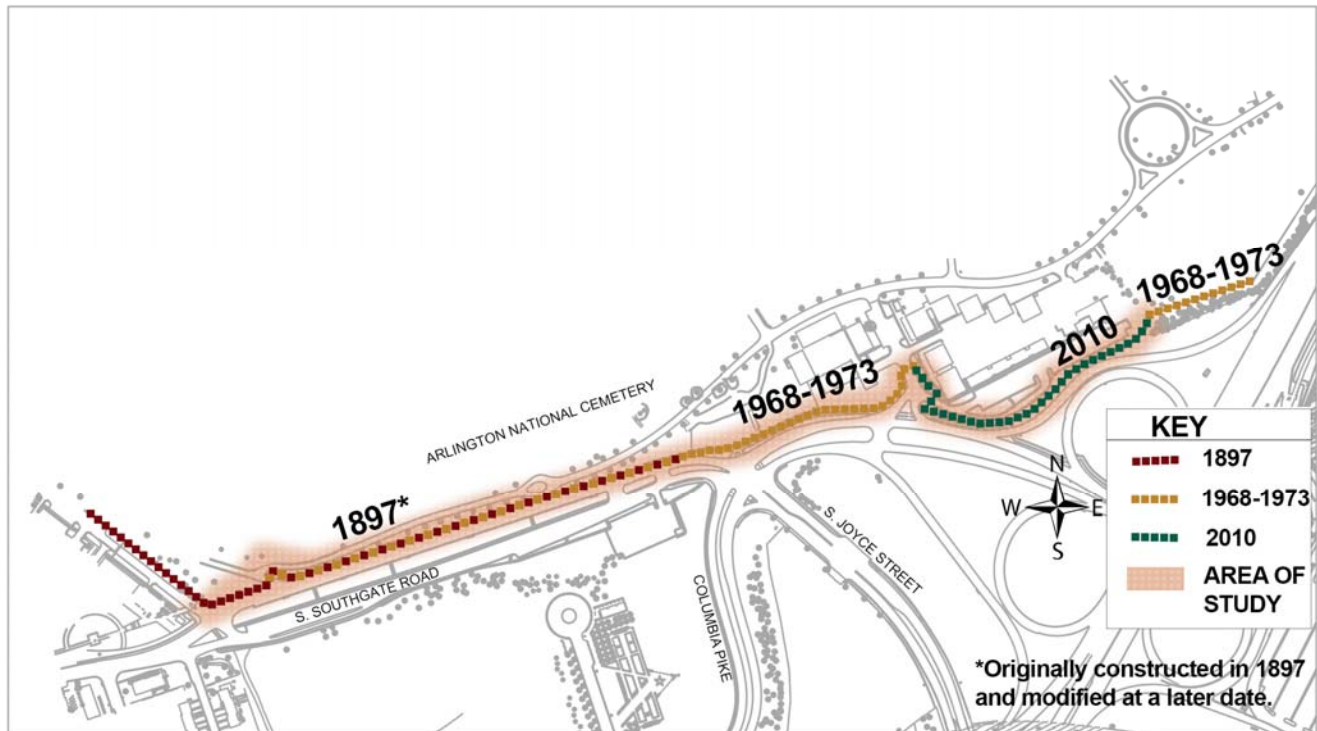


Figure 1- Study Area

Background

Reports and master plans provided by HNTB were reviewed for pertinent information related to the southern boundary wall. These documents included various master plans and reports developed over the years, along with utility surveys, and the Memorandum of Agreement (MOA) for the transfer of the land for the southern expansion. Limited research was conducted of other secondary source documents related to the history of the cemetery and the boundary wall. These included the National Register of Historic Places Registration Form, the Cultural Landscape Report for Arlington House, and the Historic American Building Survey of Sheridan Gate. These

documents were used to understand the development history of the cemetery for the relevant portions of the boundary wall.

Context

The development of Arlington National Cemetery occurred in the second half of the nineteenth century beginning in 1864 when the Estate of Mary Custis Lee located in Arlington County in Northern Virginia was established as a military cemetery.

The picturesque characteristics of the cemetery grounds are attributed to Quartermaster General Montgomery Meigs, who selected the location and assigned his assistant Edward Clark as “architect and engineer of the cemetery” (Meigs 1864). In 1910 the Commission of Fine Arts had an impact on the cemetery grounds with the recommendation of planting thousands of trees in vacant areas of the cemetery (Moore 1920), planted “solely an effect of varying masses of light and shade over the landscape” (Moore 1923).

In 1867 Congress passed An Act To Establish and Protect National Cemeteries which declared, that they be enclosed with a “substantial stone or iron fence”. A stone wall was erected between 1870 and 1897 out of Seneca sandstone enclosing the boundary of the cemetery (Hanna 2001a). There have been several changes to the boundary wall since it was first constructed around Arlington National Cemetery in 1870 (**Figure 2**). As the cemetery grew, the old walls were removed and new ones were built, sometimes using stone from the old wall (Seneca sandstone) to build the wall in the new location. This occurred with the original southern boundary wall and the one along Georgetown and Alexandria Road, also known as Arlington Ridge Road, which ran north to south, approximately in the location of the current Eisenhower Drive. The largest expansion of the cemetery occurred post 1968 with the incorporation of Fort Meyer’s South Post.

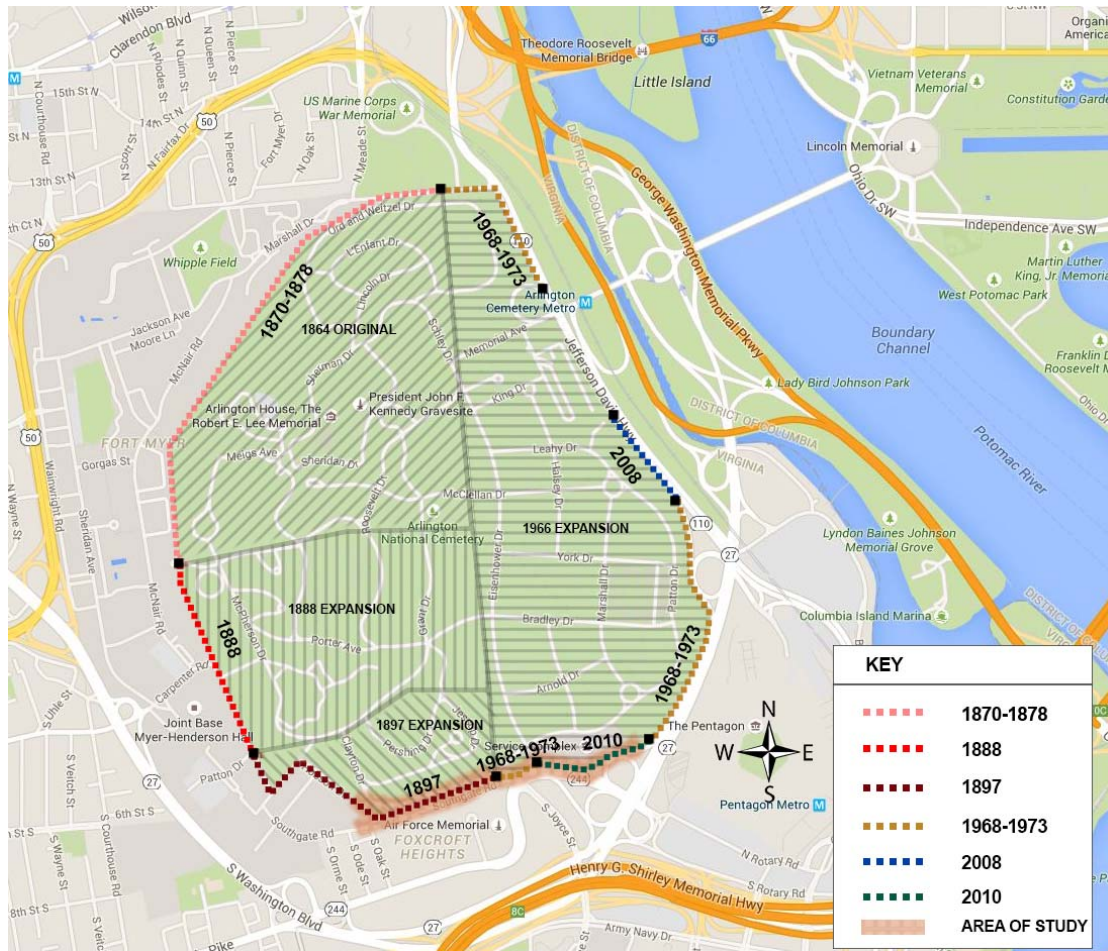


Figure 2- Cemetery Key Plan Indicating Periods of Expansion

The study area includes boundary walls built during three known time periods (Figure 2). The section west of what was Georgetown and Alexandria Road is the oldest dating from 1897 (Figure 3). Based on field observation and the map of the cemetery in 1912, the boundary wall changed when the gate at South/Clayton was added (Figure 4). It was observed that Patton Drive curves just before the gate, and along the northern road edge is a retaining wall (Figure 11). The appearance of the retaining wall is slightly different from the boundary wall, and also has a precast concrete cap. Our supposition is the boundary wall was modified with the addition of the metal fence, which may have occurred when Patton Drive was installed. With the installation of Patton Drive, the surrounding grade was likely re-graded creating the areas where the wall functions as a retaining wall. In depth research was not performed to prove these conclusions.

Near the current southern boundary of the cemetery a Freedman's Village was established by the military. It was officially dedicated on December 4, 1863 (James 1970; Schildt 1984). The village consisted of a collection of buildings clustered along two roads west of Alexandria and Georgetown Pike. One of the roads runs in the general vicinity of the boundary wall, with some structures located where Southgate Road currently runs. In 1900 all of the tenants were moved to expand the cemetery and the land was re-graded in preparation for burials (Reidy 1987; Schildt 1984). There is the possibility that buried artifacts may remain from the Freedmen's village under Southgate Road, just north of the highlighted area (Figure 5).

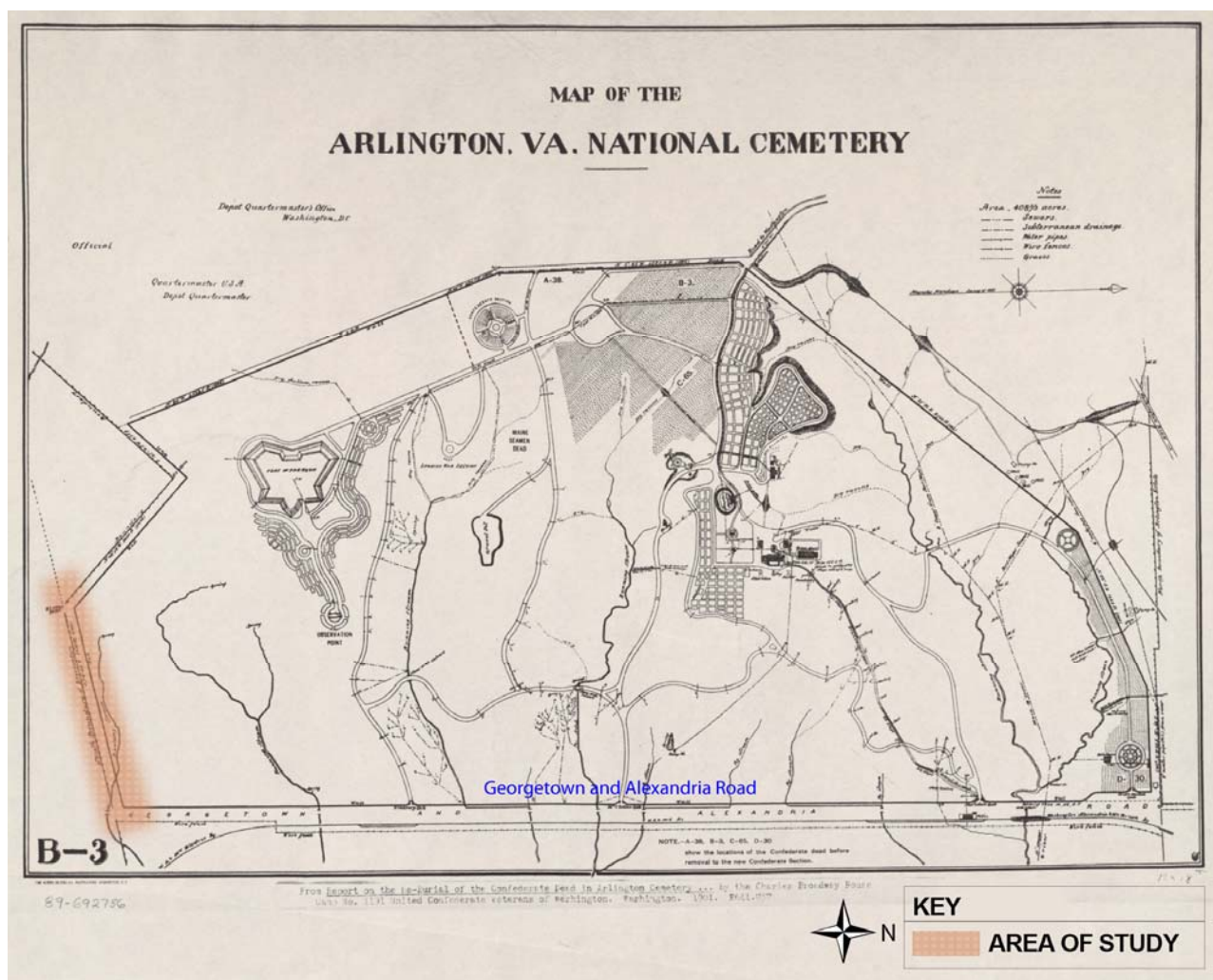


Figure 3- Map from 1901, Section west of what was Georgetown and Alexandria Road is the oldest portion of wall in the study area dating to 1897

Arlington National Cemetery
Southern Expansion - Boundary Wall Evaluation

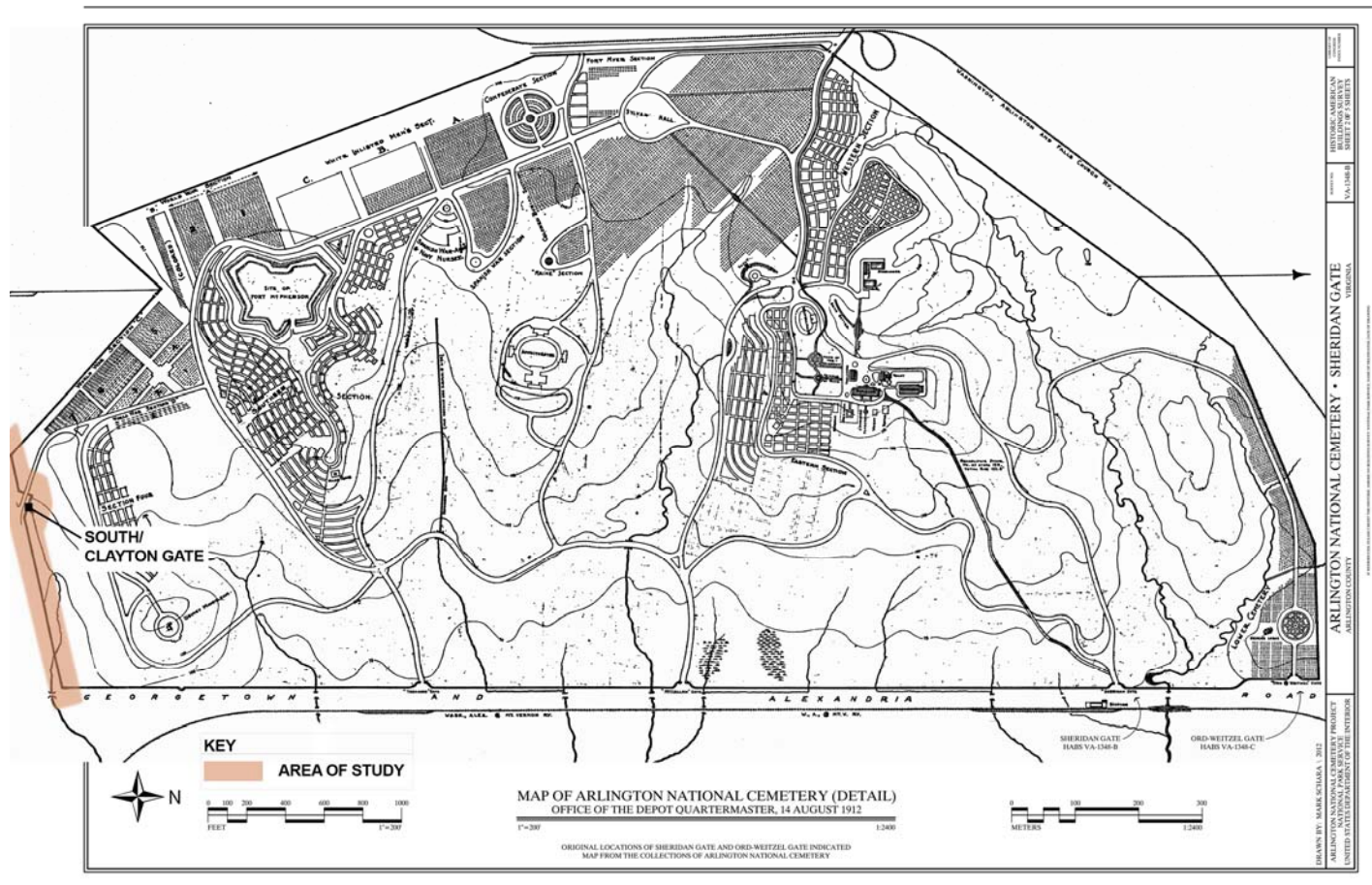


Figure 4- 1912 Map showing change to boundary wall when the South/Clayton gate was added.

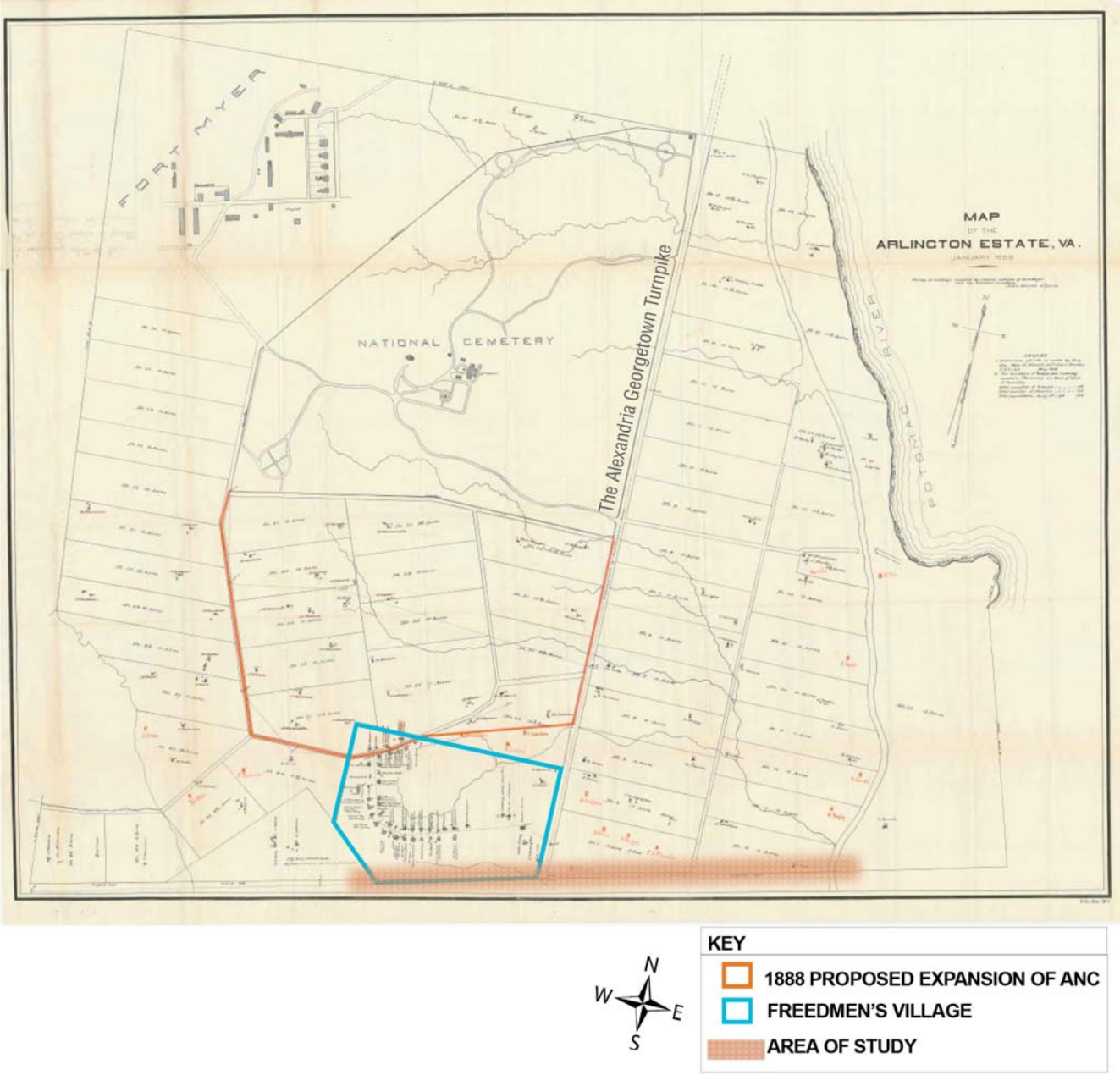


Figure 5- 1888 Map with Freeman's Village

Observations

Arlington National Cemetery is located west of the Potomac River on a site that rises above the river to a hillside with ravines. The cemetery currently has a perimeter of approximately 3.86 miles. Most of the perimeter has a fence or wall that marks the boundary of the cemetery grounds. Inside the boundary is a picturesque landscape of gentle rolling hills of grass accentuated with trees that contribute to the natural beauty of the grounds. Covering the grounds are rows of white marble headstones that are arranged to follow the natural contours of the grounds (**Figure 6**). Curvilinear roadways are laid out to provide internal circulation of the grounds. Much of the grounds are enclosed with a stone wall, part of it is Seneca sandstone with the remainder of it in a blueish stone, possibly a metarhyolite or micaceous quartzite. The area of focus in this study is an approximately 0.6 mile long blue section of the wall, the majority of which is topped by a ferrous metal fence.

The southern boundary of Arlington National Cemetery has a stone wall that generally runs in a west-south-west to east-north-east direction. At the western end of the study area, rows of headstones run somewhat perpendicular to the stone wall. Southgate Road, a four lane divided road, runs parallel to the wall outside of the Arlington National Cemetery. The road is split into two independent grades, rising away from the wall. A combination of angled and parallel parking is provided between Southgate Road and the wall.

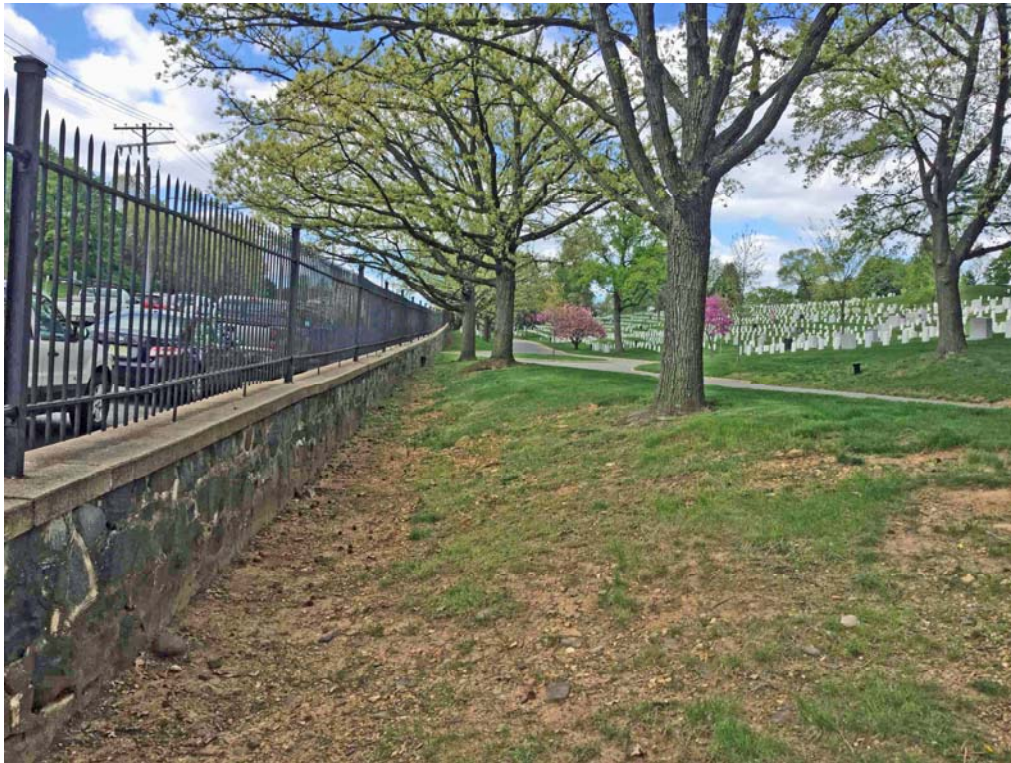


Figure 6- General View looking west

The southern boundary wall is comprised of masonry from different periods with variations in materials, colors, coursing and size of stone and joints evident. The majority of the wall is made up of rock-faced blue stone with the edges pitched off (straightened) laid in a random rubble course. Between the stones is a beaded mortar joint that is roughly flush with the adjacent stone surfaces. The stones vary in color, primarily in shades of medium grey-blue with limited green and brown stones mixed in. Along the length of the wall are stone piers, spaced approximately twenty feet apart, projecting on the outside face of the wall. There are four primary sections of the boundary wall within the study area consisting of the following (**Figure 1**):

- Section 1: Built in 1897 (Westernmost section of study area to the South/Clayton gate)
- Section 2: Built in 1897 and altered circa 1968 (east of the South/Clayton gate to the intersection of Southgate Road and Columbia Pike)
- Section 3: Built circa 1968 to 1973 (east of the intersection of Southgate Road and Columbia Pike to the Service Complex gate)
- Section 4: Built in 2010 (east of the Main Gate of the Service Complex to the end of the study area)

Section 1 – Built in 1897 (westernmost section of study area to South/Clayton gate)

The westernmost section extending from the corner eastward to the South/Clayton Gate is built with rough ashlar coursing with a bluestone cap that slightly overhangs the wall below. This section of wall does not have a fence on top of the cap stones (**Figure 7 and Figure 8**).



Figure 7- Westernmost section of boundary wall in study area

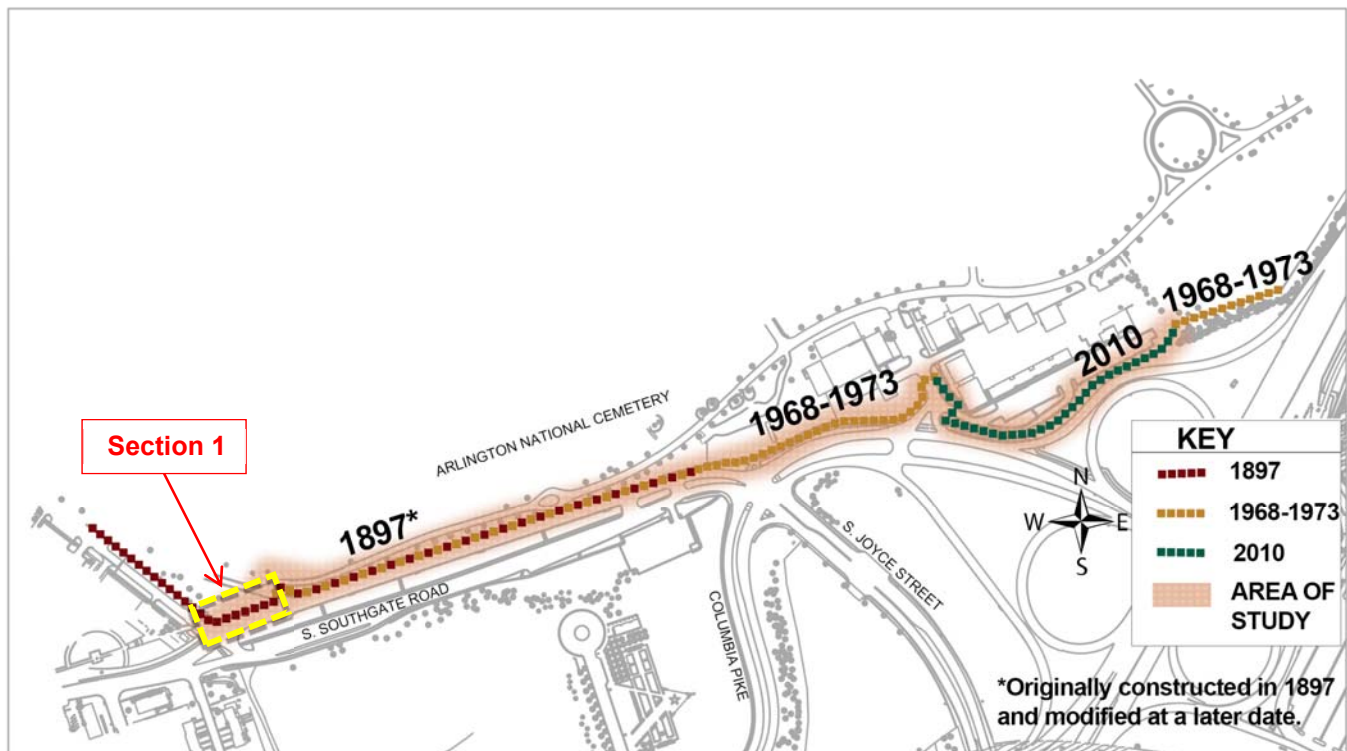


Figure 8- Section 1 Location (westernmost section of boundary wall to South/Clayton gate)

Not far from the western end of the wall, near the intersection with the South/Clayton Gate is a small stone arch at the base of the wall (**Figure 9** and **Figure 10**). This was likely for drainage or below grade structure extending through the boundary.



Figure 9- Stone Arch

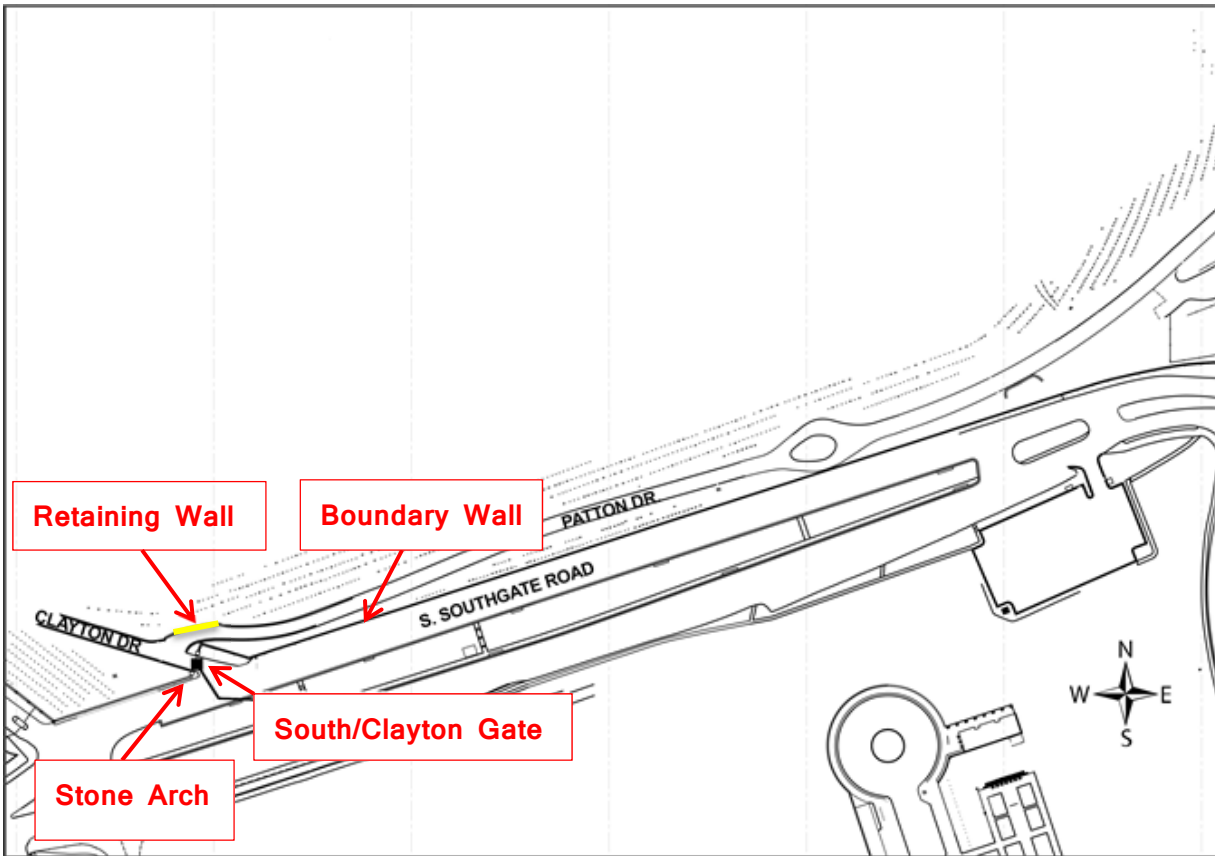


Figure 10- Location of Stone Arch, South/Clayton Gate and Retaining Wall

The South/Clayton Gate is angled and recessed into the cemetery away from the boundary wall (**Figure 10** and **Figure 13**). At each end of the gate are tall stone piers topped with a stepped stone caps. The top edge of double leaf metal gate curves up toward the piers, ending in a scroll (**Figure 11**). Patton Drive runs parallel to the inside face of the boundary wall and curves away as it nears the gate. A retaining wall runs along the north side of Patton Drive. The retaining wall has a sloping stone cap that follows the grade (See **Figure 10** and background left in **Figure 12**).



Figure 11- Detail of South/Clayton Gate



Figure 12- Area west of South/Clayton Gate with retaining wall along north edge of Patton Drive in the background



Figure 13- South/Clayton Gate

Section 2 – Built in 1897 and modified at a later date (east of the South/Clayton gate to the intersection of Southgate Road and Columbia Pike)

East of the South/Clayton gate, the characteristics of the stone wall remain the same, except for the cap which is precast concrete instead of bluestone. On top of the wall is a ferrous metal picket fence, embedded in the cap (**Figure 14 and Figure 15**), which does not exist on the earlier section of the wall.



Figure 14- Boundary wall east of the South/Clayton Gate

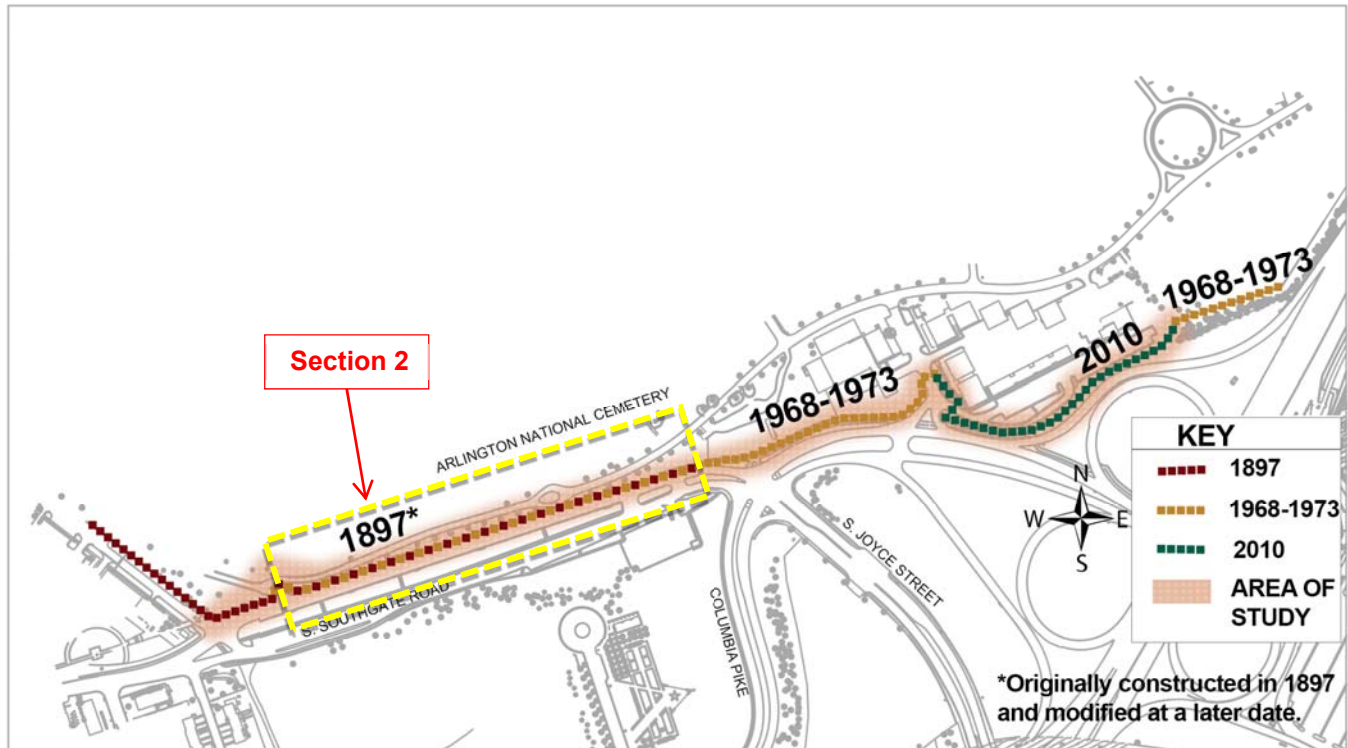


Figure 15- Section 2 Location (east of South/Clayton gate to the intersection of Southgate Road and Columbia Pike)

A single precast course concrete slab runs the length between the stone piers and a joint sealant fills the gaps between the cap stones. Black painted metal fence posts are embedded into the top of the wall at each pier. The fence is comprised of evenly spaced pickets held between two horizontal bars with a rivet near the top and bottom of the fence segments. Each fence panel spans approximately twenty feet from pier to pier with two pickets at third points that extend into the wall cap to provide support. The extended pickets are embedded into the precast concrete cap with grout. Each end of the fence panel is bolted to an angle that aligns with the horizontal bars, which in turn is bolted to the “H” shaped fence post (**Figure 16**), except at the gates where the fence panels bolt into the side of the stone pier. Running somewhat parallel inside the cemetery wall is a gently curving paved roadway (Patton Drive). Some of the lawn area between the wall and internal roadway (Patton Drive) has two rows of headstones running parallel to the wall (**Figure 17 and Figure 18**).



Figure 16- Detail of post connections



Figure 17- Rows of headstones running parallel to the boundary wall

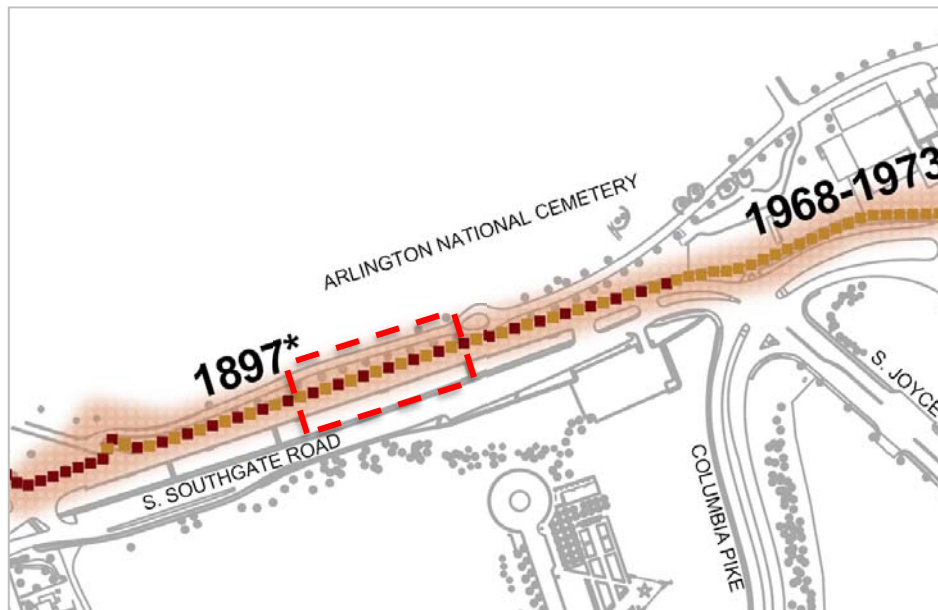


Figure 18- Location where headstones run parallel to the boundary wall

In some locations the wall is acting as a retaining wall as the cemetery side is typically lower than the sidewalk/street outside of the wall (**Figure 19**). There is a grade difference up to four feet between each side of the wall. **Figure 20** shows spot elevations on each side of the wall along the portion of the wall that currently serves as a retaining wall.



Figure 19- Boundary wall acting as a retaining wall

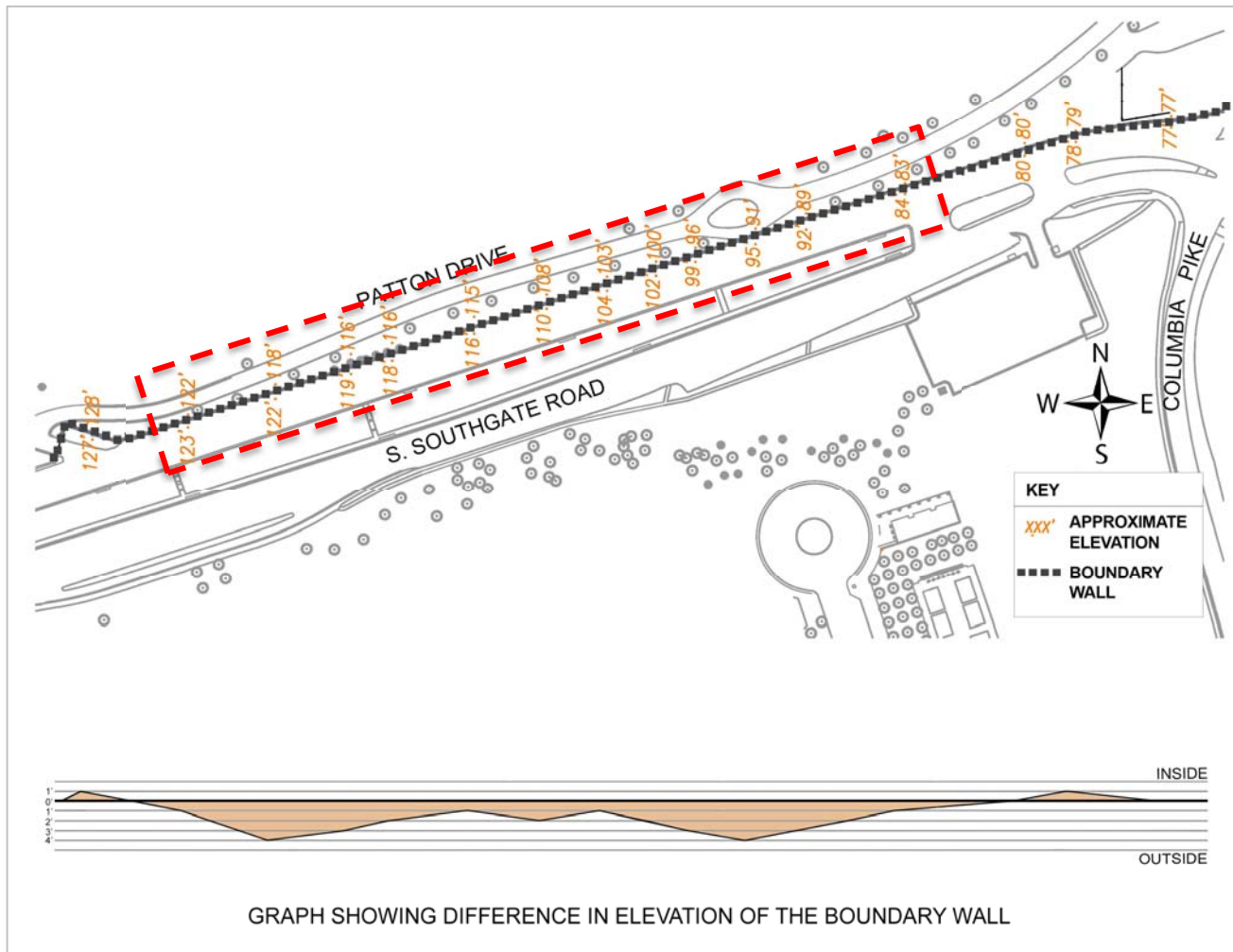


Figure 20- Area of boundary wall acting as a retaining wall with spot elevations

Section 3 – Built circa 1968-1973 (east of intersection of Southgate Road with Columbia Pike to the Service Complex Gate)

Further to the east, outside of the boundary wall, Southgate Road terminates into Columbia Pike, a major four lane divided roadway. South Joyce Street and the on and off ramps for South Washington Boulevard intersect with Columbia Pike outside this section of the boundary wall. Near this location the boundary wall undulates some before curving inward to the Service Complex Gate (**Figure 21 and Figure 22**).

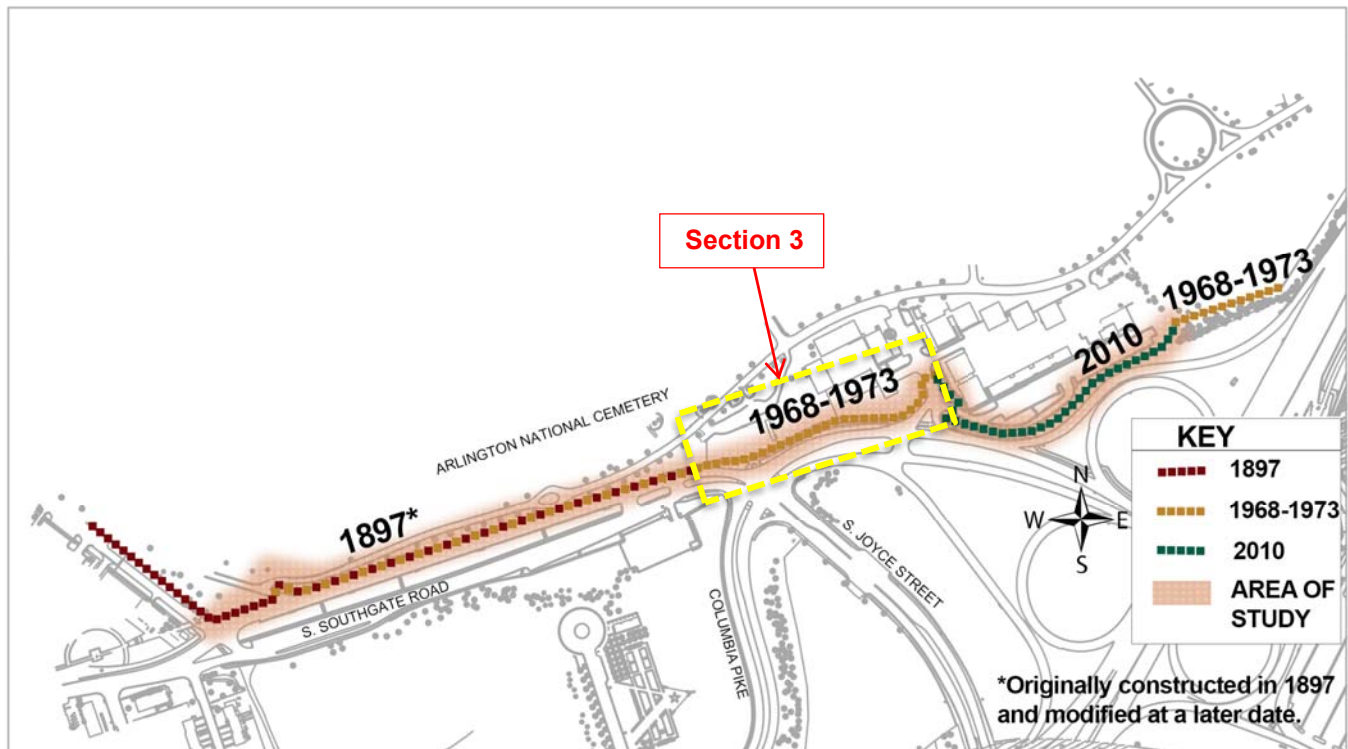


Figure 21- Section 3 Location (east of intersection of Southgate Road with Columbia Pike to the Service Complex gate)

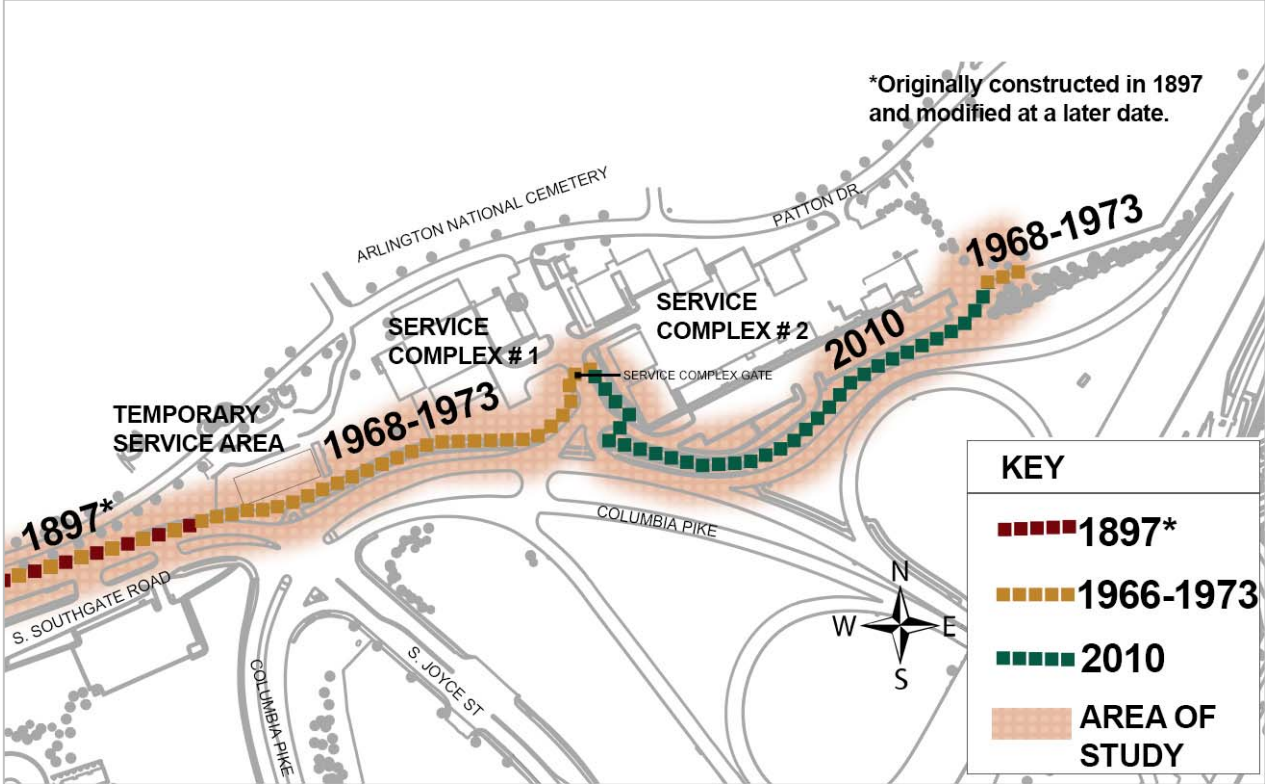


Figure 22- Temporary Service Area and Service Complex Locations

East of the Columbia Pike/Joyce Street intersection where the wall starts to undulate, the stone of the wall changes in color, shape, and size. Smaller rubble stones with a more brown color were used to construct this section of the wall. A approximately a third of the way through Section 3 near the edge of the Temporary Service Area the stones change in size to larger rubble stones, and the fence has welds from modifications (Figure 23 and Figure 24).



Figure 23- Area of large rubble stones

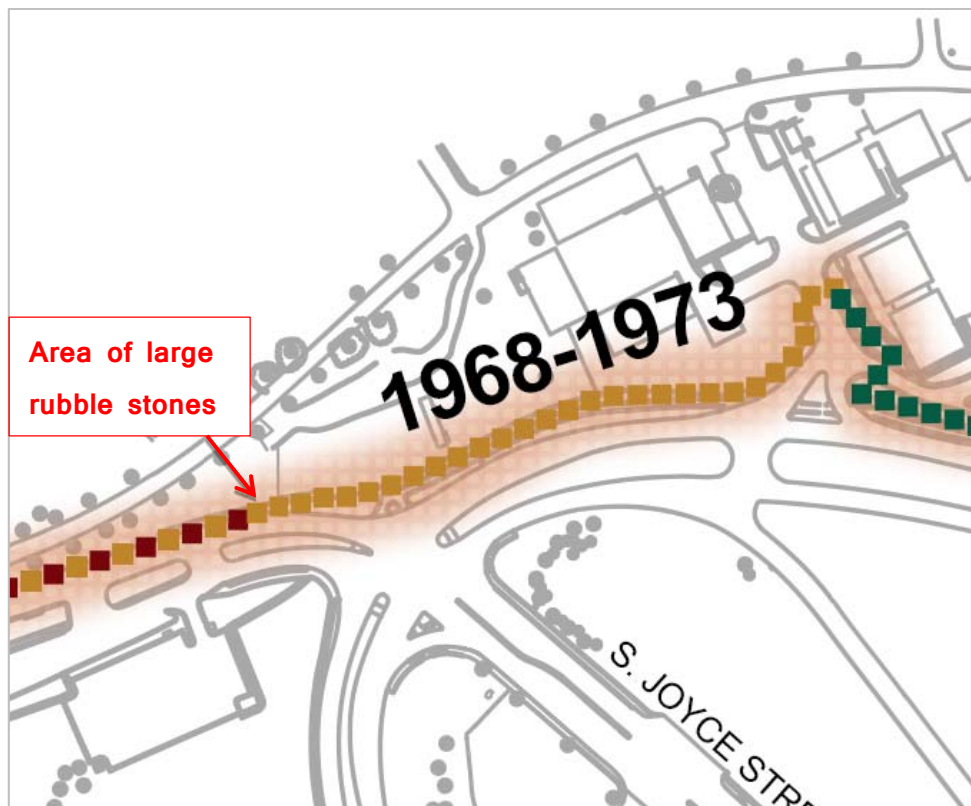


Figure 24- Location of large rubble stones

Adjacent to this area, inside the cemetery is a temporary service area enclosed with a temporary wooden screen. Next to it is a temporary work trailer (See **Figure 25** and **Figure 22** for location).



Figure 25- Service area within wooden screen and adjacent temporary work trailer

Further to the east is the Service Complex Gate. Inside the cemetery to the west of the gate is Service Complex #1 composed of four buildings constructed in the 1970's. To the east of Service Complex #1 is a group of the buildings that make up Service Complex #2 (**Figure 22**), which were constructed in 1998 and expanded around 2010.

The Service Complex Gate has stone piers, topped with a stepped stone cap, at each side of the double leaf metal gate (**Figure 26**). The leaf of the gate is composed of pickets that increase in height from the meeting of the leaves toward the piers in a gentle curve. The end of the gate near the pier has a larger steel member that has a plinth hinge attached near the top that embeds into the pier. A gate operator is attached to each of the leaves.



Figure 26- Main Gate to Service Complex

Section 4 – Built in 2010 (east of the Service Complex Gate to end of study area)

The appearance of the boundary wall changes adjacent to the Main Gate to the Service Complex, with a combination of a slightly different stone and a pre-cast concrete cap (**Figure 27 and Figure 28**). The color of the stone is predominantly blue which varies from the predominate brown of the adjacent wall sections. Rubble stone with some shaping create joints that are fairly tight and consistent. The precast concrete cap has a slight peak in the center; it is composed of shorter segments in a light color with a smooth finish and a mortar joint between segments. The metal fence above remains the same in appearance as the other sections.

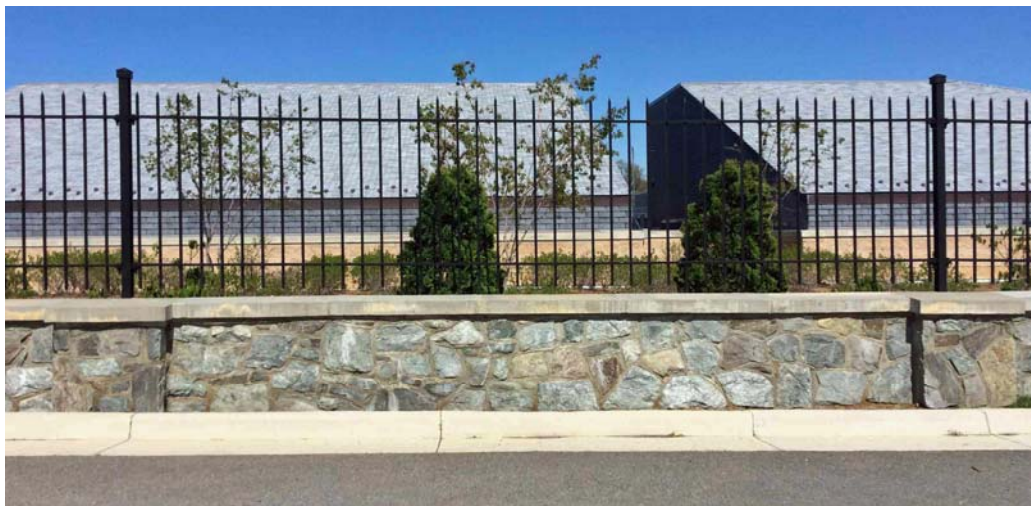


Figure 27- Boundary wall to the east of the Service Complex gate

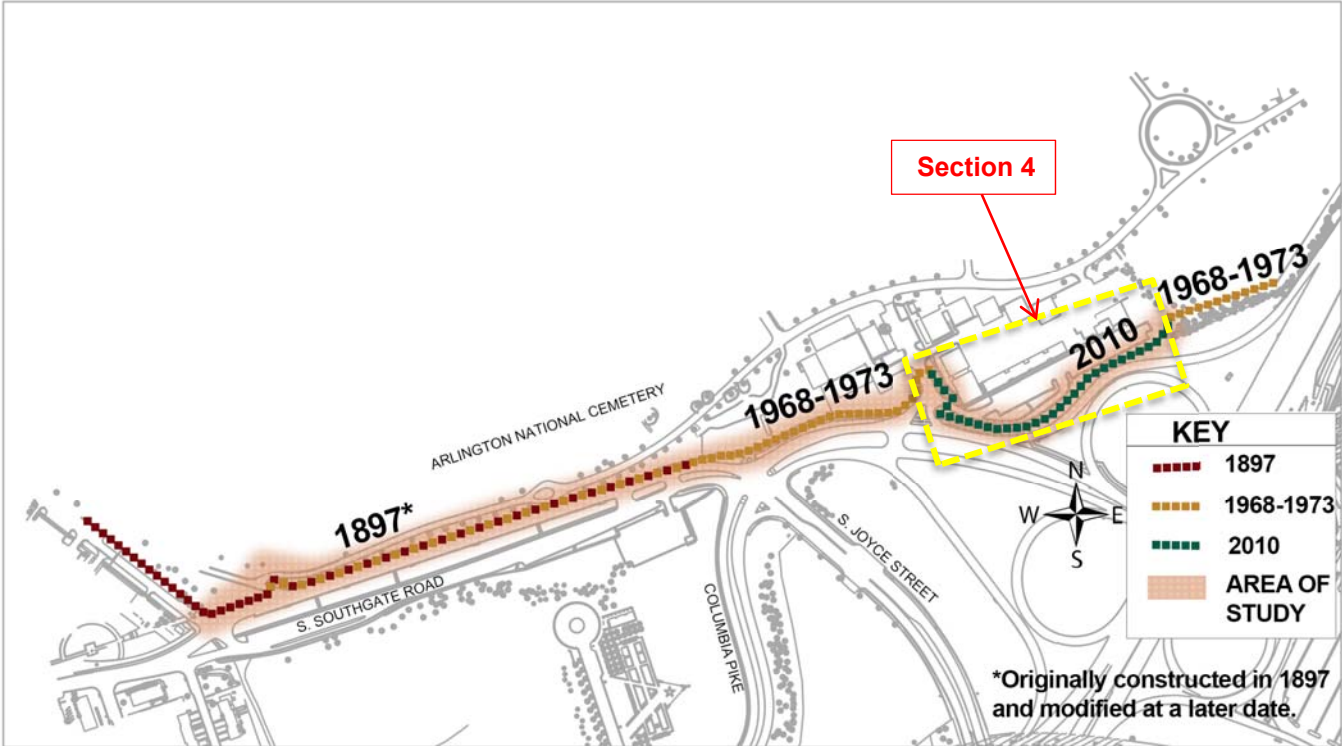


Figure 28- Section 4 Location (east of the Service Complex gate to the end of the study area)

The boundary wall curves around to the secondary gate which serves a parking area for the service area. The piers use a similar stone from the adjacent walls, but a different gate. The aluminum gate has a horizontal top and bottom support and operating mechanism that is independent of the stone piers (Figure 29 and Figure 30).



Figure 29- Secondary service area gate serving a parking area

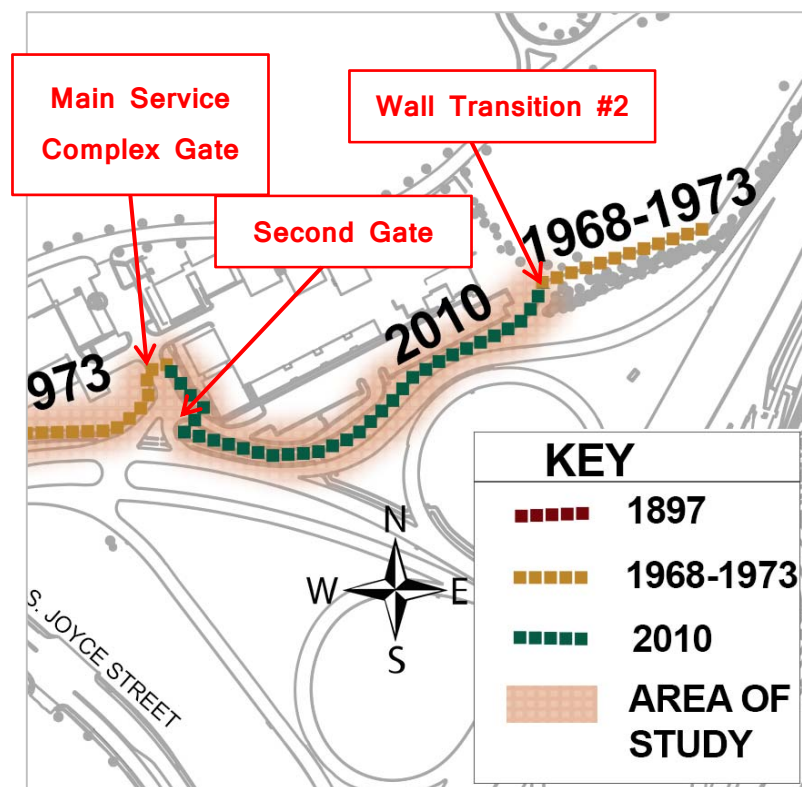


Figure 30- Location of Service Complex gate, second gate serving a parking area and Wall Transition #2

The stone boundary wall continues, curving around the service complex mirroring the curves of exit ramp from South Washington Boulevard, before meeting with a straight section of the wall running further to the northeast. This wall continues to run in a straight line in a northeast/southwest direction. At the intersection of these two sections of the boundary wall the stone changes in color as does the concrete cap (**Figure 31** and **Figure 30**). The study area ends at this perpendicular corner of the boundary wall.



Figure 31- Wall Transition #2 at the east end of the study area

Summary

In conclusion there are four distinct wall types that make up the southern boundary in the area of study. The first wall type was constructed in 1897 at the western end of the study area. The stones that make up the wall vary in color in shades of blue with a few green and brown stones mixed in. The stones are rock-faced with the edges pitched off (straightened) to lay them in a random rubble course. Between the stones is a beaded mortar joint that is roughly flush with the adjacent stone surfaces. The wall is topped with a bluestone cap that slightly overhangs the wall below.

The second type, built in 1897 and altered possibly circa 1968, starts east of the South/Clayton Gate. The characteristics of the stone remain the same as the preceding wall type. However, the cap is a precast concrete capstone with sealant joints and a metal fence is embedded into the cap.

The third wall type starts east of the intersection of Southgate Road with Columbia Pike, where Georgetown and Alexandria Road ran before it was incorporated into the cemetery with the circa 1968 to 1973 expansion. Smaller rubble stones with a more brown color are used and the mortar joints are wider than the other wall types. This section also has a precast concrete capstone and an embedded metal fence on top.

The fourth type of boundary wall, built around 2010, starts adjacent to the Main Gate to the Service Complex. The color of the stone in this section is predominantly blue in color similar to the 1897 wall. A random rubble stone with some shaping is used allowing for consistently tight mortar joints. The precast concrete cap on top of the wall has a slight peak in the center. The cap is composed of short segments in a light color with a smooth finish and a mortar joint between segments. The metal fence above remains the same in appearance as the other sections of the wall (**Figure 32**).

The geological classifications of the stones that compose the wall were not determined, that level of detail information was not required for evaluate the impact on the historic resources.



Figure 32- Typical Wall Types (Viewed from outside at piers)

Condition

Overall the boundary wall is in good condition with limited areas of mortar deterioration (**Figure 33**). In the worst cases plant material is growing from the mortar joint. Many of the sealant joints between the cap stones are no longer fully adhered. For the metal fence there is some surface rusting (**Figure 34**).



Figure 33- Deteriorated Mortar (typical view from outside cemetery)

One section of the fence and wall has evidence of modification. This includes welding segments of fencing and a variety of pipes and rebar that is embedded into to the cap and welded to the fence panel to provide intermediate support (**Figure 34** and **Figure 35**). This location of the wall was likely damaged by a vehicle or intentionally removed to provide a temporary access point.



Figure 34- Fence Weld



Figure 35- Pipe Support at Fence

Resource Evaluation

The resources within the study area were previously evaluated for significance and determined to be contributing to the nationally significant Arlington National Cemetery Historic District¹ with the establishment of the district in April 11, 2014. This section evaluates the resources in the study area, describing how they contribute to the district along with evaluating its integrity; laying the groundwork for evaluating the impact of the proposed undertaking.

Criteria Considerations

Ordinarily cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. Arlington Cemetery qualifies under the *italicized* criterion considerations identified below. The National Register has identified considerations for properties that are integral parts of districts that do meet the criteria, but fall within the following categories:

- a. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- b. A building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life; or

¹ Arlington National Cemetery was listed in the National Register of Historic Places in 2014.

<http://www.nps.gov/nr/feature/places/14000146.htm>

<http://www.nps.gov/nr/feature/places/pdfs/14000146.pdf>

d. A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

g. A property achieving significance within the past 50 years if it is of exceptional importance.

Evaluation-Significance

As indicated in the National Register of Historic Places Registration Form, the Arlington National Cemetery Historic District (Arlington National Cemetery; DHR #000-0042) qualifies for National Register listing under the criteria A, B and C. Criteria Considerations for the property include d, f and g. The Period of Significance is 1864 to present. Significant dates include 1864 (date of first burial), 1920 (Beaux Arts additions) and circa 1968 to 1973 (expansion east of Eisenhower Drive). There are a total of sixty-three contributing resources comprised of 22 buildings, 1 site, 10 structures and 30 objects (not including the 6 resources owned by the National Park Service).

There have been four major expansions to ANC since it was established in 1864: 1) the southern addition in 1888; 2) a further southern addition in 1897; 3) the eastern addition circa 1968 to 1973; and 4) the Millennium addition in 2004 (Hurt & Proffitt).

Determination of Eligibility for National Cemeteries²

² Excerpt from the 1997 Master Plan Technical Report-draft

In 1977 the National Register of Historic Places formulated a general policy about the National Register eligibility of national cemeteries. The National Register found that:

“every national cemetery is potentially eligible and may have inherent national significance. National cemeteries thus generally qualify for the National Register by "association with historic events," and often also include "distinctive design features" and "graves of persons of transcendent importance."

After a consensus with the Veterans Administration (V.A.), the National Register provided the V.A. with a general statement of their approach to national cemeteries. The National Register stated that the age of the cemetery was less important than the events surrounding the creation and use of the cemeteries. Further, the Register stated that areas within the cemetery that were "developed" or laid out for burial were eligible even though burials had not taken place. Recently acquired land not reserved for interments, however, might not be eligible.

Areas within a cemetery in which interments of veterans and their dependents have been made, or which have been clearly prepared for that purpose, even if the cemetery has been recently established, are eligible. Because the cemeteries include the remains of military personnel associated with every war and branch of service, and their dependents, and draw their essential significance from the presence of these remains of those who have served the country throughout its history, the National Register believes the age of the cemetery itself is not necessarily the determining factor.

Consequently, we define as eligible for listing in the National Register those areas in the national cemeteries that you customarily refer to in your documentation as "developed." We take this to mean those areas that have been used or prepared for the reception of the remains of veterans and their dependents. The landscaped zone immediately around such areas is also eligible.

In accordance with articulated National Register policy, as a national cemetery Arlington National Cemetery in its entirety would be eligible for the National Register of Historic Places. Based on this policy, it is our understanding that entire ANC, from the original 1864 establishment of the cemetery through the latest expansion in 2004 (regardless of age) would be part of the National Register Historic District including its enclosing structures.

The evaluation of the wall, internal cemetery roadway, and landscaping are broken down here into subsections based primarily on development periods and the architectural characteristics in different locations.

Masonry Wall:

The boundary wall was erected to enclose the cemetery grounds, but has been altered and expanded as the boundary for the cemetery has changed. The western most portion of the wall west of the former location of Georgetown and Alexandria Road, constructed ca. 1897 meets Criterion C, contributing to the picturesque aspects of Meigs' original design. The section east of the former Georgetown and Alexandria Road does not meet Criterion C, but does meet Criterion A with considerations f and g. The wall maintains a similar appearance and continues to define the extent of the burial area that honors the nation's military deceased.

Fence:

The metal fence maintains a continuous appearance, but is split into two periods. This split occurs at the Service Complex Gate. The west section built circa 1968 to 1973 consists of the wall from the same period, along with the section of the modified 1897 wall. The east section is from 2010. Both meet Criterion A using consideration f and g, defining the boundary of burial area that honors the nation's military deceased.

Gates:

The gates are considered part of the boundary wall providing access into the cemetery grounds. At the western end of the study area is the South/Clayton Gate. Being that this gate was installed as a component of the picturesque landscape from Meigs' original design, this gate meets Criterion C as well as Criterion A. The two gates at the Service Complex do not contribute to picturesque landscape, and therefore only meet Criterion A using consideration f and g, defining the access points to the support area for the cemetery that honors the nation's military deceased.

Roads:

In the 1890's the roads were laid out in a picturesque manner to provide circulation inside the cemetery for access to burial plots. Clayton Drive was laid out during this period, and meets Criterion C for its contribution to the picturesque landscape. While Patton Drive was installed during a later period, it maintains the picturesque appearance west of the Service Complex, and therefore also meets Criterion C. The portions of Patton Drive along the Service Complex meet Criterion A, providing access to the burial sites of the nation's military deceased.

Integrity

Integrity is the ability of a property to convey its significance. To be listed in the National Register of Historic Places, a property must not only be shown to be significant under the National Register criteria, but it also must have integrity. The evaluation of integrity is sometimes a subjective judgment, but it must always be grounded in an understanding of a property's physical features and how they relate to its significance.

Historic properties either retain integrity (convey their significance) or they do not. Within the concept of integrity, the National Register criterion recognizes seven aspects or qualities that, in various combinations, define integrity. These aspects are location, design, setting, materials, workmanship, feeling and association.

To retain historic integrity a property will always possess several, and usually most, of the aspects. The retention of specific aspects of integrity is paramount for a property to convey its significance. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant. The following describes the

evaluation of the southern boundary wall with respect to these seven aspects.

3

Evaluation-Integrity

In general, the wall and inside landscape features (topography, trees, manicured lawn) retain a high level of integrity that contribute to the picturesque landscape that makes up Arlington National Cemetery.

Wall:

The portion of the stone masonry wall west of the South/Clayton Gate at Patton Drive retains a high degree of integrity for all seven aspects (See Figure 7, and Appendix A1.02 to A1.12). This portion of the southern boundary wall has not been significantly altered and is in good repair. Minor deterioration of mortar, slight shifting of masonry units and an overall change of grade over time, which is expected for landscaped areas, do not diminish its integrity to convey the significance of this boundary wall.

The portion of the stone masonry wall with concrete cap stone east of the South/Clayton Gate, extending to the former location of Georgetown and Alexandria Road retains its integrity (See Figure 13, and Appendix A1.13 to A6.12). This section has seen modifications including the replacement of the capstone and addition of a metal fence, along with changes to the grades. The grades were likely changed with the addition of Patton Drive. Even with these changes the fabric of the stone wall remains intact, and the grade changes and additional road contribute to the cemetery fabric. This section of wall retains its original location, materials, and association with the cemetery, while its integrity was reduced with the modifications performed with the addition of the metal fence.

The next portion of the wall is from the former location of the Georgetown and Alexandria Road east to the Service Complex gate (See Figure 28, and Appendix A6.12 to A9.11). This section

³ Excerpted from National Park Service, National Register Bulletin, How to Apply the National Register Criteria for Evaluation.

had extended further, but was partially removed when the Service Complex #2 was constructed. The remaining portion retains a high degree of integrity, with only minor mortar deterioration. Adjacent to the wall are assorted buildings and enclosures that detract for the picturesque setting. This included the temporary service area and Service Complex #1. Since Service Complex #1 was planned and built at the same time as the wall, it does not compromise the integrity of the wall. It retains six of the criterion, with only the setting being currently compromised with the temporary service area.

The last section of the wall starting at the Service Complex Gate, was recently constructed (See Figure 25, and Appendix A9.12 to A12.07). It has seen no modification and has no condition issues. This section retains a high degree of integrity, from its period of erection.

Metal Fence:

The portion of the metal fence between the South/Clayton Gate and the Service Complex Gate has seen some alterations near the edge of the temporary service area, and also has some minor condition issues (primarily surface rusting). Even though this section of fence retains its integrity from its period of installation, the modifications that were performed to the earlier stone wall reduced the integrity of the wall. These modifications also detract from the pastoral and picturesque landscape of gently rolling hills, changing the wall from a boundary marker to a barrier.

The portion of the fence starting at the Service Complex Gate is fairly new with no alterations or condition issues, maintaining all aspects that define its integrity (See Figure 25, and Appendix A9.12 to A12.07).

Gates:

The South/Clayton Gate retains its original location, and maintains its materials and design (See Appendix A1.13). The setting has been altered with the addition of Patton Drive and the adjacent retaining wall. However, its picturesque landscape is retained and therefore enough of the aspects of its integrity remain intact.

The Service Complex Gates are from two different periods. Both maintain their original configuration and materials. The setting of the main gate has been altered with the addition of Service Complex #2, along with the removal of the original wall in the area and the addition of the adjacent boundary wall (See Appendix A9.11). With this area designated as the service area, these alterations do not compromise the integrity of this gate. The secondary gate into the parking area is unaltered in setting and retains its integrity (See Appendix A9.17).

Roads:

Clayton Drive retains its location, but its setting has been slightly altered with the addition of Patton Drive. The addition did not compromise the overall picturesque setting; therefore the integrity of this road remains.

Patton Drive retains its location, design, setting, materials, workmanship, feeling and association, therefore its integrity remains intact.

Assessment of Effect

Summary of Proposed Undertaking

The proposed undertaking is preliminary in nature and has not progressed beyond conceptual stage; the final cemetery design is a separate activity. The objectives for this undertaking are: 1. Cemetery development (in a very broad sense); 2. Roadway realignment, including closure of Southgate Road; and, 3. Roadway safety and operation - new signalized intersections must operate at an acceptable level of service.

The final design for the cemetery seeks to maximize burial space based on the available land and three types of burials - in-ground caskets, in-ground urns, and above-ground urns. Current census shows approximately 1/3 of each. Based on existing inventory of burial spaces, the program and design will be adjusted to achieve the required proportion of each type.

Area of Potential Effect

The area of potential effect is indicated below (**Figure 36**). It is the area north of Interstate 395 and South Washington Boulevard. The western boundary is the adjoining neighborhood and western boundary wall. The northern boundary is defined by the areas within the cemetery that have a view of the boundary wall and expansion area. The eastern extent of the area is defined by the southeast corner of the cemetery.

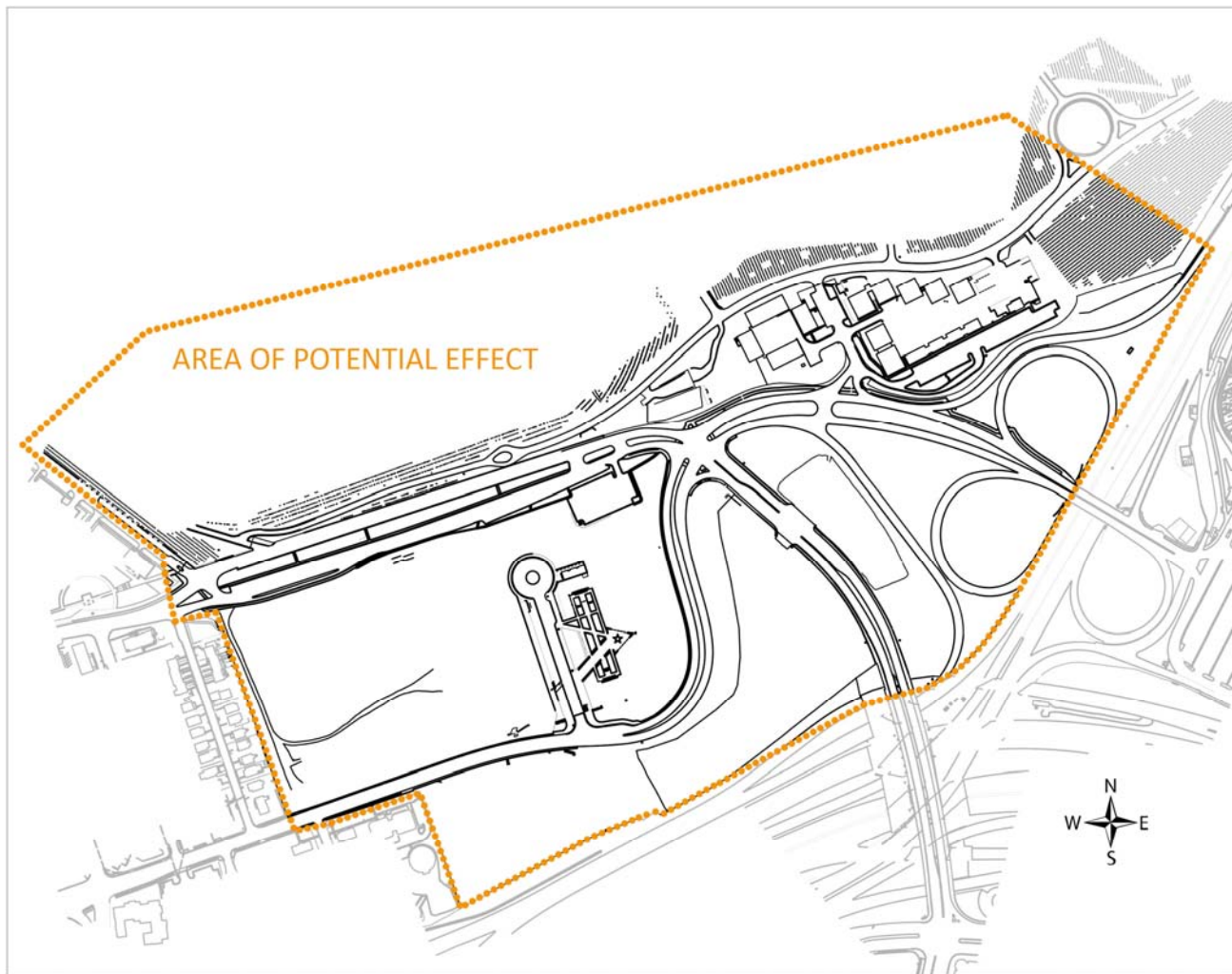


Figure 36 - Area of Potential Effect

Design Options

Two options are being considered - one that would alter the boundary wall to accommodate the cemetery expansion, and an alternative that would not. The alternative design would preserve the historic boundary wall and gates in their current alignment. This alternative would preserve Patton Drive in its current location. All cemetery elements outside the existing southern boundary wall will remain identical as in the preferred option. The realignment of Columbia Pike has been discussed for years, and the final alignment has been agreed on by multiple parties, so there are no alternatives for the road alignment.



Figure 37 - Diagram of Proposed Undertaking

The preferred design (**Figure 37**) involves the deconstruction/removal of the boundary wall and associated fence that runs along the south side of the cemetery as well as the removal of Patton Drive. At the southwest corner near the intersection of Hobson Drive and Southgate Road (**Figure 37-A**) the wall running parallel to Hobson will be retained as well as the section of wall running along Southgate to South/Clayton Gate. Beyond the gate to the east extending to just past the Service Complex (**Figure 37-B**), the wall will be removed. The boundary wall beyond the Service Complex and along South Washington Boulevard will be retained. A new wall is planned to be erected along the new cemetery boundary (**Figure 37-C**).

Along this length of the boundary wall within the study area, there are three gates. Two of the gates are located near the Service Complex (**Figure 37-D**); they will be removed, while the third gate (South/Clayton) (**Figure 37-E**) will be retained.

The proposed action will impact several roads both within and adjacent to the cemetery. The length of Patton Drive (**Figure 37-F**) from Clayton Drive to the intersection with Eisenhower will

be relocated to the south to serve as the main road through the expanded area of the cemetery. Outside the cemetery, Southgate Road will be completely removed. Other roads outside of the boundary will be reconfigured to accommodate the expansion. These include Columbia Pike (**Figure 37-G**), South Joyce Street, and the ramps connecting to South Washington Boulevard.

Assessment of Effect

The proposed undertaking, detailed above, will affect historic resources, as defined in the Advisory Council on Historic Preservation (ACHP) regulations (36CFR 800.5). The complete effect of these actions is unknown at this time, considering the diagram does not cover the design details of the proposed new work.

Adverse Effect:

The proposed plan includes retaining the South/Clayton Gate but removing the wall connected to the east side of the gate. This will alter the gate's current purpose from providing access into the cemetery to acting as a historical marker of the expansion of the cemetery. This impact to its significance creates an adverse effect. There are two approaches that have been used in the past when the boundary wall is moved. The Ord & Weitzel Gate was dismantled and a new gate constructed reusing some of the original stones. Whereas the McClellan Gate remains in its original location along with short segments of the boundary wall, acting as a symbolic entrance to the original portion of the cemetery.

Potential Adverse Effect:

The boundary wall, including sections that have been modified in the past as well as more recently constructed sections, is a contributing element. By definition, any demolition of a contributing element would be considered an adverse effect and require mitigation. While the entire length of the wall being removed should constitute an adverse effect, in this case the proposal relocates the boundary wall to reflect the expansion of the cemetery grounds. Therefore the demolition of this section of wall, east of the South/Clayton Gate, is seen only as a potential adverse effect. The details of the proposed boundary wall are yet to be developed but should match the appearance and characteristics of the existing boundary wall.

The two gates within this section of the boundary wall proposed for removal are at the Service Complex. Although the removal of these gates should constitute an adverse effect, in this case,

a new gate, similar to the existing, is proposed in the new boundary wall. The new gate will provide access, primarily for service vehicles, to the cemetery minimizing the adverse effect. Various other gates are proposed along the new boundary wall for service vehicles, emergency access, and pedestrians. These gates are yet to be designed, but should reflect the characteristics of the existing gates.

Parts of the existing boundary wall currently serve as a retaining wall (**Figure 19&20**). In addition, there are also two segments of retaining walls independent of the boundary wall along Patton Drive. With the removal and relocation of Patton Drive these retaining walls may no longer be required. The current diagram does not indicate how the grades will be altered to address these. These changes will likely involve the removal of historic resources and changes to the current contours, resulting in a potential adverse effect. The impact can be minimized if the expansion maintains the picturesque landscape of gentle rolling hills following the natural contours.

The removal of Patton Drive from Clayton Drive to the intersection with Eisenhower is an adverse effect. With its relocation to the south, it will continue to serve as the main road through this section of the cemetery, resulting in a potential adverse effect. Additional circulation roads are proposed to provide access to the expanded interment areas. These access roads shall be designed to match the other roads in the cemetery and will be laid out to maintain the picturesque nature of the cemetery to prevent any adverse effect. The proposed expansion affects several roads outside the cemetery. The impact outside of the cemetery is not being evaluated for adverse effect since the focus of this report was limited to the existing boundary wall and adjacent features only. The scope of work for the cemetery expansion includes removing Southgate Road and reconfiguring the outside roads such as Columbia Pike, South Joyce Street and the ramps connecting to South Washington Boulevard.

The alternative design retains the historic boundary wall, but it will no longer mark the boundary of the cemetery, altering its context. Depending on how the adjacent grades are altered and the new boundary wall joins the existing wall, there is the potential for an adverse effect with this alternative design.

Mitigation and Consultation

The National Historic Preservation Act requires that any adverse effect to historic property be addressed and for the US Army Corps of Engineers (USACE) to consult with the State Historic Preservation Office (SHPO). USACE can independently consider other alternatives that reduce or eliminate any adverse effect before consulting with the SHPO as required by Section 106. If USACE chooses to submit a finding of adverse effect pursuant to 800.5(d)(2), then USACE shall consult further with the SHPO and other consulting parties to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on historic properties. If there is a finding of adverse effect, the Advisory Council on Historic Preservation (ACHP) must be given an opportunity to comment prior to executing a Memorandum of Agreement (MOA).

The Consulting Parties opportunity to comment:

At the heart of Section 106 review is the comment process. In most cases, this takes the form of consultation among the Federal agency, the State Historic Preservation Officer, and ACHP staff; although at times other interested parties may be invited to participate. During consultation, these parties attempt to reach agreement on measures to avoid, minimize, or mitigate the adverse effects of the agency's undertaking.

Memoranda of Agreement are similar to contracts, and courts defer to the interpretation of the signatories in questions regarding the meaning of the agreement's language. Where an MOA has been signed, it must govern the undertaking and all its parts. If a Federal agency consults with the ACHP and SHPO and agrees to certain mitigation measures by incorporating them into permit conditions but does not execute an MOA, courts have found substantial compliance with the ACHP regulations and the intent of NHPA fulfilled.

However, it is recommended that an MOA be executed as part of the consultation process. This document should identify the pertinent aspects of agreements reached for mitigation of adverse effect and outline rights, responsibilities, and procedures to fulfill the intent of the agreement, in the event that disputes arise.

Effect of the Advisor Council on Historic Preservation comments:
