

4.0

ENVIRONMENTAL CONSEQUENCES

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Cultural Resource Impacts

4.1.1 Historic Resource Impacts

The National Historic Preservation Act of 1966 (NHPA), as amended, establishes standards for evaluating potential effects on historic resources. The NHPA defines “effect” as an “alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register” (36 CFR 800.16) and requires that the lead agency, in consultation with the SHPO, determine whether the effect is adverse. According to the NHPA, an “adverse effect” occurs “when an undertaking may alter, directly or indirectly, any of the characteristics of the historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association” (36 CFR 800.5).

Section 101(b)(4) of NEPA requires federal agencies to coordinate and plan proposed actions to, among other goals, “preserve important historic, cultural, and natural aspects of our national heritage.” The White House Council on Environmental Quality (CEQ) regulations implementing NEPA also require an evaluation of effects on historic resources as part of an Environmental Assessment (EA) or Environmental Impact Statement (EIS). In accordance with the Advisory Council on Historic Preservation (ACHP) regulations implementing Section 106 of the NHPA, effects on cultural resources are identified and evaluated by (1) determining the area of potential effects, (2) identifying cultural resources present in the area of potential effects that were either listed in, or eligible to be listed in, the National Register of Historic Places, (3) applying the criteria of adverse effect to affected resources, and (4) considering ways to avoid, minimize, or mitigate adverse effects.

Potential effects to historic resources include direct and indirect effects. The alteration, physical displacement, or demolition of a resource is a direct adverse effect; changes in the use, operation or character of a resource can be either direct or indirect effects; and changes to the visual context are considered indirect effects. ‘Impacts’, as used under NEPA, and ‘effects’, as used under NHPA, are synonymous.

Consistent with Section 106 of the NHPA, consultation was initiated in June 2007 and has involved coordination with appropriate agencies and individuals. As recommended by the CEQ, the Section 106 process is being undertaken concurrent with the environmental review process mandated by NEPA. GSA is the lead agency in the Section 106 process. NCPC hosted an initial public scoping/Section 106 meeting on June 25, 2007. Additional meetings occurred on July 2, 10, and 23, 2007. The Section 106 process will continue throughout the environmental review process. As identified in Chapter 3, historic resources within the study include the Lafayette and United Mine Workers Buildings, the L’Enfant Plan, and the 15th Street Financial and Lafayette Square Historic Districts.

Perimeter Security Alternative A

Under Perimeter Security Alternative A, a series of granite-sheathed bollards, granite benches, planters, and hardened streetlights would be installed around the perimeter of the Lafayette Building. The bollards would be trapezoidal shafts, 39” high and 12” in diameter. The security elements would be placed four feet apart on center. New street trees would be planted along the exterior perimeter of the security elements, between the security line and the street.

The installation of perimeter security elements would not have direct adverse effects on the Lafayette Building because the building’s primary significance derives from association with the Reconstruction Finance Corporation and Jesse Jones. However, the implementation of Perimeter Security Alternative A would have indirect visual effects on the reciprocal street level views to and from the Lafayette Building and adjacent historic parks and properties. The security elements would appear as relatively minor elements in the foreground of these views.

The installation of security elements along Vermont Avenue, and H and I Streets, NW would also form both physical and visual barriers between the building facades and the roadways, altering the continuity of the roadways and the historic spatial relationships that are important features of the L’Enfant Plan. Along 15th Street, NW the effects would be moderate due to the placement of the security elements at the edge of the existing retail seating areas (except at corner and alley crossings). The implementation of Perimeter Security Alternative A would also adversely affect views along the Vermont Avenue corridor, a contributing view in the Plan. Thus, the Perimeter Security Alternative A would have adverse effects on the L’Enfant Plan.

The placement of the security barrier around the Lafayette Building would interrupt the continuity within the 15th Street Financial Historic District, isolating the Lafayette Building from most of the other resources that are located within this district. While the proposed barriers would serve to unify the Lafayette Building with the adjacent Shoreham Building because of the similar sidewalk treatment, this treatment would isolate the block from the rest of the 15th Street Financial Historic District, most notably the Southern, Union Trust, Liberty National Bank, and Bowen Buildings. Thus, the 15th Street Financial Historic District, which is a linear historic district characterized by homogeneous architectural character along both sides of the street, would be adversely affected by the implementation of Perimeter Security Alternative A.

The bollards and benches proposed along Vermont Avenue would be visible from Lafayette Square looking northeast along Vermont Avenue to McPherson Square, affecting the quality of this historic view. The bollards and tree enclosures proposed along Vermont Avenue would be prominent in ground-level views of the Lafayette Building from the Veterans Affairs Building across the street, as well as in ground-level views to the north from the Dolly Madison House on H Street, NW. Thus, the Lafayette Square Historic District would also be adversely affected under Perimeter Security Alternative A.

Perimeter Security Alternative A would have additional adverse affects on views southwest to the Lafayette Building from the United Mine Workers Building, a National Historic Landmark, as the security improvements would alter the open urban relationship between the two buildings.

Overall, adverse effects to historic resources resulting from the implementation of Perimeter Security Alternative A would be moderate.

Possible Mitigation Measures

- To the extent possible, the physical features that would provide perimeter security should consist of hardened streetscape elements, such as streetlights, trash receptacles, and bike racks, to minimize the number of bollards required.
- Where bollards are unavoidable, the elements should be made less visible and designed to reflect the architectural style of the building. The bollards should be smaller in size (both shorter and thinner), spaced farther apart (five feet rather than four feet), and constructed of metal.

Perimeter Security Alternative B

Under Perimeter Security Alternative B, the sidewalks on Vermont Avenue, and H and I Streets, NW would be widened from 19' to 40' and a series of tree enclosures and bollards would be installed between the sidewalk and the curb. The bollards would be black metal, 30" high, with a six-inch diameter placed five feet apart on center. On Vermont Avenue, the three existing trees would remain, forming a double row of street trees. On H and I Streets, NW, the trees would be replaced.

The installation of perimeter security elements would not have direct adverse effects on the Lafayette Building because the building's primary significance derives from association with the Reconstruction Finance Corporation and Jesse Jones. However, the implementation of Perimeter Security Alternative B would have indirect visual effects on the reciprocal street level views to and from the Lafayette Building and adjacent historic parks and properties. The security elements would appear as relatively minor elements in the foreground of these views.

In general, Perimeter Security Alternative B would divide the building face from the roadway, thereby breaking the continuity of these roadways and altering the historic spatial relationships established by the L'Enfant Plan. Although under this alternative, the security elements would affect the historic view along Vermont Avenue, this alternative would also have positive effects on the L'Enfant Plan by widening the sidewalk on Vermont Avenue, and aligning it with the path through McPherson Square and the sidewalk on the blocks of Vermont Avenue to the north. These sidewalk enhancements would strengthen the historic Vermont Avenue axis although the installation of a second line of street trees along the edge of the roadway would narrow the view corridor slightly. From the center of the roadway looking north to McPherson Square, the additional trees would not alter the distant axial view through the square further up Vermont Avenue; however, in views looking south toward Lafayette Square, the narrowed corridor may slightly reduce the visibility of the Kosciusko statue that is located in the northeast corner of the park. A 1939 Baist Real Estate Map shows that the historic curb line on I Street, another L'Enfant street, was 25' from the face of the Lafayette Building. This alternative would restore the historic sidewalk width and align the sidewalk on I Street with the block to the west, thereby strengthening this important commercial corridor.

The placement of the security barrier around the Lafayette Building would interrupt the established continuity of the 15th Street Financial Historic District, isolating the Lafayette Building and the adjacent Shoreham Building from the other blocks and resources located within the district. Thus implementation of this alternative would result in adverse effects to the linear quality of the 15th Street Financial Historic District.

The bollards and tree enclosures proposed along Vermont Avenue would be visible from Lafayette Square looking northeast to McPherson Square, affecting the quality of the historic view. The new line of trees would narrow the view corridor closest to H Street, NW slightly but would not obstruct distant views through McPherson Square and along Vermont Avenue to the north. The bollards and tree enclosures proposed along Vermont Avenue would be prominent in ground-level views from the Veterans Administration Building and would adversely affect views to the north from the historic Dolly Madison House on H Street, NW. Thus, the Lafayette Square Historic District would be adversely affected by the implementation of Perimeter Security Alternative B.

Perimeter Security Alternative B would have additional adverse affects on views to the southwest from the United Mine Workers Building, a National Historic Landmark, located northeast of the Lafayette Building, as the security improvements would alter the open urban relationship between the two buildings.

Overall, implementation of Perimeter Security Alternative B would result in a range of effects. Adverse effects to historic resources would be moderate; however, positive effects would also result from widening of the Vermont Avenue sidewalk and the reestablishment of the axis connecting the sidewalk through McPherson Square to Vermont Avenue north of the square. Positive effects would also result from the reestablishment of the historic sidewalk width on I Street.

Possible Mitigation Measures

- To the extent possible, the physical features that would provide perimeter security should consist of hardened streetscape elements, such as streetlights, trash receptacles, and bike racks, to minimize the number of bollards required.

No Action Alternative

Under the No Action Alternative, perimeter security elements would not be installed at the Lafayette Building. Thus, the identified adverse effects on historic resources, including those that would result from placing physical security barriers within the public realm, altering the historic setting of the building, and interrupting the linear quality of adjacent corridors, would not occur. Similarly, the positive effect that would be generated by widening the sidewalks around the perimeter of the building would not occur.

4.1.2 Visual Resource Impacts

The visual impact assessment for the proposed Lafayette Building perimeter security project addresses potential changes to views and vistas that can be attributed to the proposed action. Impacts to views and vistas are determined based on an analysis of the existing quality of the view, the sensitivity of the view (such as important views from historic and cultural sites) and the anticipated relationship of the proposed design elements to the existing visual environment.

Visual impacts in the analysis presented below are described in the following categories:

- **No visual impact** – The proposed security elements would not result in any visual changes.
- **Minor visual impact** – The proposed security elements would be visible, but would not interfere with views and would not change the character of the existing views.
- **Moderate visual impact** – The proposed security elements would be visible and would interfere with existing views, but would not change the character of the existing views.
- **Major visual impact** – The proposed security elements would be visible as a contrasting or dominant element that interferes with views and substantially changes the character of the existing views.
- **Positive visual impact** – The proposed security elements would improve a view or the visual appearance of an area.

Perimeter Security Alternative A

Views Along Vermont Avenue

Under Perimeter Security Alternative A, a line of dark granite bollards and benches would be placed along the edge of the sidewalk. The bollards would have a trapezoidal design, would be 12” across, 39” high, and would be spaced four feet apart on center. Every effort would be made to preserve the three existing street trees on Vermont Avenue; however, it is likely that bollard construction activities would damage the root systems. . In the event that the trees need to be removed, new trees would be planted in their places. In addition, seven new street trees would be planted along the curb line of the avenue.

Under Perimeter Security Alternative A, there would be a noticeable visual contrast between the openness of the streetscape in front of the Veterans Affairs Building and the security elements in front of the Lafayette Building. However, the addition of seven street trees would enhance the view by strengthening the green edge of the corridor.

Looking north along Vermont Avenue from Lafayette Square, the form of the bollards would be particularly prominent in the view of the southwest corner of the building. Further north in the view, the benches and bollards would be visible along the edge of the roadway, although they would be partially obscured when cars and motorcycles are parked on the east side of the street.



Figure 4-1

Simulation Showing Proposed Security Elements at Corner of Vermont Avenue and H Streets

(Source: GSA, 2007)

Looking south along Vermont Avenue from McPherson Square, the form of the bollards around the corner of the sidewalk at I Street, NW would be prominent in ground-level views. Further south in the view, the elements would be visible between the sidewalk and the face of the building below the tree canopy, although they could be partially obscured by parked cars. The security elements would have no impact on the visibility of the statue at the northeast corner of Lafayette Square. Overall, adverse impacts to views along Vermont Avenue, considered an important part of the L'Enfant Plan, would be moderate due to the introduction of physical barriers and the likely loss of two mature trees; however, there could be slight positive impacts from the addition of seven new street trees.

Views Along H Street, NW

Under Perimeter Security Alternative A, two new trees would be added along H Street, NW, just east of the existing tree that would likely require replacement. A line of bollards would connect the three tree panels. The bollards would be visible in views to the east on H Street from the roadway, contrasting with the open sidewalk on the south side of the street. From inside the sidewalk looking east, the bollards would form a visual edge, dividing the sidewalk from the roadway. At the parking garage, the bollards would cross the sidewalk, physically and visually disconnecting the Lafayette Building streetscape from that of the adjacent hotel. Looking west from the sidewalk in front of the Sofitel Hotel, the bollards would be visible in the distance

crossing the sidewalk and would form a broken granite line along the edge of the curb. Overall, adverse impacts to views on H Street would be moderate.

Views Along 15th Street, NW

On 15th Street, NW a line of granite bollards and benches would divide the sidewalk from the outside seating areas of the eating establishments within the Lafayette Building. On the outside of the security elements, five small shade trees in planting beds would mirror the line of Elm trees at the curb. Looking north from the Sofitel Hotel, the security line would appear as a predominantly green edge, continuing the line of plantings established by the hotel. Looking south from McPherson Square, a line of granite bollards would intrude diagonally across the sidewalk at the corner of 15th and I Streets. The new trees would be visible, mirroring the Elm trees that line the curb. Due to the location of the security elements, there would be little impact to views north from the roadway. Overall, impacts to views along 15th Street, NW would be minor, with positive impacts resulting from the addition of the second row of trees.

Views Along I Street, NW

Along I Street, NW, a line of granite bollards would connect the four tree panels that would enclose the new tree plantings. The bollards would be visible in views to the east and west on H Street from the roadway, contrasting with the open sidewalk adjacent to McPherson Square. However, cars parked along the edge of the roadway could partially obscure the security elements. From inside the sidewalk looking east and west, the bollards would form a visual edge, dividing the sidewalk from the roadway. Overall, visual impacts would be moderate.

Possible Mitigation Measures

- To the extent possible, the physical features that would provide perimeter security should consist of hardened streetscape elements, such as streetlights, trash receptacles, and bike racks, to minimize the visual impact of the improvements.
- Where bollards are unavoidable, the elements should be made less visible and designed to reflect the architectural style of the building. The bollards should be smaller in size (both shorter and thinner), spaced farther apart (five feet rather than four feet), and constructed of a metal material that would complement the architectural detail of the building..

Perimeter Security Alternative B

Views Along Vermont Avenue

Under Perimeter Security Alternative B, the sidewalk would be widened and a line of metal bollards would alternate with tree enclosures at the edge of the curb. The bollards would be 6” in diameter, 30” high, and would be spaced five feet apart on center. Every effort would be made to maintain the three existing trees on Vermont Avenue; however, it is possible that extension of the curb line may damage the root systems and that the trees may not survive. In the event that the trees need to be removed, new trees would be planted in their places. A line of eight street trees would also be added along the new curb line. The double row of trees would enhance the existing sidewalk area and their affect on the Vermont Avenue viewshed is illustrated in Figure 4-2. At the corner of Vermont Avenue and H Street, NW the existing planting bed would be enlarged to serve a security function.

The widening of the sidewalk under Perimeter Security Alternative B would visually connect the Lafayette Building’s sidewalk with the diagonal path through McPherson Square and the Vermont Avenue sidewalk to the north. The new line of street trees would frame this view; however, the line of bollards at the edge of I Street, NW would interrupt it slightly.



Figure 4-2
View North on Vermont Avenue Showing Conceptual Placement of New Trees and Curb
Source: NCPC, 2007

Looking south from McPherson Square, an important viewshed in the L'Enfant Plan, the new trees would eventually narrow the view to Lafayette Square, although the Kosciusko statue would still be a prominent focal point at the corner of the park. However, the expanded public realm would improve the view by creating a stronger green edge to the corridor. The bollards and tree enclosures would be visible at the edge of the roadway, and would contrast somewhat with the openness of the streetscape in front of the Veterans Administration Building.

Looking north along Vermont Avenue from Lafayette Square, the line of bollards would be a visible barrier crossing the sidewalk. The increase in the number of street trees would enhance the green character of the view. The bollards and tree enclosures would be visible along the edge of the roadway, although they would be partially obscured when cars and motorcycles are parked on the east side of the street. The new line of street trees would narrow the view slightly to McPherson Square, but it would not obstruct the view of the statue at the center of the square or the Vermont Avenue axis to the north. Overall, impacts to views along the important Vermont Avenue corridor would be minor, with positive impacts resulting from the alignment of the sidewalk with the visual axis through McPherson Square, the strengthening of the green edge, and the expansion of the public realm along the east side of the roadway.

Views Along H Street, NW

Under Perimeter Security Alternative B, the sidewalk would be widened on the north side of H Street and a line of metal bollards and tree enclosures would be placed along the curb line. The bollards would be visible in views to the east on H Street, NW from the roadway, contrasting with the open sidewalk on the south side of the street and visually separating the Lafayette Building from the adjacent hotel. More importantly, looking east or west along the H Street sidewalk a line of bollards would cross the sidewalk, partially obstructing the view. Overall, due to the introduction of physical barriers across the sidewalk and the visual separation of the Lafayette Building from adjacent uses, the adverse impacts to views on H Street, NW would be moderate.

Views Along 15th Street, NW

On 15th Street, NW a low terrace wall and planting beds would alternate with metal bollards, dividing the sidewalk from the outside seating areas of the eating establishments within the Lafayette Building. Looking north from the Sofitel Hotel, the security line would appear as a predominantly green edge, continuing the line of plantings established by the hotel. Looking south from McPherson Square, a line of metal bollards would intrude across the sidewalk at the corner of 15th and I Streets, NW. Due to the location of the security elements, there would be little impact to views north from the roadway. Overall, impacts to views along 15th Street, NW would be minor with positive impacts resulting from the continuation of the green edge established by the Sofitel Hotel to the south.

Views Along I Street, NW

Along I Street, NW, the sidewalk would be widened to align and visually connect it with the I Street sidewalk to the west of the Lafayette Building. However, a line of bollards would intrude across the sidewalk at 15th Street and Vermont Avenue, partially obstructing the view along the sidewalk. Along the edge of I Street, a line of metal bollards would connect the four tree panels. The bollards would be visible in views to the west on H Street from the roadway, contrasting with the open sidewalk adjacent to McPherson Square. However, the removal of on-street parking along I Street would enhance this view, framing it with the line of street trees. Overall, adverse visual impacts to the I Street corridor would be moderate with positive impacts resulting from the realignment of the sidewalk and the removal of on-street parking.

Possible Mitigation Measures

- To the extent possible, the physical features that would provide perimeter security should consist of hardened streetscape elements, such as streetlights, trash receptacles, and bike racks, to minimize the visual impact of the security measures.

No Action Alternative

Under the No Action Alternative, the temporary security planters that span the entrance to the Lafayette Building on Vermont Avenue would be removed. Given that these planters are not in keeping with the historic character of the Lafayette Building, the removal of these elements would improve the visual quality of the Vermont Avenue streetscape. In addition, because no additional security measures would be installed along H, I, or 15th Streets, NW, there would be no positive or negative visual impacts to views along these corridors.

4.2 Land Use and Planning Policy Impacts

4.2.1 Land Use Impacts

Perimeter Security Alternative A

Perimeter Security Alternative A would not alter land uses on the site or within the surrounding area. Due to the size and spacing of the bollards, connectivity between the Lafayette Building and adjacent blocks could be impacted slightly, particularly during peak pedestrian hours. Restaurant uses within the Lafayette Building would be enhanced by the definition of seating areas along 15th Street, between the building and the sidewalk. However, non-restaurant retail operations in these storefronts may be adversely impacted by placing barriers between the pedestrian zone and the retail zone of the sidewalk. This impact would be minimized by the alignment of the porous portions of the security line with the retail entrances.

The Sofitel Hotel, and to a lesser extent the land uses that border the Lafayette Building, could be more vulnerable to terrorist activity, because the line of security at the Lafayette Building would be pushed further away from the face of the building and closer to the surrounding uses. Overall, impacts to land use would be minor.

Perimeter Security Alternative B

Perimeter Security Alternative B would not alter land uses on the site or within the surrounding area. Due to the open, porous nature of the security improvements, connectivity between the Lafayette Building site and the adjacent blocks would not be interrupted. Restaurant uses within the Lafayette Building would be enhanced by the definition of seating areas along 15th Street, between the building and the sidewalk. However, non-restaurant retail operations in these storefronts may be adversely impacted by placing barriers between the pedestrian zone and the retail zone of the sidewalk. This impact would be minimized by the alignment of the porous portions of the security line with the retail entrances.

The Sofitel Hotel, and to a lesser extent the land uses that border the Lafayette Building, could be more vulnerable to terrorist activity, because the line of security at the Lafayette Building would be pushed further away from the face of the building and closer to the surrounding uses. Overall, impacts to land use would be minor.

No Action Alternative

Under the No Action Alternative, perimeter security improvements would not be installed at the Lafayette Building. Thus, there would be no impact on land uses on the site or within the surrounding area. The No Action Alternative provides no protection against identified threats and does not meet GSA's purpose and need.

4.2.2 Planning Policy Impacts

Perimeter Security Alternative A

Perimeter Security Alternative A would comply with portions of the Federal Elements of the Comprehensive Plan. However, contrary to the Plan, Perimeter Security Alternative A would impair the health of existing trees, could impact pedestrian flow during peak hours, and could interfere with the adjacent hotel's operations by impeding daily deliveries to the facility, thus resulting in adverse impacts. In addition, Perimeter Security Alternative A would have adverse effects on the view along Vermont Avenue, a significant element in the L'Enfant Plan.

Perimeter Security Alternative A would comply with portions of the NCPC Security Plan and the subsequent Policies and Objectives. The design would employ a range of streetscape elements hardened for security purposes and would respond to the architectural context of the historic Lafayette Building. Regarding the installation of barriers in public space, the Policies and Objectives allow for barriers in public space if the distance from the face of the building to the outer edge of the building yard is less than 20', but also state that the placement of barriers in public space is discouraged and should be avoided. In addition, the alternative would impact pedestrian circulation and could impact commerce at the adjacent hotel.

Perimeter Security Alternative A appears to not respond to the recommendations of DDOT's Departmental Order 301.03, because the proposed security elements would be placed within the public sidewalk rather than being placed on private land, as recommended in the Order. For this reason, DDOT has expressed serious concerns about the project. In addition, DDOT opposes any reduction in travel lanes or on-street parking. GSA will need to obtain a public space permit from DDOT and a permit from the Urban Forestry Administration to remove the existing trees on Vermont Avenue, and H and I Streets, NW.

Perimeter Security Alternative B

Perimeter Security Alternative B would be consistent with some of the Federal Elements of the Comprehensive Plan in that the widening of the sidewalk on Vermont Avenue would enhance elements of L'Enfant's view along the roadway by aligning the sidewalk with the paths through McPherson Square, and the sidewalks on Vermont Avenue north of McPherson Square. The widening of the sidewalk on I Street would also enhance elements of the L'Enfant Plan by restoring the sidewalk to its historic alignment. However, contrary to the Federal Elements, Perimeter Security Alternative B would impair the health of existing trees and could interfere with the adjacent hotel's operations by impeding daily deliveries to the facility as well as other hotel operations.

Perimeter Security Alternative B would comply with portions of the NCPC Security Plan and the more recent Policies and Objectives. The design would employ a range of streetscape elements hardened for security purposes, would minimize any impact on pedestrian flow through the spacing of the bollards and the widening of the sidewalks, and would respond to the architectural context of the historic Lafayette Building. Regarding the installation of barriers in public space, the Policies and Objectives allow for barriers in public space if the distance from the face of the

building to the outer edge of the building yard is less than 20', but also state that the placement of barriers in public space is discouraged and should be avoided. The alternative could also impact commerce at the adjacent hotel.

Perimeter Security Alternative B would appear to not respond to the recommendations of DDOT's Departmental Order 301.03, because the proposed security elements would be placed within the public sidewalk rather than being placed on private land, as recommended in the Order. For this reason DDOT has expressed serious concerns about the project. In addition, DDOT opposes any reduction in travel lanes or on-street parking. GSA will need to obtain a Public Space Permit from DDOT and a permit from the Urban Forestry Administration to remove the existing trees on Vermont Avenue, and H and I Streets, NW.

No Action Alternative

Under the No Action Alternative, perimeter security improvements would not be installed in the public realm surrounding the Lafayette Building and streetscape enhancements would not be undertaken. As a result, the adverse and positive effects associated with either of the build alternatives would not occur.

4.3 Vegetation Impacts

Perimeter Security Alternative A

Under Perimeter Security Alternative A, the installation of the security barriers would likely damage the root systems of the three existing street trees on Vermont Avenue, including the 36" caliper Oak tree near the corner of H Street, NW. Although every effort would be made during construction to preserve these trees, their long-term survival is unlikely. In keeping with the Downtown BID Streetscape Guidelines, a line of Red Oak trees would be planted along Vermont Avenue, 40' apart on center.

The trees on H and I Streets are relatively small. In the event that the root systems are damaged during construction activities, the impact would be minimal to the site.

Impacts to the mature Elm trees that line 15th Street, NW would not likely occur as a result of the proposed security elements, as the bollards and benches would be placed in the middle of the sidewalk away from the trees' root systems. A second line of street trees, shrubs and grasses would be planted in tree openings on the sidewalk side of the security elements, creating a green edge that would mirror the existing line of Elm trees along the curb.

Overall, Perimeter Security Alternative A would have a moderate impact to vegetation on the site, with positive impacts resulting from the new planting beds and trees along 15th Street, NW.

Possible Mitigation Measures

- Care should be taken during construction on 15th Street, NW to ensure that the root systems of the existing trees are not damaged.
- The total caliper of trees removed from the perimeter of the Lafayette Building must be replaced on the site to the extent possible, with the balance of the trees placed nearby. Approval by DDOT would be required.

Perimeter Security Alternative B

Under Perimeter Security Alternative B, the root systems of the three existing trees on Vermont Avenue may be damaged during expansion of the sidewalk. However, the root systems would likely be confined to the inside of the sidewalk. Careful removal of the existing curb could reduce the likelihood of damage to these root systems. Although every effort would be made during construction to preserve these trees, particularly the 36" caliper Oak tree near H Street, their long-term survival is uncertain. If they do not survive, new trees would be planted in their places. In accordance with the Downtown BID Streetscape Guidelines, Red Oak trees would be planted 40' apart on center along the edge of the new curb line, supplementing the existing trees if they can be saved.

Along H and I Street, NW the existing small trees would be replaced by street trees along the new curb lines. In accordance with the Downtown BID Streetscape Guidelines, Halka Honeylocusts would be planted on H and I Streets, 40' apart on center.

Impacts to the mature trees that line 15th Street, NW should not occur as a result of the proposed security elements, as the bollards and terrace wall would be placed in the middle of the sidewalk away from the trees' root systems. Planting beds would be placed on the sidewalk side of the terrace wall, partially shielding the wall from view and creating a green line consistent with the placement of the planters and seating area in front of the Sofitel Hotel to the south.

Overall, Perimeter Security Alternative B would have a minor impact to vegetation on the site with positive impacts resulting from the additional row of trees along Vermont Avenue and the new planting beds along 15th Street, NW.

Possible Mitigation Measures

- Care should be taken during construction on 15th Street, NW to ensure that the root systems of the existing trees are not damaged.
- The total caliper of trees removed from the perimeter of the Lafayette Building must be replaced on the site to the extent possible, with the balance of the trees placed nearby. Approval by DDOT will be required.

No Action Alternative

Under the No Action Alternative, perimeter security improvements would not be installed at the Lafayette Building. Thus, there would be no positive or adverse impacts on the trees or other vegetation on the site.

4.4 Transportation Impacts

4.4.1 Vehicular Circulation Impacts

Perimeter Security Alternative A

Physical Security Elements

The construction of the security elements under Perimeter Security Alternative A would not create additional disruptions to vehicular circulation and parking, as the security improvements would be installed at the same time as the building modernization. Once construction is complete, the addition of the security elements would not result in a change in traffic volumes on roadways providing access to the Lafayette Building; however, local traffic patterns would be altered as a result of the security screening process as discussed below.

Security Screening Process

The screening of vehicles entering the parking garage on H Street, NW and the public alley on 15th Street, NW would be conducted adjacent to those areas. A screening area along the north side of H Street, NW just west of the garage, and the area along 15th Street just north of the public alley would be designated for this purpose. In order to accommodate these functions, the north side of H Street, NW between Vermont Avenue and the parking garage entrance would be designated as “No Parking Tow Away Zone”. The existing parking spaces located along H Street, NW between Vermont Avenue and the parking garage entrance would be designated as a “left turn only” lane. Similarly, a no parking zone would be created along 15th Street, NW between the public alley and the beginning of the northbound left turn pocket at the 15th Street/I Street intersection. The restricted parking space along 15th Street, NW would be used to accommodate trucks waiting in line for security screening.

Vehicle queuing space for the security screening of cars accessing the parking garage would occur within the space just west of the parking garage on the north side of H Street, NW. Queuing space would result in the partial loss of one travel lane during peak travel times; however, a left turn lane would be created at the east end of the block. It would also result in the loss of five parking spaces during off-peak times. It is estimated that during the AM peak hour, 11 vehicles would enter the parking garage from H Street. Based on the existing conditions of the roadways and the expected volume of traffic requiring access to the security areas, localized impacts to traffic circulation are expected to be moderate; however, impacts to the area roadway system would be minor.

Trucks making deliveries to the Sofitel Hotel or the Lafayette Building would be required to pass through a security check prior to entering the public alley on 15th Street, NW. Security personnel would be housed in a guard station just north of the alley, within the existing footprint of the building. The security screening of trucks accessing the public alley would occur on the west side of 15th Street, just north of the public alley entrance. Security checks would last approximately seven to ten minutes. After being screened, the trucks would back up against the flow of traffic to access the alley entrance to the south. It is estimated that during the AM peak

hour, approximately seven vehicles would access the public alley from 15th Street, and generally one truck would be in the alley at a given time. As they currently do, these trucks would exit the alley onto 15th Street once their delivery is complete, momentarily interrupting the flow of traffic. Depending on the size of the truck being screened, there may not be sufficient space for multiple trucks to queue in the designated area north of the alley. As a result, trucks may double park on 15th Street, waiting for a space to open up in the screening area. The circulation of trucks accessing the alley would likely cause temporary disruptions to local traffic. Additionally, the provision of queuing space would result in the loss of a portion of the westernmost travel lane during peak hours, adversely affecting traffic flow on the local roadways.

The potential backup created by the security screening process also has the potential to interfere with the operation of the front entrance to the hotel, including the arrival and departure of guests, valet parking, the operation of the Hotel's sidewalk café, and staging operations for VIP guests who are accompanied by their own security details. Security screening of trucks on 15th Street could also affect trash collection, staff entry and exit, and deliveries at the hotel. Thus, the security screening process would likely have adverse effects on hotel operations.

No circulation changes are proposed on I Street, NW and Vermont Avenue. Overall, impacts to localized vehicular circulation are anticipated to be moderate, with minor impacts resulting within the larger study area. Impacts to localized vehicular circulation would also affect Metrobus routes within the immediate area. In addition, potential impacts to hotel operations could also result from the proposed security screening of trucks on 15th Street.

Possible Mitigation Measures

- Minimize construction vehicle and equipment movement during AM and PM peak hours.
- GSA should coordinate truck access with the Sofitel Hotel and consider restricting truck access times to off-peak hours.
- Traffic control personnel should assist in the direction of trucks accessing security points to avoid traffic conflicts.
- GSA should develop a plan with the city and hotel's concurrence to minimize adverse impacts to vehicular circulation and hotel operations.

Perimeter Security Alternative B

Physical Security Elements

Perimeter Security Alternative B includes the addition of security barriers along the perimeter of the building on H and I Streets, 15th Street, and Vermont Avenue as well as the widening of existing sidewalks on Vermont Avenue, and H and I Streets, NW. The construction of the security elements under Perimeter Security Alternative A would not create additional disruptions to vehicular circulation and parking, as the security improvements would be installed at the same time as the building modernization. Once construction is complete, Perimeter Security Alternative B would not result in a change in traffic volumes on roadways providing access to

the Lafayette Building; however, traffic patterns would be altered as a result of the security improvements and sidewalk widenings.

Security Screening Process

The screening of vehicles entering the parking garage on H Street, NW and the public alley on 15th Street, NW would be conducted adjacent to those areas. A screening area along the north side of H Street, NW just west of the garage and the area along 15th Street just north of the public alley would be designated for this purpose. In order to accommodate these functions, the north side of H Street, NW between Vermont Avenue and the parking garage entrance would be designated as “No Parking Tow Away Zone”. The existing parking spaces located along H Street, NW between Vermont Avenue and the parking garage entrance would be designated as a “left turn only” lane. Similarly, a no parking zone would be created along 15th Street, NW between the public alley and the beginning of the northbound left turn pocket at the 15th Street/I Street intersection. The restricted parking space along 15th Street, NW would be used to accommodate trucks waiting in line for security screening.

The security screening of cars accessing the parking garage would occur on the north side of H Street, just west of the parking garage entrance. The existing parking west of the garage on the north side of H Street would provide space for the queuing of up to five vehicles. After being screened, the cars would proceed east, turning left into the parking garage. Based on existing conditions, it is estimated that during the AM peak hour, 11 vehicles would enter the parking garage from H Street. Based on the existing conditions of the roadways and the expected volume of traffic requiring access to the security areas, localized impacts to traffic circulation are expected to be moderate; however, impacts to the area roadway system would be minor.

Trucks making deliveries to the Sofitel Hotel or the Lafayette Building would be required to pass through a security check prior to entering the public alley on 15th Street, NW. Security personnel would be housed in a guard station just north of the alley, within the existing footprint of the building. The security screening of trucks accessing the public alley would occur on the west side of 15th Street, just north of the public alley entrance. Security checks would last approximately seven to ten minutes. After being screened, the trucks would be required to back up against the flow of traffic to access the alley entrance to the south. It is estimated that during the AM peak hour approximately seven vehicles would enter the public alley from 15th Street, and generally one truck would be in the alley at a given time. As they currently do, these trucks would exit the alley onto 15th Street once their delivery is complete, momentarily interrupting the flow of traffic. Depending on the size of the truck being screened, there may not be sufficient space for multiple trucks to queue in the designated area north of the alley. As a result, trucks may double park on 15th Street, waiting for a space to open up in the screening area. The circulation of trucks accessing the alley would likely cause temporary disruptions to local traffic. Additionally, the provision of queuing space would result in the loss of a portion of one travel lane during peak hours, adversely affecting traffic flow on the local roadways.

The potential backup created by the security screening process also has the potential to interfere with the operation of the front entrance to the hotel, including the arrival and departure of guests, valet parking, the operation of the hotel’s sidewalk café, and staging operations for VIP guests

who are accompanied by their own security details. Security screening of trucks on 15th Street could also affect trash collection, staff entry and exit, and deliveries at the hotel. Thus, the security screening process would likely have adverse effects on hotel operations.

Sidewalk Widening

Perimeter Security Alternative B includes additional changes in the vehicular circulation as a result of sidewalk widening. On Vermont Avenue, the sidewalk width would be increased from 19' to 40', to align it with the sidewalk on the east side of Vermont Avenue north of McPherson Square. The widening would be accommodated by relocating the government parking spaces along Vermont Avenue closer to the centerline and the removal of one travel lane, changing the circulation patterns from four travel lanes to three travel lanes. However, impacts from this on the local transportation system would be minor, since the lane is currently used by government vehicles for double parking. Based on the existing conditions and traffic volumes, impacts to local traffic along Vermont Avenue would be moderate.

The sidewalk on I Street, NW would be widened from 18' to 25', to align it with the sidewalk on I Street in the block west of the Lafayette Building. This would result in the loss of one lane during peak hours. However, the roadway narrows in the block to the west and thus the lane being removed would have a minimal affect on through traffic. This alternative would also result in the loss of seven parking spaces on the south side of I Street during off-peak hours. The sidewalk on H Street would be widened from 17' to 25'. This would result in the loss five parking spaces on the north side of H Street, NW during off-peak hours. During off-peak hours, four travel lanes would be preserved at the east end of the block between the garage entrance and 15th Street, the northernmost lane serving as a left-turn-only lane. The number of available travel lanes during peak hours would be reduced from five lanes to four lanes with shared turning to accommodate the sidewalk widening and the security screening process. No changes are proposed for the sidewalks along 15th Street.

Overall, impacts to localized vehicular circulation as a result of Perimeter Security Alternative B would be major; however, impacts to the overall study area would be moderate. Impacts to localized vehicular circulation would also affect Metrobus routes within the immediate area. In addition, potential impacts to hotel operations could result from the proposed security screening of trucks on 15th Street. Although adverse impacts to vehicular circulation would occur, the widening of the sidewalk would serve to mitigate adverse effects to pedestrian circulation resulting from the bollards.

Possible Mitigation Measures

- Minimize construction vehicle and equipment movement during AM and PM peak hours.
- GSA should coordinate truck access with the Sofitel Hotel and consider restricting truck access times to off-peak hours.
- Traffic control personnel should assist in the direction of trucks accessing security points to avoid traffic conflicts.
- GSA should develop a plan with the city and hotel's concurrence to minimize adverse impacts to vehicular circulation and hotel operations.

No Action Alternative

Under the No Action Alternative, perimeter security improvements would not be installed at the Lafayette Building and area sidewalks would not be widened. Vehicular circulation and security screening procedures would not change. Thus, there would be no adverse impact on vehicular circulation within the study area.

4.4.2 Parking Impacts

Perimeter Security Alternative A

The installation of security checks would result in a change to parking availability along 15th and H Streets, NW. The left-most lane on east-bound H Street, immediately west of the garage entrance would become a queuing lane for vehicles entering the garage, resulting in the loss of five off-peak parking spaces. The left lane of 15th Street would be closed for parking all day between the public alley and the beginning of the northbound left turn pocket at the 15th Street/I Street intersection along 15th Street. This would result in the loss of three parking spaces during the off-peak period. As this public alley is accessed by delivery trucks only, these existing parking spaces would be used to accommodate a truck waiting in line for security check prior to accessing the public alley.

No change to the guest parking area and taxi cab parking area in front of the Sofitel Hotel are proposed; however, coordination of truck queuing by traffic control personnel may be required to ensure trucks do not block the hotel's designated parking spaces. Under Perimeter Security Alternative A, a total of eight parking spaces would be lost. Considering the availability of parking in the study area, this impact would be minor.

Perimeter Security Alternative B

Under Perimeter Security Alternative B, changes to parking availability would be a result of both the security screening process and the widening of sidewalks. Three parking spaces would be lost on 15th Street, NW to accommodate the security screening process. Parking along I Street between 15th Street and Vermont Avenue would not be permitted on south side of the roadway, resulting in a loss of seven parking spaces. Parking along Vermont Avenue would remain available to government vehicles and motorcycles.

In order to accommodate the security screening process, no parking would be permitted along H Street between Vermont Avenue and the garage entrance. No parking would also be allowed east of the parking garage on H Street, in order to allow for the widening of the sidewalk and the establishment of a left-turn lane. This would result in a loss of twelve parking spaces along H Street during off-peak hours. Parking along H Street is not permitted during peak hours, thus parking impacts would only occur during off-peak hours.

No change to the guest parking area and taxi cab parking area in front of the Sofitel Hotel are proposed; however coordination of truck queuing by traffic control personnel may be required to ensure trucks do not block the hotel's designated parking spaces. Under Perimeter Security Alternative B, a total of 22 public parking spaces would be lost. Considering the availability of parking in the study area, this impact would be moderate.

No Action Alternative

Under the No Action Alternative, security elements would not be installed, security screening procedures would not change, and sidewalks would not be widened. Thus no impacts to parking would result.

4.4.3 Pedestrian Circulation Impacts

Perimeter Security Alternative A

Under Perimeter Security Alternative A, the existing temporary planters would be removed from the front of the building on Vermont Avenue, and a combination of bollards, planters, bollards benches, and hardened streetlights would be installed around the perimeter of the building. The granite bollards would be 12" across, 39" high, and would be spaced four feet apart on center. Disruptions to pedestrian circulation would be minimized by installing the security elements at the same time that the building modernization is underway.

The presence of bollards in this busy area of the city would result in adverse impacts to the pedestrian realm, altering the open relationship between the sidewalks and the roadways and restricting pedestrian flow, particularly at the corners of the building. Pedestrians coming from outside of the building perimeter would have to cross a line of bollards at the intersections of H Street and Vermont Avenue, I Street and Vermont Avenue, and 15th and I Streets. Due to the resulting three-foot opening between the bollard faces, there could be moderate impacts to pedestrian flow during peak hours. Bollards would also cross the sidewalk at the garage entrance on H Street and the alley on 15th Street, but would not inhibit pedestrian flow in this location because pedestrians already have to yield to vehicles entering and exiting the garage and alley. Pedestrian safety could potentially be impacted by the security screening operation on 15th Street, as trucks will be required to back out into the roadway to enter and exit the alley. Positive impacts to the pedestrian realm would result from the greening of Vermont Avenue and 15th Street.

Possible Mitigation Measures

- During construction of the security elements, employ appropriate signage and flagging to minimize impacts to pedestrian circulation.
- During the construction of security measures within pedestrian pathways, implement appropriate best management practices for construction to ensure pedestrian safety.
- In addition to security screening personnel, traffic control personnel will be required on 15th Street to assist in the direction of trucks accessing security points to avoid conflicts with pedestrians

Perimeter Security Alternative B

Under Perimeter Security Alternative B, the existing temporary planters would be removed from the front of the building on Vermont Avenue, and a combination of bollards, tree enclosures, and terrace walls would be installed around the perimeter of the building. The bollards would be six inches in diameter, 30" high, and would be spaced five feet apart on center. Disruptions to pedestrian circulation would be minimized by installing the security elements at the same time that the building modernization is underway.

Once complete, at the intersections of H Street and Vermont Avenue, I Street and Vermont Avenue, and 15th and I Streets, pedestrians coming from outside of the building perimeter would have to cross a line of bollards. The resulting approximate four foot opening between the bollards would have minor impacts on pedestrian flow. The presence of bollards in this area of the city would slight disrupt pedestrian circulation and would result in adverse impacts to the pedestrian realm. Pedestrian safety could also potentially be impacted by the security screening operation on 15th Street, as trucks will be required to back out into the roadway to enter and exit the alley. However, the proposed widening of sidewalks along H and I Streets, and Vermont Avenue would expand the pedestrian environment, mitigating the adverse effect of the bollards. In addition, the wider sidewalks, new street trees and planting beds would enhance the pedestrian experience around the Lafayette Building. Thus, overall, impacts to pedestrian circulation would be minor.

Possible Mitigation Measures

- During construction of the security elements, employ appropriate signage and flagging to minimize impacts to pedestrian circulation.
- During the construction of security measures within pedestrian pathways, implement appropriate best management practices for construction to ensure pedestrian safety.
- In addition to security screening personnel, traffic control personnel will be required to assist in the direction of trucks accessing security points to avoid conflicts with pedestrians.

No Action Alternative

Under the No Action Alternative, security elements would not be installed, security screening procedures would not change, and sidewalks would not be widened. Thus, no impacts to pedestrian circulation would result.

4.4 Utility and Infrastructure Impacts

Perimeter Security Alternative A

On Vermont Avenue, the construction of security elements and additional tree panels could potentially disturb the sewer line that runs below the sidewalk, between the curb line and the face of the building. To ensure that the sewer line is not compromised, the DC Water and Sewer Authority (WASA) might require that a preconstruction survey be completed.

On I Street, NW the construction of the bollards could impact the electrical line that runs below the sidewalk at the east end of the block. On 15th Street, NW the installation of the bollards, benches and tree panels could require the relocation of the existing electrical line that runs under the center of the sidewalk. At the entrance to the alley, the retractable bollards would cross both an electrical line and a telecom line. Depending on the depth of the lines, the installation of the bollards could require the relocation of these two lines. On H Street, NW due to the location of the sewer line at the curb, DC WASA might require a preconstruction survey. If it is determined that construction activities could disturb the existing line, the line might have to be lined. Overall, potential impacts resulting from the construction of perimeter security elements would be minor.

Possible Mitigation Measures

- GSA must coordinate with the appropriate utility providers prior to initiating construction.

Perimeter Security Alternative B

Under Perimeter Security Alternative B, the sidewalk on Vermont Avenue would be widened to 40 feet and security elements would be installed along the new curb line. As a result, the existing power, gas and water lines that currently run under the roadway, would instead run under the sidewalk. The bollards and tree enclosures would be located between the existing utility lines and new curb line, and thus their construction should not require moving or lining existing lines. It is unlikely that the sewer line that runs between the sidewalk and the face of the building would be compromised. However, to ensure that it is not damaged, DC Water and Sewer Authority (WASA) might require that a preconstruction survey be completed.

On I Street, NW the widening of the sidewalk and the installation of security elements could require the relocation of the existing eight-inch water line. On 15th Street, NW the installation of the bollards, benches and tree panels could require the relocation of the existing electrical line that runs under the center of the sidewalk. At the entrance to the alley, the retractable bollards would cross both an electrical line and a telecom line. Depending on the depth of the lines, the installation of the bollards could require the relocation of these two lines. On H Street, NW due to the location of the sewer line near the new bollards and tree enclosures, DC WASA might require that a preconstruction survey be completed. If it is determined that construction activities could disturb the existing line, the pipe might have to be lined. Overall, potential impacts resulting from the construction of perimeter security elements would be minor.

Possible Mitigation Measures

- GSA must coordinate with the appropriate utility providers prior to initiating construction.

No Action Alternative

Under the No Action Alternative, perimeter security elements would not be installed at the Lafayette Building. Thus, there would be no impacts to utilities and infrastructure.