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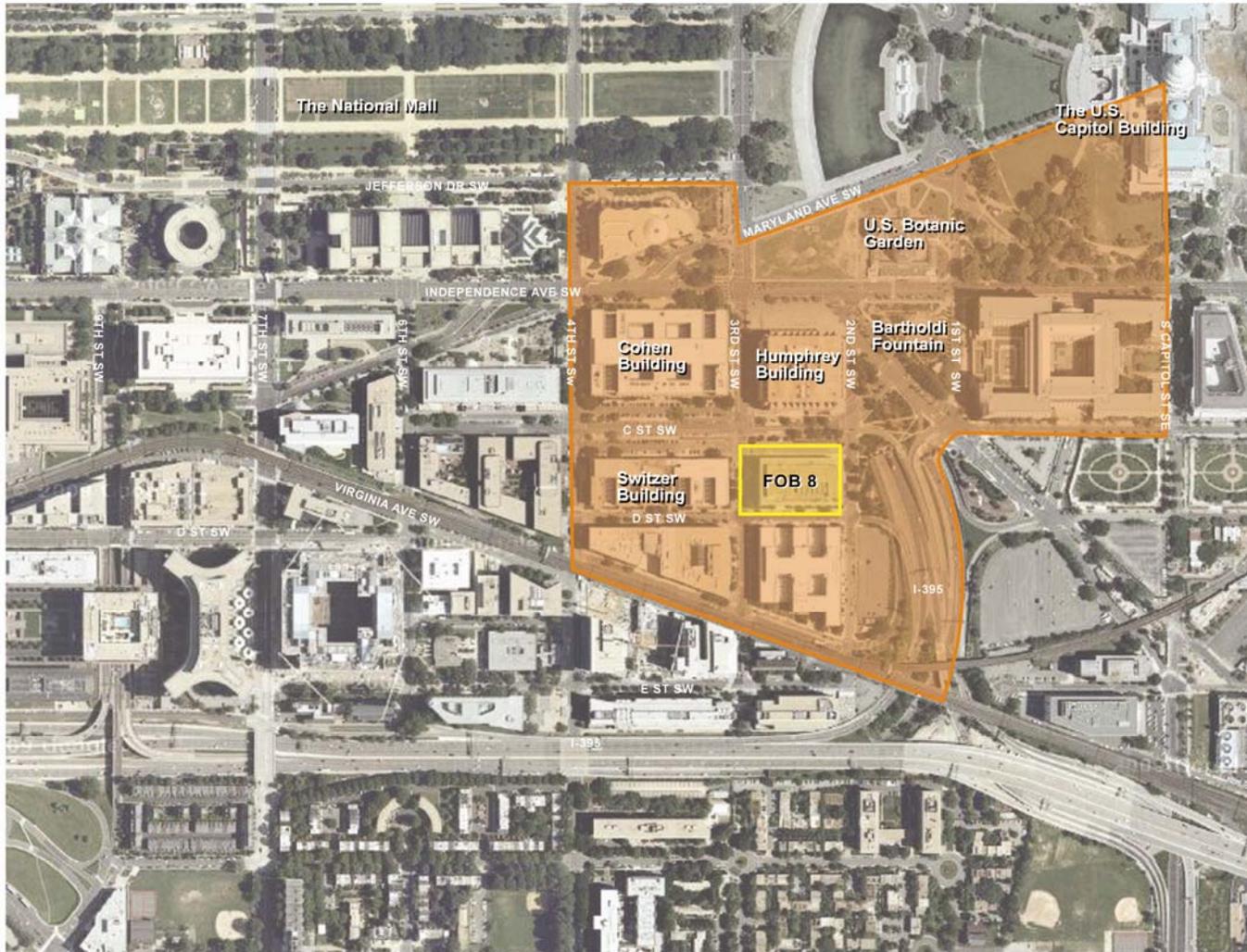
AFFECTED ENVIRONMENT

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3.0 AFFECTED ENVIRONMENT

3.1 CULTURAL RESOURCES

This section documents the potential archaeological, historic, and visual resources that are present on the FOB 8 site and within the surrounding area. This information was derived from historic maps, National Register nominations, prior studies, and field surveys. It was determined that the only impacts to archaeological resources would occur as a result of ground disturbing activities. Thus, the Area of Potential Effects (APE) for archeological resources includes the area between the face of the building and the curbline. Through the Section 106 process, the APE for historic resources was defined based on the potential for the proposed security improvements to be visible from historic properties surrounding the site. The area is generally bounded by: 4th Street, SW in the west, north to Jefferson Drive; east on Jefferson Drive to 3rd Street, SW; south on 3rd Street, SW to Maryland Avenue; northeast on Maryland Avenue to the U.S. Capitol Building; south from the Capitol Building on South Capitol Street to C Street, SW; west on C Street to 1st Street, SW; south along the 1st Street alignment to the railroad tracks; west along the railroad tracks to Virginia Avenue, SW; and northwest on Virginia Avenue, SW to 4th Street, SW (Figure 3-1). The study area for visual resources is identical to the APE for historic resources.



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2 *Figure 3-1: Area of Potential Effects for Historic Resources*
3 *Source: EDAW 2009*

3.1.1 Archaeological Resources

As part of the larger Potomac River watershed, the land surrounding the Mall was historically marshland. Between 1810 and 1815, the Washington Canal was constructed north and east of the site, resulting in the filling of these marshes. The area's soils reflect this history: according to the U.S. Department of Agriculture's soil surveys, the area around FOB 8 is composed of Urban soils. Urban soils have a man-made surface layer that has been produced by mixing, filling, or by the contamination of land surface in urban and suburban areas. Due to the nature of the soils, and the fact that the site and immediate area were disturbed through construction activities for the building, roadways, and sidewalks, it is unlikely that intact prehistoric archaeological resources are present near the surface on the FOB 8 site.

During the 19th century, the project site was part of a residential community known as Southwest. Attractive to government workers due to the proximity to the Capitol, the area became a vibrant residential neighborhood. As residential development spread within Southwest, commercial establishments benefited. This portion of Southwest DC remained a combination of low-scale residential and commercial uses until the mid-20th century when urban renewal resulted in the demolition of more than half of the area's buildings. The area now known as the Southwest Federal Center was redeveloped with large-scale federal office buildings during the 1950s, 1960s, and 1970s.

According to historic Sanborn and Baist maps, the block now occupied by FOB 8 was fairly densely developed from the end of the 19th century through the middle of the 20th century. The structures were brick or frame and small in scale. A number of stables existed nearer the center of the site, off the main streets. The Metropolitan Wesley A.M.E. Zion Church, a modest sized brick structure, was located on D Street near the center of the block. The Watts and Brothers Coal and Wood Yard was located on C Street near the center of the block. By 1959, the buildings on the site had been razed and the block was being used for parking (Sanborn 1928-1959).

No archaeological surveys have been completed on the FOB 8 site. North of FOB 8, historic archaeological remains dating from the 18th century were documented in a survey completed prior to the construction of the NMAI building (John Milner and Associates 1993). Although it is possible that similar historic archaeological resources were present on the FOB 8 site, it is likely that they have been disturbed due to the urban renewal efforts in the 1950s and the construction of FOB 8 itself.

3.1.2 Historic Resources

FOB 8

FOB 8 was constructed in 1965 as laboratory space for the Food and Drug Administration. As is characteristic of many modern buildings from this period, FOB 8 is set back significantly from C Street, SW. The area between the north face of the building and C Street was designed as a parking lot. GSA and the District of Columbia State Historic Preservation Officer are in concurrence that FOB 8 does not meet the criteria for listing in the National Register of Historic Places.

L'Enfant and McMillan Plans

The project site is bordered by streets originally planned by Pierre Charles L'Enfant in the 18th century. Recognized as one of the country's most notable achievements in urban planning, the L'Enfant Plan, completed in 1791, is characterized by a coordinated system of radiating avenues, vistas, and parks overlaid upon an orthogonal grid of streets (Figure 3-2). A notable example of Baroque city planning, L'Enfant's Plan defines the physical and symbolic character of the capital city through its arrangement of roadways, buildings, parks, and views. At the turn of the 20th century, the McMillan Commission expanded on the L'Enfant Plan in a manner consistent with the City Beautiful movement. The McMillan Plan extended the Mall to the west and terminated several important visual axes with monuments. The principles articulated in these plans still guide the development of the city today.



Figure 3-2: L'Enfant Plan for the City of Washington, 1791

Source: NCPC

The Plan of the City of Washington is listed in the National Register of Historic Places, and is also a city landmark, listed in the District of Columbia Inventory of Historic Sites. The designation recognizes components of the McMillan Plan that contribute to, extend, or enhance the L'Enfant Plan. The period of significance is 1791-1942. The National Register nomination for the

L'Enfant Plan identifies historic streets, reservations and appropriations, and vistas that contribute to the plan's significance. The portions of 3rd Street, SW, C Street, SW, and D Street, SW that border the project site are all contributing elements within the L'Enfant Plan. In addition, the Capitol Grounds and the National Mall east of 14th Street comprise L'Enfant's Original Appropriation Number 2. The vista along C Street, SW, is identified within the nomination as being interrupted by I-395 east of the project site and at 5th Street west of the project site.

Mall

Northwest of FOB 8, the Mall was a key component of L'Enfant and McMillan's plans for the city. The Mall extends from the Capitol Grounds in the east to 14th Street in the west, and from Constitution Avenue in the north to Independence Avenue in the south (Figure 3-3). Numerous national museums line the Mall, and a tree-lined greensward runs through the center. The Mall was listed in the DC Inventory in 1964 and the National Register in 1966. It is also a component of the National Register Multiple Property Nomination for the L'Enfant Plan. In 2006, a cultural landscape inventory was completed for the Mall which identified contributing features and concluded that, while not a National Historic Landmark, the Mall clearly has national significance. FOB 8 is visible in views south on 3rd Street from the Mall (Figure 3-4).



Figure 3-3: The Mall
Source: EDAW, 2009



Figure 3-4: View south on 3rd Street from the National Mall
Source: EDAW, 2009

The U.S. Capitol Building and Grounds

The U.S. Capitol Building is one of the nation's iconic historic buildings. Located approximately ¼ mile northeast of FOB 8 (Figure 3-6), the Neoclassical style structure was designed by William Thornton in 1793, and then renovated and expanded in the 19th century by Benjamin Latrobe, Charles Bulfinch, and Thomas U. Walter. The structure is characterized by a large columned portico on the front of the building, and a massive dome that caps the structure (Figure 3-5). The monumental building is sited on an original L'Enfant Appropriation and is set within a landscape designed by Frederick Law Olmsted. Both the Capitol dome and the grounds are visible from the northeast corner of FOB 8. The Capitol was designated a National Historic Landmark in 1960 and listed in the DC Inventory of Historic Sites in 1964.



Figure 3-5: U.S. Capitol Building
Source: EDAW, 2009



Figure 3-6: View to U.S. Capitol from the northeast corner of the project site
 Source: EDAW, 2008

Hubert H. Humphrey Building

The Hubert H. Humphrey Building is located north of FOB 8 across C Street (Figure 3-8). Constructed in 1976, the building is one of two Modernist style structures in Southwest DC by renowned architect Marcel Breuer, the other being the Department of Housing and Urban Development Building. The Humphrey Building is a six-story concrete structure with a brise soleil, a penthouse, and a recessed ground floor (Figure 3-7). Although not yet 50 years old, the Humphrey Building could potentially be eligible for the National Register both for its design and as the work of a master architect.



Figure 3-7: Hubert H. Humphrey Building

Source: EDAW, 2008



Figure 3-8: View of Hubert H. Humphrey Building from FOB 8
Source: EDAW, 2009

Mary Switzer Building (Railroad Retirement Board Building)

Located directly west of FOB 8, the Mary Switzer Building was designed by Charles Klauder and constructed in 1939-1940. One of the last buildings erected under the massive federal office construction program of the 1920s and 1930s, the Switzer Building is a secondary component within a jointly planned complex that includes the Wilbur J. Cohen Building (originally constructed for the Social Security Administration) to the north. The structure was designed in the Stripped Classical style. Distinctive features include monumental windows and pylons, and Egyptian motifs that adorn the sandstone facades (Figure 3-9). In plan, the building resembles a half-fishbone, with six wings that extend off a main base. The Switzer Building has been determined to be eligible for listing in the National Register of Historic Places.



Figure 3-9: Mary Switzer Building
Source: EDAW, 2008

Wilbur J. Cohen Building

Northwest of FOB 8, the Wilbur J. Cohen Building was constructed in 1939 for the Social Security Administration. Like the Switzer Building to the south, the structure was designed by Charles Klauder and is representative of the Stripped Classical style with its bands of vertically oriented windows (Figure 3-10). The building is significant for its role in city planning in the District of Columbia, as well as the last work of a prominent architect known for his skill in melding historical references with modern programmatic needs. It is further significant for its association with the Social Security Administration and the New Deal. The Wilbur J. Cohen Building was listed in the DC Inventory of Historic Sites and the National Register of Historic Places in 2007.



Figure 3-10: Wilbur J. Cohen Building
Source: EDAW, 2008

U.S. Botanic Garden

The Botanic Garden, located north of FOB 8 within the Capitol Grounds, showcases diverse vegetative species and ecosystems in varying climatic exhibits. The garden was originally established by Congress in 1820, and remains one of the largest of its kind in North America. Designed in the Beaux Arts Style by Bennett Parsons & Frost in 1902, the garden was listed in the DC Inventory of Historic Sites in 1964. It also lies within the bounds of the National Mall (Figures 3-11 and 3-12).



Figure 3-11: U.S. Botanic Garden

Source: EDAW, 2008



Figure 3-12: View of U.S. Botanic Garden from FOB 8
 Source: EDAW, 2009

Bartholdi Fountain

The Bartholdi Fountain has been a prominent feature on the grounds of the U.S. Botanic Garden since 1878. The elaborate tiered cast iron fountain is the work of Frederic Auguste Bartholdi, sculptor of the Statue of Liberty. The fountain was exhibited alongside the Statue of Liberty at the Philadelphia Centennial Exhibition in 1876 and was then subsequently purchased by the federal government. Its elaborate form rises 30 feet above a marble pool, with three colossal caryatids supporting a water basin, attended by tritons, reptiles, and dolphins. Twelve light globes circle the rim of the basin. The fountain was listed in the DC Inventory of Historic Sites in 1964 (Figure 3-13). The fountain may be visible from the northeast corner of FOB 8 during the winter months.



Figure 3-13: The Bartholdi Fountain
Source: Wikipedia, 2009

3.1.3 Visual Resources

Methodology

This section documents the existing visual character of FOB 8 and the surrounding area. The study area for visual resources was determined by estimating the visibility of FOB 8, and thus the proposed exterior improvements, to viewers from public places and historic resources. Due to the urban density of the Southwest Federal Center neighborhood, views are generally afforded along the streets that border the site, including C, 3rd, D, and 2nd Streets, SW. In addition, views are afforded from the open parcels east of the site, northeast towards the U.S. Capitol Building, and southwest from the Capitol Grounds to FOB 8. The visual character of the roadways, buildings, and open space that border the site are described below.

Existing Visual Environment

C Street, SW/North of the Site

C Street, SW borders the FOB 8 site to the north. The two-lane roadway is bordered on the north and south sides by massive mid-rise federal office buildings. On the south side of the street, both FOB 8 and the Switzer Building are setback substantially from C Street, allowing for surface parking between the building entrances and the street. The surface parking lot at FOB 8 is currently encircled by a tall fence. In addition to surface parking, FOB 8 has an access drive to a below-grade parking garage. A low wall divides the C Street sidewalk from the drive at the eastern end of the block. On the north side of C Street, the Humphrey and Cohen Buildings are set closer to the roadway, both buildings lacking substantial building yards. East and west of the site, the roadway and associated view corridors are interrupted. The view west from the site terminates at a large building at 5th Street, SW (Figure 3-15). The C Street view corridor terminates at 2nd Street immediately east of the site at a small green parcel (Figure 3-14). When I-395 was constructed in the 1960s, C Street, SW, was realigned east of 2nd Street, such that it now turns to the northeast (Figure 3-16). Views are thus afforded of the Capitol Building from the northeast corner of the project site.



Figure 3-14: View east on C Street from 3rd Street, SW
Source: EDAW, 2008



Figure 3-15: View west on C Street with FOB 8 and the Switzer Building in the foreground
 Source: EDAW, 2008



Figure 3-16: View along the diagonal portion of C Street from the northeast corner of the project site
Source: EDAW, 2008

3rd Street, SW/West of the Site

Bordering FOB 8 to the west, 3rd Street, SW is a four-lane roadway that runs north-south, following L'Enfant's city grid. Views along 3rd Street are framed by mid-rise buildings and a variety of street trees. The sidewalk adjacent to FOB 8 is narrow, mirroring the walk on the west side of the street adjacent to the Switzer Building (Figure 3-17). There is a small planting bed and a sunken garden located between the sidewalk and FOB 8 at the south end of the block. At the north end of the block, the green strip is wider and extends to the face of the building; however, this area is currently blocked from view by a tall fence. Views are afforded to the north along 3rd Street to the Mall (Figure 3-18). Views to the south along 3rd Street are obstructed by the elevated railroad lines one block south of FOB 8.



Figure 3-17: View looking north along 3rd Street from D Street, SW
Source: EDAW, 2008



Figure 3-18: View looking north on 3rd Street near C Street, SW
 Source: EDAW, 2008

D Street, SW/South of the Site

D Street, SW is a narrow one-way street that borders FOB 8 to the south. On the north side of D Street, adjacent to FOB 8, the sidewalk is narrow. A line of street trees and lampposts run between the curb and the sidewalk. Inside of the walk, a narrow, slightly raised planting bed contains a line of low shrubs and small trees. Between the trees, a series of light wells provide natural light to the building's lower level. On the south side of the street, a line of uniform bollards placed between the sidewalk and the roadway encircles the Ford House Office Building. Views along D Street are framed by street trees of varying sizes and modern mid-rise buildings. Views to the east include the on ramp to I-395 and greenspace beyond the highway infrastructure (Figure 3-19). Views to the west terminate at 4th Street, SW, where a building interrupts L'Enfant's historic street alignment (Figure 3-20).



Figure 3-19: View looking east on D Street, SW with FOB 8 on the left
 Source: EDAW, 2008



Figure 3-20: View along D Street, SW looking west with FOB 8 on the right
Source: EDAW, 2008

2nd Street, SW/East of the Site

East of FOB 8, 2nd Street, SW runs in two lanes one-way from the north to the south. On the west side of the street, adjacent to FOB 8, the sidewalk is narrow. Between the sidewalk and the building face, a planting bed containing both trees and shrubs creates a green edge. On the east side of the street, the sidewalk divides the roadway from a small park, the future site of the American Veterans Disabled for Life Memorial. To the south, at the intersection of 2nd and D Streets, SW, there is an access ramp to the recessed portion of I-395 (Figure 3-21). Views north and south along the 2nd Street corridor include mid-rise office buildings, open greenspace, highway infrastructure, surface parking, and the elevated railway south of FOB 8 at Virginia Avenue (Figure 3-22). From the corner of 2nd and C Streets, SW views are afforded of the U.S. Capitol Building to the northeast.



Figure 3-21: View south on 2nd Street from C Street, with FOB 8 on the right
Source: EDAW, 2008



Figure 3-22: View north on 2nd Street, SW with the Humphrey Building on the left and the National Mall and U.S. Botanic Garden in the Center of the View
 Source: EDAW, 2008

3.2 SOCIOECONOMIC RESOURCES

3.2.1 Land Use

FOB 8 is a government-owned building located within the Southwest Federal Center, two blocks from the U.S. Capitol Building and grounds. Bounded by 2nd Street to the east, 3rd Street to the west, C Street to the north, and D Street to the south, the 2.1-acre site occupies a full city block. The structure is six-stories high, with two additional stories located below grade. The main pedestrian entrance is on C Street, where an approximately 100-foot setback allows for a surface parking lot for the building. An additional below-grade parking area is accessed via a ramp off of 2nd Street. Constructed in 1965 as laboratory space for the U.S. Food and Drug Administration (FDA), FOB 8 has been vacant since FDA relocated in 2002. While GSA owns the building, the surrounding sidewalks are under the jurisdiction of the District of Columbia.

The area surrounding FOB 8 is dominated by mid-rise federal office buildings. Like FOB 8, many of these structures fill a full city block. The Hubert Humphrey Building is sited directly north of FOB 8, across C Street. This structure houses the Department of Health and Human Services. Northeast of FOB 8, across Interstate 395 (I-395), the Rayburn House Office Building is occupied by the U.S. House of Representatives. The Cohen Building lies northwest of FOB 8 and is occupied by the Department of Health and Human Services. The Ford House Office Building, which houses Congressional staff and the Architect of the Capitol, borders FOB 8 to the south. Privately owned commercial office buildings are located southwest of FOB 8 at 3rd and D Streets, and 4th and E Streets.

There are several small parks and larger areas of open space in the immediate vicinity of FOB 8. Directly east and northeast of the site, across 2nd Street, are several small, irregularly shaped parcels, each landscaped and traversed by sidewalks. The parcel directly east of the site acts as a partial barrier to the I-395 underpass. A parcel to the northeast is the planned location for the American Veterans Disabled for Life Memorial. Further north and east of the site, the National Garden, Bartholdi Park, and the U.S. Capitol Grounds offer additional public open space. The largest area of greenspace in the downtown, the National Mall, lies one block north of FOB 8 and stretches from the U.S. Capitol grounds in the east to the Washington Monument grounds in the west.

Other land uses in the area include cultural attractions, retail establishments, and transportation infrastructure. The National Air and Space Museum and the National Museum of the American Indian are located to the north of FOB 8 along the edge of

the Mall. The U.S. Capitol Building, located two blocks northeast of FOB 8, also functions as a civic and cultural institution and is open daily for public tours.

Interstate 395 runs below grade directly east of the site and access to this highway is provided via an onramp at 2nd Street. The Federal Center-SW Metrorail Station is located less than one block from the site, at the intersection of 3rd and D Streets, SW. A rail line also runs along Virginia Ave SW and crosses over I-395 two blocks to the south. Finally, several surface lots and parking structures are located within the vicinity of FOB 8.

3.2.2 Planning Controls and Policies

Zoning

As a federally-owned property, FOB 8 is not subject to DC zoning regulations. Instead, new design and renovation projects on federal property are under the purview of NCPC, pursuant to the District of Columbia Zoning Enabling Act of 1938 (ch. 534, 52 Stat. 802 and DC ST § 6-641.15). In accordance with the Act, NCPC has approval authority for use, open space, height, and bulk, for projects on federal property.

Comprehensive Plan for the National Capital (2004)

The *Comprehensive Plan for the National Capital, Federal Elements* is the principal planning tool used by NCPC to guide the planning of federal facilities in Washington, DC. The Plan is comprised of goals, objectives, and policies intended to guide growth and development in the Nation's Capital. There are two elements that are of particular relevance to the proposed perimeter security project at FOB 8, the Federal Workplace Element and the Preservation and Historic Features Element.

The Federal Workplace Element states that it is the goal of the federal government in the National Capital Region to: "Locate the federal workforce to enhance the efficiency, productivity, and public image of the federal government; to strengthen the economic well-being and expand employment opportunities of the region and the localities therein; and to give emphasis to the District of Columbia as the seat of the national government." This element outlines policies in support of this goal that address perimeter security and include the following:

- Design such improvements in accordance with guidance included in *The National Capital Urban Design and Security Plan (and related policies)*.

- Incorporate security needs into the design of buildings, streetscapes, and landscapes using urban design principals in a manner that: enhances and beautifies the public realm, resulting in coherent and welcoming streetscapes; does not excessively restrict or impede operational use of sidewalks or pedestrian, handicap, or vehicular mobility; and does not impact the health of existing mature trees.
- Design projects in a manner that does not impede commerce and economic vitality, but balances the need for perimeter security with the need to enhance and maintain the vitality of urban areas.
- Design security barrier lines and elements that complement and enhance the character of the area in which they will be located and that respect the historic context of the area when applicable.
- Design security elements to respond to site-specific conditions, such as vehicle approach speed and angles, in order to minimize the size of security elements when possible.
- Place security elements in the building yard, rather than in public space where possible.

The Preservation and Historic Features Element states that it is the goal of the federal government to: “Preserve and enhance the image and identity of the nation’s capital and region through design and development that is respectful of the guiding principles of the L’Enfant and McMillan Plans, the enduring value of historic buildings and places, and the symbolic character of the capital’s setting.” Policies in support of this goal that are applicable to the FOB 8 exterior improvements include the following:

- Protect and enhance the vistas and views, both natural and designed, that are an integral part of the national capital’s image.
- Promote continuity in the historic design framework of the nation’s capital by protecting and enhancing the elements, views, and principles of the L’Enfant Plan.
- Protect the settings of historic properties, including views to and from the sites where significant, as integral parts of the historic character of the property.

National Capital Urban Design and Security Plan (2002) and Urban Design and Security Plan Policies and Objectives (2005)

NCPC’s *National Capital Urban Design and Security Plan* (adopted May 5, 2005) seeks to balance the security needs and requirements of federal agencies with the need to protect the historic urban fabric of Washington, DC. The Plan holds that

security elements for federal buildings should be enhanced in a manner that does not compromise the vitality and function of the public realm, be it pedestrian circulation, vehicular mobility, commerce, or the aesthetic experience of visitors. To this end, the Plan establishes a series of goals. These goals are as follows:

- Provide appropriate levels of perimeter security for sensitive buildings and their occupants against threats generated by unauthorized vehicles approaching or entering them.
- Provide security in the context of a city-wide program of streetscape enhancement and public realm beautification, rather than as a separate or redundant system of components whose only purpose is security.
- Expand the palette of elements that can gracefully provide perimeter standoff security, avoiding the monotony of endless lines of jersey barriers or bollards, which only invoke defensiveness.
- Produce a coherent strategy for deploying specific families of streetscape and security elements in which priority is given to achieving aesthetic continuity along streets, and within areas, rather than solutions selected solely by the needs of a particular building under the jurisdiction of one public agency.
- Provide perimeter security in a manner that does not impede the City's commerce and vitality, pedestrian or vehicular mobility, or operational use of sidewalks within the Monumental Core or downtown.

In order to achieve these goals, the Plan offers a variety of design elements that can be used in perimeter security projects. These solutions include such physical elements as “hardened” or fortified street furniture, planters, and fences, low stone plinth walls, bollards, large round linear planters with seating, bicycle racks, and curbside hedges with embedded security measures. Potential security measures should be designed to be applied in a variety of different contexts and ways to meet the specific security and design needs of each particular downtown area.

The *Urban Design and Security Plan Policies and Objectives* was adopted in 2005 to clarify issues related to contextual design, vehicular and pedestrian controls, and the placement and design of physical security elements. The objectives and policies are intended to be used to guide federal agencies when evaluating, planning, and designing proposed perimeter security projects.

The policies and objectives include the following:

- Strike a balance between physical perimeter security for federal buildings and the vitality of the public realm.

- Encourage a multi-faceted approach to selection of appropriate security measures that considers intelligence information, operational and procedural measures (such as surveillance and screening), and design strategies (such as structural engineering, window glazing, emergency egress, and physical perimeter barriers).
- Intelligence information, operational controls, and physical design measures should be used to protect against vehicle-borne explosives.
- The placement of physical security barriers in public space is discouraged and should be minimized.
- For existing buildings in urban areas, perimeter security barriers should be located within the building yard when the face of the sensitive building to the outside edge of the building yard is a minimum of 20 feet. If the distance from the face of the building to the outside edge of the building yard is less than 20 feet, then perimeter security barriers may be permitted in public space adjacent to the building.
- Perimeter security barriers at intersections, corners and near crosswalks or other highly used pedestrian areas should be minimized; barriers that are needed should be located to allow safe pedestrian waiting areas and pedestrian movement.
- The design of security barriers, including their mass, form and materials should respond to the architectural and landscape context in which they are located and complement and aesthetically enhance the special character of the associated building and precinct.
- Perimeter security barriers in public space should incorporate decorative tree wells, planters, light poles, signage, benches, parking meters, trash receptacles and other elements and public amenities typically found in a streetscape.

National Capital Framework Plan (2008)

The *National Capital Framework Plan*, released in the summer of 2008, is the result of a joint planning effort between NCPC and the U.S. Commission of Fine Arts (CFA). The Plan serves as a tool to guide strategic decisions to coordinate federal and local interests, identifying opportunities to coordinate land use, urban design, and transportation improvements. The principal goals of the Plan are to: Plan for the future needs of the federal government, including space for new memorials, museums, public gathering spaces, and federal offices in a way that contributes to sustainable city life; preserve the historic open space of the National Mall and protect it from overbuilding; and extend the special civic qualities of the National Mall and the vitality and vibrancy of the city into the adjacent federal precincts.

In order to accomplish these goals, the Plan identifies four major precincts adjacent to the National Mall which are to be the focus for future cultural attractions and government offices. The four precincts are: the Northwest Rectangle, Federal Triangle, the Southwest Rectangle, and East Potomac Park. The Framework Plan examines opportunities to enhance these precincts in order to meet the future needs of the federal government, while also protecting the city's open space and public realm.

As identified within the Plan, the Southwest Rectangle precinct generally stretches from Jefferson Drive, SW on the north to the Southeast Freeway and the 10th Street Overlook on the south, and from 15th Street, SW on the west to the Center Leg Freeway on the east. FOB 8 is located at the east end of this area. The Plan states that the primary objective for the Southwest Rectangle is to transform it from a sterile office precinct to a desirable workplace, cultural venue, and visitor destination through improved connections between the Smithsonian Castle and the Southwest waterfront, and between the U.S. Capitol and the Jefferson Memorial. Specific strategies to achieve this objective include the following:

- Establish 10th Street, SW and the Overlook as a lively mixed-use corridor and premier cultural destination to connect the National Mall and the Southwest waterfront;
- Establish Maryland Avenue, SW as a grand urban boulevard to link the U.S. Capitol to the Jefferson Memorial;
- Create new places for museums, offices, shops, and residences to increase the mix of uses within the precinct; and
- Bridge the Potomac River and restore the street grid to improve mobility.

Tree Removal Permit

The Urban Forestry Administration, under the District Department of Transportation (DDOT), requires permits for the removal of street trees. Specifically, the Urban Forest Preservation Act of 2002, effective June 12, 2003 (D.C. Law 14-309; D.C. Official Code 8-6501.01 *et seq.*), established an urban forest preservation program requiring a Special Tree Removal Permit prior to the removal of a tree with a circumference of 55 inches or more. If a tree removal permit is approved, the Urban Forestry Administration will require the replacement of lost trees based on caliper, either on the site or in a comparable area.

3.2.3 Public Space

The District of Columbia Department of Transportation, Public Space Management

The District Department of Transportation (DDOT) has management and oversight responsibility for the use and occupancy of the public space. According to DDOT, public space is defined as all the publicly owned property between the property lines on a street and includes, but is not limited to, the roadway, tree spaces, sidewalks, and alleys. The sidewalks and the area between the walks and curblines around FOB 8 are considered to be public space under the jurisdiction of DDOT.

DDOT encourages that security perimeters be established within privately-owned space or federal public space adjacent to buildings, not on sidewalks, curbs, gutters, streets, or public alleys. In the event that perimeter security elements are proposed within public space, a Public Space Permit must be obtained from DDOT. Further, DDOT requires that perimeter barriers be no closer than two feet from the curb line and neither block pedestrian traffic flow from the curb line to the sidewalk, nor present unreasonable barriers to pedestrians traveling within the sidewalk.

GSA: Achieving Great Federal Public Spaces

Although not directly related to DDOT's public space policy and review, GSA has published guidelines titled *Achieving Great Federal Public Spaces: A Property Manager's Guide*. This publication was released in 2007 as part of GSA's efforts to evaluate and improve public spaces and transform federal spaces into civic places. According to this guide, GSA buildings and public spaces should:

- Reflect the dignity and accessibility of government;
- Be secure and welcoming;
- Improve tenant satisfaction and building revenue;
- Provide a forum for tenant activity and public use; and
- Act as a catalyst for downtown revitalization.

The guide presents an overall strategy for improvement of a facility's public spaces, from physical enhancements to partnerships with communities, to better management practices. It recognizes a key challenge to be the need to increase security at federal facilities while providing welcoming public spaces.

3.3 NATURAL RESOURCES

The study area for the inventory and analysis of physical and biological resources has been defined as the area around FOB 8 as bordered by C, D, 2nd, and 3rd Streets, SW. In preparing this analysis, the following resources were reviewed: U.S. Geological Survey (USGS) mapping, aerial photos, local comprehensive and land use plans, Geographic Information System (GIS) databases, conceptual design drawings, scientific literature, government reports, other previous studies, agency comments, and other materials as needed. Site visits to the grounds around FOB 8 were also conducted.

3.3.1 Vegetation

Vegetation around FOB 8 was inventoried through site reconnaissance and a review of the most recent survey drafted in 2006. The vegetation consists entirely of streetscape plantings and modest landscaping adjacent the building. Along C Street, SW, these plantings consist of yews (*Taxus* sp.), creeping juniper (*Juniperus horizontalis*), and crepe myrtle (*Lagerstroemia indica*) and two large oak trees at the curbline. Boxwoods (*Buxus* sp.) and flowering cherries (*Malus* sp.) are planted along 2nd Street, SW. Along D Street, SW, shrubs include boxwood, crepe myrtle, junipers (*Juniperus* sp.), holly (*Ilex* sp.), and abelia (*Abelia grandiflora*) with some yarrow (*Achillea* sp.) planted as well. Scarlet oaks (*Quercus coccinea*) are present along the street. Street trees along 3rd Street include swamp white oaks (*Quercus bicolor*), white oak (*Q. alba*), scarlet oaks, and a large magnolia (*Magnolia* sp.) at the building's northwest corner (Figure 3-23). Additional plantings along 3rd Street, SW include crepe myrtle, and Japanese maples (*Acer japonica*).



Figure 3-23: Magnolia at the corner of C and 3rd Streets, SW
Source: EDAW, 2008

3.3.2 Water Resources

The District of Columbia Department of Health (DDOH) Water Quality Division, the DDOH Watershed Protection Division, and the U.S. Environmental Protection Agency (EPA) regulate water resources and water pollution in the District. Together, they administer programs created by the Federal Water Pollution Control Act of 1972 (commonly known as the Clean Water Act), the federal Water Quality Act of 1987, and a 1984 amendment to the federal Resource Conservation and Recovery Act (RCRA). In addition, the Water Quality Division administers programs enacted by the Water Pollution Control Act of 1948 and implements the Water Quality Standards for Surface Water. Building construction and use can affect water quality and aquatic ecosystems by altering the dominant hydrodynamics (i.e., the volume and timing of flows), increasing water temperature, and contributing pollutants and particulates to downstream surface water bodies.

There are no surface water bodies in the vicinity of FOB 8. All stormwater drainage moves overland into area drains or the street curb and gutter system for discharge to the DC Water and Sewer Authority (DC WASA) storm sewer system. Preliminary floodplain mapping produced by the Federal Emergency Management Agency (FEMA) has indicated that if the current levee system is not updated, the FOB 8 site would be within the 100-year floodplain. Construction of the new levee system is expected to commence in 2009. As a result, it is unlikely that FOB 8 will be located within the 100-year floodplain.

3.4 TRANSPORTATION

3.4.1 Vehicular Circulation

The transportation network in the vicinity of FOB 8 includes both local roadways and a federal highway. The FOB 8 site is bordered by four local roadways, C Street, SW in the north, 3rd Street, SW in the west, D Street, SW in the south, and 2nd Street, SW in the east. Interstate 395 (I-395) is located immediately east of 2nd Street, SW.

C Street, SW

C Street is classified as a collector roadway according to DDOT's roadway classification system. Collector roadways include intermediary streets that funnel vehicular traffic from local streets to arterial streets and back. C Street runs east-west, with one travel lane in each direction. The roadway is interrupted at 2nd Street, SW, by a small park. Beyond this, the roadway turns to the northeast towards the U.S. Capitol Building. Adjacent to FOB 8, metered parking is provided on both sides of the roadway most times of the day; however, the portion east of 3rd Street provides no parking. According to DDOT, the average weekday volume on the portion of the roadway adjacent to FOB 8 was 5,500 vehicles in 2007. The posted speed limit is 25 mph.

2nd Street, SW

As it passes the FOB 8 site, 2nd Street, SW is a one-way, two-lane roadway that runs southbound. The left hand lane is a left turn only lane that provides access to I-395, and the right lane is both a left turn and through lane, providing access to I-395. According to DDOT, 2nd Street is classified as a local roadway. Parking is provided along the west side of the roadway. The posted speed limit is 25 mph.

Truck access to FOB 8 is also provided via 2nd Street, SW. A guard station is located off of 2nd Street, near the intersection of 2nd and C Streets. A secure ramp sloping downward from east to west provides access for service and deliveries, as well as to secure parking below.

D Street, SW

D Street, SW borders the FOB 8 site to the south. This local roadway is one directional and provides one eastbound travel lane. The majority of its users are federal workers accessing the buildings in the immediate area. Parking is provided on both sides of the roadway. The posted speed limit is 25 mph.

3rd Street, SW

The District classifies 3rd Street, SW as a collector street. As it passes the western side of FOB 8, 3rd Street, SW provides two travel lanes in the north-south direction during off-peak times, and four travel lanes during peak hours (7:00 – 9:30 a.m. and 4:00 – 6:30 p.m.). Two lanes of parking are provided during off-peak hours when not in use for travel purposes. According to DDOT, the average weekday volume in 2007 on 3rd Street adjacent to FOB 8 was 6,600 vehicles. The posted speed limit is 25 mph.

Interstate 395

Located directly east of 2nd Street, SW, I-395 carries a large proportion of the daily traffic into and out of the District. A southbound on-ramp located at 2nd and D Streets, SW and an off-ramp located to the northeast on Washington Avenue accommodate travel to and from the FOB 8 site. According to DDOT, the average weekday volume on I-395 was 107,000 in 2007. The posted speed limit is 55 mph.

3.4.2 Parking

Parking is provided within and around the FOB 8 site in the form of metered parking spaces, permit parking, at-grade parking, and garage parking. A total of 38 metered parking spaces, and 35 permit spaces, are provided along the roadways that border FOB 8. On C Street, SW there are eight metered spaces on each side of the roadway. On the north side of the street, parking is not allowed between 7:00 and 9:30 a.m. On the south side of the street, parking is restricted between 4:00 and 6:30 p.m. On 2nd Street, SW there are eight metered spaces on the west side of the street. There are no peak hour restrictions. Parking is not allowed on the east side of 2nd Street. On D Street, SW, there are 18 parking spaces reserved for local government workers on the north side of the street. Similarly, there are 17 permit spaces on the south side of the street. There are seven metered

parking spaces on each of the east and west sides of 3rd Street, SW. The metered spaces permit public parking for two hour increments and follow the DC guidelines for accessible parking spaces.

An at-grade parking lot located on the C Street side of the building provides forty-eight automobile parking spaces and 15 motorbike parking spaces. These spaces served employees at FOB 8. Fifty-nine additional spaces are located in a below-grade garage within the building. The garage is accessible via an entrance on 2nd Street. A guard station monitors vehicles entering and exiting both lots. Due to the fact that FOB 8 is vacant, utilization of these lots is minimal.

Additional parking throughout the study area is available in the form of metered spaces along local roadways as well as several managed and privately operated parking garages. The closest garages to the FOB 8 site are located on Virginia Avenue and 4th Street, both managed and operated by Colonial Parking.

3.4.3 Public Transit

Metrorail

The FOB 8 site is accessed by the Federal Center SW Metrorail station, which is served by the Blue and Orange lines. The Federal Center SW station is located one block from FOB 8 along D Street, near the intersection of D and 2nd Streets, SW. Also served by the Blue and Orange lines, the Capitol South Metrorail Station is located approximately six blocks to the southeast of FOB 8. Although not accessible by either of these lines, Union Station, one of the region's most significant intermodal transportation terminals, is easily accessible via Metrorail (Red line) and Metrobus.

Metrobus

The second major component of the public transit system serving the study area is WMATA's Metrobus. Ward 2 is the focal point for the Metrobus, served by nearly 100 Metrobus routes. The P1 and P2 lines run along 3rd Street, SW adjacent to the site, while the P6 line has stops on C Street, SW adjacent to the site. Numerous lines run along Independence Avenue, one block north of the site, connecting this portion of Southwest with Capitol Hill to the east and the Mall and Pennsylvania Avenue to the west and north.

3.4.4 Pedestrian and Bicycle Circulation

Pedestrian activity in the vicinity of the FOB 8 site is generally light, with the majority of pedestrian consisting of federal workers in the surrounding office buildings. The highest levels of pedestrian activity occur during the a.m. and p.m. peak hours, and during lunch time. When FOB 8 was occupied, there were two sidewalks along the C Street side of the building, one that accessed the main entrance and one that bordered the roadway. The sidewalk closest to the building is currently closed, as the front of the building and the surface parking lot are contained within a fence. The outer sidewalk remains operational, but is difficult to navigate due to its changing widths. It is substantially narrower at the east end of the block due to the ramp to the below-grade parking area (Figure 3-24). Sidewalks on 2nd, D, and 3rd Streets, SW are relatively narrow, between 5 and 8 feet wide.

According to DDOT's Bicycle Map, the closest designated bicycle route to the FOB 8 site is along 4th Street. This signed bike route connects to its east-west path along I Street in the south and up north to the National Mall. There are no designated or signed bicycle paths along the roadways immediately surrounding the site.



Figure 3-24: Narrow sidewalk at the east end of C Street, SW with FOB 8 on the left
Source: EDAW, 2008

3.5 UTILITIES/INFRASTRUCTURE

3.5.1 Site Utilities

The following utility information is based on a 2006 utility plan compiled by A. Morton Thomas and Associates, Inc. (AMT).

Water

Water service is supplied to FOB 8 by the DC Water and Sewer Authority (WASA). Eight inch water lines are located below the roadways surrounding the site. Water lines cross the sidewalk on D Streets, entering the building at mid-block. Another line crosses the sidewalk and enters the building at the north end of the block along 3rd Street. An abandoned water line is also located near the southeast corner of the site, within the 2nd Street right-of-way (ROW).

Sanitary Sewer

WASA provides wastewater management for DC, including the collection, treatment, and discharge of effluent. Sewage is collected and transported for treatment at WASA's Blue Plains Wastewater Treatment Plant. Treated effluent is then discharged into the Potomac River.

A 24 inch (610 mm) sewer line runs below D Street, crossing the sidewalk and entering the building near the pedestrian tunnel to the Ford Building and again further east on D Street. Another 24 inch (610 mm) line is located within the 3rd Street ROW. A 15 inch (381 mm) sewer line runs south along 2nd Street, entering FOB 8 at the buildings northeast corner. In addition, several storm sewer manholes are located on the periphery of the site, along the curblines. The identified locations of the manholes include one on the southeast corner of the building along the curb, three along the 2nd Street curblines, one in the northeast corner, and two along 3rd Street near the front of the building.

Electric

Electric service is provided to the building by PEPCO. The main lines are located within the 3rd Street ROW and along the 3rd Street curb/gutter line. Smaller feeder lines run along the perimeter of the building and below adjacent sidewalks.

Steam

The FOB 8 building is heated by steam provided by the Heating Operation and Transmission District (Steam Distribution and Heating Plant), which is operated and owned by GSA. The main steam line serving the site is located within the 3rd Street ROW and enters the building from the west, crossing below the sidewalk near the pedestrian tunnel to the Switzer Building.

Communications

According to the survey conducted by AMT in 2006, fiber optic lines were not locatable but are believed to exist within a duct system along D Street, entering and leaving the south wall of the metro vent. Additional fiber optic lines were found to be located outside of the curblin along C Street. Telephone lines run below the sidewalk on D Street.

Other

Street lampposts are located along the perimeter of the site, three along D Street, two along 2nd Street, three along C Street, and two along 3rd Street. An additional six lampposts are located along the at-grade parking lot on C Street. Because the metro tunnel is located immediately to the south of the site, several metro vents are located along D Street.

3.5.2 Stormwater Management

Typical of the urban environment throughout the District, the natural stormwater drainage patterns of the site and within the general area have been altered as a result of urbanization. Stormwater within the area drains away from the building and is collected in storm drains and combined sewer lines located along the periphery of the site, as noted in the Utilities section. Combined sewer lines that convey both stormwater and sanitary sewage are located along the perimeter of the site.

Stormwater is treated at the Blue Plains Wastewater Treatment Plant. However, under extreme stormwater events, combined sewer overflows (CSOs) may be released directly into the Potomac River, impacting water quality. The governing body for stormwater management in DC is the Stormwater Management Section of the Department of Consumer and Regulatory Affairs.

3.5.3 Hazardous Materials

Due to the age of the building and prior uses, several environmental studies have been completed to assess potential hazardous substances at FOB 8. These studies include a *Phase I Environmental Site Assessment* (Phase 1 ESA) undertaken in 1998-1999, a *Final Environmental Hazards Report* completed in 2003, a *Chemical Decommissioning Report* completed in 2005, a *Fly Ash Contamination Sampling Report* finalized in 2007, and an *Environmental Conditions Report* released in 2008. Although the *Environmental Conditions Report* documented the presence of asbestos containing materials (ACMs), lead based paint, and PCBs (in electrical fixtures) in the building, it is unlikely that such substances are present outside of the structure. In addition, these substances are being remediated during the renovation process, a separate action from what is being analyzed in this EA. The 2007 sampling of fly ash at FOB 8 established the presence of dioxins and furans, Polynuclear Aromatic Hydrocarbons, and metals of interest above the limit of detection. This contamination is due to the prior operation of a biological waste incinerator system by the FDA. It is possible that these materials are present in the soil immediately surrounding the building, due to the ventilation of the system through a stack on the roof.

3.6 AIR QUALITY

In response to the Clean Air Act (CAA) of 1970 and the CAA Amendments of 1977 and 1990, the U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for criteria air pollutants including carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), particulate matter equal to or less than 10 microns in size (PM₁₀), and fine particulate matter equal to or less than 2.5 microns in size (PM_{2.5}). The NAAQS include primary standards designed to protect human health and secondary standards to protect public welfare.

Regions of the country that are currently not meeting the NAAQS are identified as “nonattainment” areas. These non-attainment areas are classified as “marginal”, “moderate”, “serious”, “severe”, or “extreme”. The Metropolitan Washington air quality region, which includes Washington, DC and ten surrounding counties in Virginia and Maryland, is currently designated as moderate non-attainment for the federal eight-hour ozone standard and non-attainment for the fine particulate (PM_{2.5}) standard. The Washington DC metropolitan area is also located within an ozone transport region. The Metropolitan Washington Air Quality Committee (MWAQC), as the region’s lead air quality planning agency, has undertaken planning efforts to bring the region into compliance with the NAAQS.

The EPA requires that non-attainment regions prepare attainment plans aimed at reducing ozone-causing emissions in order to reach compliance with the NAAQS. Federal agencies responsible for an action in a non-attainment area are required to determine if the action either conforms to the prepared regional attainment plan or is exempt from conformity. The EPA has determined that federal actions are exempt from conformity determinations where the total of all reasonably foreseeable direct and indirect emissions of non-attainment pollutants: (1) would be less than their specified emission rate thresholds, known as *de minimis* limits, and (2) would be less than 10 percent of the area’s annual emission budget. The general conformity *de minimis* limits for ozone nonattainment areas inside an ozone transport region are 50 tons per year for volatile organic compounds (VOC) and 100 tons per year for nitrogen oxides (NO_x). The *de minimis* limit for direct emissions of PM_{2.5} is 100 tons per year.

3.7 NOISE LEVELS

Noise can be generally defined as unwanted or unwelcome sound. Noise levels are usually measured in decibels (dB), on a logarithmic scale, that are weighted to sounds perceivable by the human ear (A-weighted sound level (dBA)). A-weighted decibels account for the fact that the human ear is not equally sensitive to all frequencies. Noise levels are typically expressed as an average over a period of time (Leq) since noise sources may produce varying degrees of sound throughout the period of operation or occurrence.

Noise regulations in the District establish maximum permissible sound levels for an operation, activity, or noise source on a property, based on time of day and land use category (i.e., residential, commercial, and industrial). Areas that are zoned commercial, such as the project site, have a maximum allowable noise limit of 65 dBA (daytime) and 60 dBA (nighttime). There are exceptions to the maximum allowable noise levels in the DC noise regulations such as for construction activities and noise emitting from emergency vehicles. From 7:00 a.m. to 7:00 p.m. on any weekday, noise levels resulting from construction or demolition are limited to a maximum of 80 dBA.

The maximum allowable noise levels are designed to protect human activities or land uses that may be infringed upon by ambient noise. Certain land uses are considered to be noise-sensitive receptors, including residential dwellings, hotels, hospitals, nursing homes, educational facilities, and libraries. The National Museum of the American Indian (NMAI) would potentially be classified as a noise-sensitive receptor because it serves an educational function. Commercial and industrial land uses are generally not considered to be noise sensitive receptors.

Ambient noise levels at the project site and surrounding areas are primarily generated by transportation activity. The most prominent source of noise is the vehicular traffic on the roadways adjacent to the site. Levels of traffic congestion and mix of vehicle types on those adjacent streets corresponds with the volume of noise generated. Idling vehicles, such as WMATA buses, further contribute to the volume of noise. Because traffic is the largest source of noise in the study area, the peak noise period of the day is anticipated to be the peak hour traffic period. Those primarily affected by this traffic noise would be pedestrians on the sidewalks surrounding the site and visitors to the museums and the Mall one block to the north.

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