

MARTIN LUTHER KING JR.  
MEMORIAL LIBRARY  
REHABILITATION AND  
MODERNIZATION

ENVIRONMENTAL ASSESSMENT

*Prepared by:*

**National Capital Planning Commission**

August 2016

*With Technical Assistance from:*



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## EXECUTIVE SUMMARY

The National Capital Planning Commission (NCPC), in cooperation with the District of Columbia Public Library (DCPL), has prepared an Environmental Assessment to evaluate impacts of alternatives for the rehabilitation and modernization of the Martin Luther King Jr. Memorial Library (MLK Jr. Library). The MLK Jr. Library is located at 901 G Street, NW, Washington, DC.

This EA evaluates three design concepts, or action alternatives and a No-Action Alternative. The DCPL is proposing to rehabilitate and modernize the MLK Jr. Library and to construct an addition on the roof that will include an event space. The project would include many environmentally sustainable elements including making the building more energy efficient as well as more comfortable for occupants. DCPL would seek a minimum of LEED®-Silver certification from the U.S. Green Building Council. The following will be incorporated into the project: a renovated reading room; digital computer center; classrooms and training facilities; innovation and creativity commons; co-working and collaboration spaces; gathering spaces for performances, readings, and civic engagement; history center, flexible spaces for use by city agencies or like-missioned non-profits; and auxiliary spaces such as a café, a welcome center, and event space with catering kitchen.

The proposed project is subject to the review of NCPC under the National Capital Planning Act. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality's Regulations for Implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508); NCPC's implementing regulations (69 FR 41299); and the National Capital Planning Act. Probable environmental impacts and potential mitigation measures have been identified for the proposed alternatives for the rehabilitation and modernization of the MLK Jr. Library and the No-Action Alternative.

Questions or comments on the EA should be addressed to:

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**List of Acronyms**

|         |  |
|---------|--|
| ACMs    | Asbestos Containing Materials                              |
| ACOE    | U.S. Army Corp of Engineers                                |
| ACS     | American Community Survey                                  |
| AIRS    | Aerometric Information Retrieval System                    |
| ANC     | Area Neighborhood Commission                               |
| APE     | Area of Potential Effect                                   |
| ASTM    | American Society for Testing and Materials                 |
| C-4     | Central Business District (Zoning)                         |
| CAA     | Clean Air Act  |
| CEQ     | Council on Environmental Quality                           |
| CFR     | Code of Federal Regulations                                |
| CO      | Carbon Monoxide  |
| CWA     | Clean Water Act  |
| CZMA    | Coastal Zone Management Act                                |
| DC HPO  | District of Columbia State Historic Preservation Office    |
| DCCFO   | District of Columbia Office of the Chief Financial Officer |
| DCMR    | District of Columbia Municipal Regulations                 |
| DCOZ    | District of Columbia Office of Zoning                      |
| DCPL    | District of Columbia Public Library                        |
| DD      | Downtown Development Overlay District                      |
| DDOT    | District of Columbia Department of Transportation          |
| DD-SHOP | Downtown Shopping Overlay District                         |
| DOE     | Determination of Eligibility                               |
| DOEE    | District Department of Energy and Environment              |
| DPW     | District Department of Public Works                        |
| EA      | Environmental Assessment                                   |
| EDR     | Environmental Data Resources, Inc.                         |
| EO      | Executive Order  |
| EPA     | Environmental Protection Agency                            |

|         |  |
|---------|--|
| ESA     | Endangered Species Act                                   |
| FEMA    | Federal Emergency Management Agency                      |
| FINDS   | Facility Index System                                    |
| FIRM    | Flood Insurance Rate Map                                 |
| HUD     | U.S. Department of Housing and Urban Development         |
| HVAC    | Heating, Ventilation, and Air Conditioning               |
| IPaC    | Information for Planning and Conservation                |
| LBP     | Lead Based Paint   |
| LEED    | Leadership in Energy and Environmental Design            |
| LUST    | Leaking Underground Storage Tank                         |
| MLK Jr. | Martin Luther King, Jr.                                  |
| MWCOG   | Metropolitan Washington Council of Governments           |
| NAAQS   | National Ambient Air Quality Standards                   |
| NCPC    | National Capital Planning Commission                     |
| NEPA    | National Environmental Policy Act                        |
| NESHAP  | National Emission Standards for Hazardous Air Pollutants |
| NHD     | National Hydrography Dataset                             |
| NHPA    | National Historic Preservation Act                       |
| NO2     | Nitrogen Dioxide   |
| NOAA    | National Oceanic and Atmospheric Administration          |
| NWI     | National Wetlands Inventory                              |
| O3      | Ozone  |
| OMB     | Office of Management and Budget                          |
| Pb      | Lead   |
| PCBs    | Polychlorinated Biphenyls                                |
| PM      | Particulate Matter                                       |
| PSA     | Police Service Area                                      |
| RECs    | Recognized Environmental Conditions                      |
| RFQ     | Request for Qualifications                               |
| SIP     | State Implementation Plan                                |

|                 |                               |
|-----------------|-------------------------------|
| SO <sub>2</sub> | Sulfur Dioxide                |
| TMDL            | Total Maximum Daily Load      |
| TSCA            | Toxic Substance Control Act   |
| USACOE          | US Army Corps of Engineers    |
| USFWS           | US Fish and Wildlife Service  |
| USGBC           | US Green Building Council     |
| USGS            | US Geological Survey          |
| VOCs            | Volatile Organic Compounds    |
| WIP             | Watershed Implementation Plan |
| WOUS            | Waters of the US              |
| XRF             | X-Ray Fluorescence            |

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## 1. PURPOSE AND NEED FOR THE PROPOSED ACTION

### 1.1 INTRODUCTION

The District of Columbia Public Library (DCPL) is proposing to rehabilitate and modernize the Martin Luther King Jr. Memorial Library (MLK Jr. Library), located at 901 G Street, NW, Washington, DC (see Figure 1 **Error! Reference source not found.**). The project also includes the construction of an addition on the roof that will include event space. The proposed project is subject to the review of the National Capital Planning Commission (NCPC) under the National Capital Planning Act. Serving as the lead federal agency and in cooperation with the DCPL, NCPC has prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality's Regulations for Implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508); NCPC's Environmental and Historic Preservation Policies and Procedures (69 FR 41299); and the National Capital Planning Act. NCPC is preparing this EA to ensure all environmental issues are identified and potential impacts are assessed before the Commission reviews and takes an action on an alternative for the renovation and modernization of the MLK Jr. Library. Concurrently, NCPC is conducting consultation in accordance with Section 106 of the National Historic Preservation Act (NHPA).

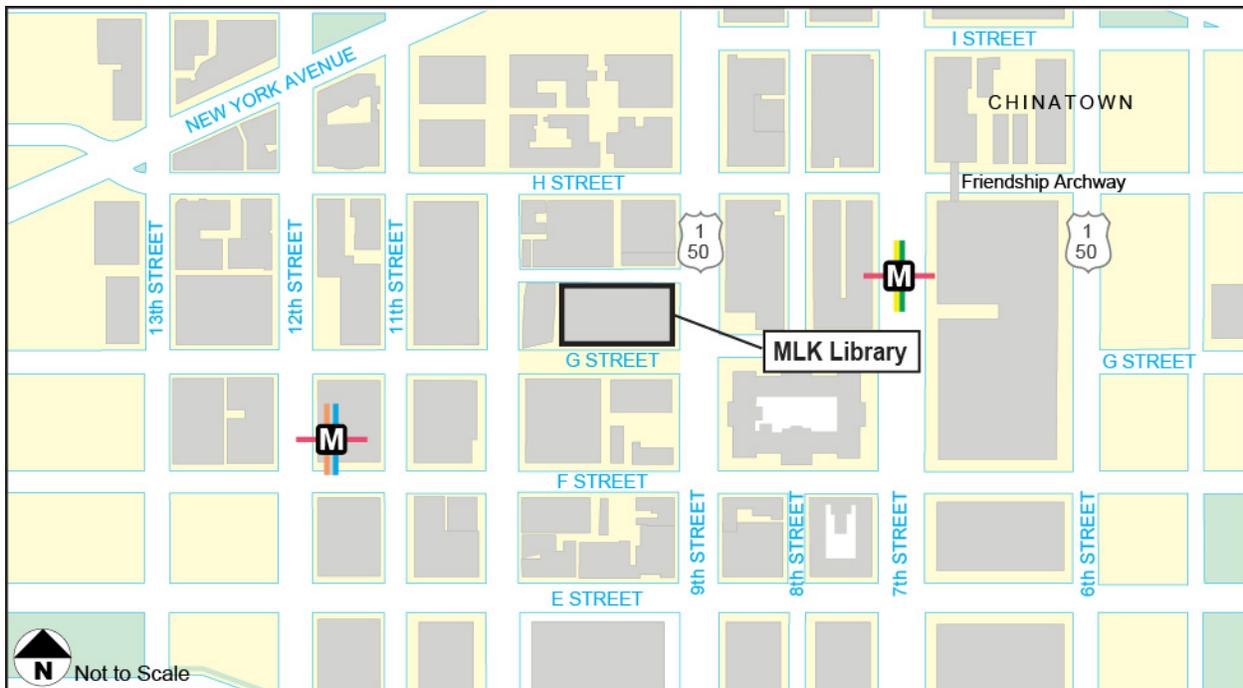


Figure 1. Project Location and Area Map

## 1.2 BACKGROUND

The DCPL was created by an act of Congress in 1896 as an official entity to furnish books and other printed matter and information services convenient to the homes and offices of all residents of the District of Columbia (the District). The establishment of a library entity (the “Library”) was largely due to the long and arduous efforts of Theodore W. Noyes, editor of *The Evening Star*. Mr. Noyes served as president of the Board of Library Trustees for 50 years.

From 1898 until 1903, the first public library in the District was located in a house at 1326 New York Ave, NW. In 1899, philanthropist and library enthusiast Andrew Carnegie donated funds to build a central library at Mount Vernon Square. The new library was dedicated in 1903 in a ceremony attended by President Theodore Roosevelt.

In the 1960s, the DCPL embarked on creating a new central library at the corner of 9<sup>th</sup> and G Streets, NW. The new central library was designed by Ludwig Mies van der Rohe, one of the most influential modern architects of the 20<sup>th</sup> century, and is the only building designed by him in Washington, DC. The building is a significant example of mid-century modernist architecture in Washington, DC. Construction began in 1969, the year of Mies van der Rohe’s death, and the building opened to the public in 1972 as the Martin Luther King Jr. Memorial Library. Architect John (Jack) Bowman, who worked for Mies van der Rohe, served as the project architect and oversaw much of the construction and construction-related decisions. The MLK Jr. Library is the only public library designed by Mies van der Rohe to have been constructed. The building continues to serve as the DCPL’s central library today. The MLK Jr. Library is listed in the DC Inventory of Historic Sites and the National Register of Historic Places. The designation includes the exterior of the building and the interior space on the First Floor.

Beginning in 2007, the DCPL commenced a Neighborhood Library Capital Improvement Program and invested over \$180 million to facilitate the transformation of the District’s neighborhood libraries. In 2011, the DCPL conducted studies to assess the condition and suitability of the MLK Jr. Library as a modern library. The results of this study outlined the following options for the MLK Jr. Library:

- Renovate the building for the sole use of the MLK Jr. Library; or
- Renovate and add two more floors for a public/private partnership (ULI, 2011).

In 2012, the DCPL conducted tests of the options identified in the Urban Land Institute report. The findings presented by The Freelon Group determined that:

- It is possible to make the MLK Jr. Library a 21<sup>st</sup> century library at its existing location, but extensive and expensive improvements are needed; and

- The Mies van der Rohe building is structurally sound to support adding two additional floors (Freelon Group, 2012).

As a result of these studies, the DCPL board passed a resolution at their November 2012 meeting that would keep the central library at its current location on G Street, NW and that it would continue to be called the Martin Luther King Jr. Memorial Library.

In September 2013, a Request for Qualifications (RFQ) was issued to identify firms with experience working on library renovations. Of the 23 firms that responded to the RFQ, ten were selected to continue to round two which required the submission of a technical proposal for the rehabilitation and modernization of the MLK Jr. Library. In February 2014, a Technical Evaluation Committee selected Martinez + Johnson Architecture and Mecanoo to design the rehabilitation and modernization of the MLK Jr. Library.

### **1.3 PURPOSE OF THE ACTION**

The purpose of the proposed project is to rehabilitate and modernize the Martin Luther King Jr. Memorial Library to provide a world-class and sustainable central city library.

### **1.4 NEED FOR THE ACTION**

The project is needed because deferred maintenance has resulted in deficient building systems that do not meet current standards. Completed in 1972, the building's major systems, including heating, cooling, plumbing, electrical, and elevators, are outdated and need to be replaced. In addition, egress is inadequate and hazardous materials are present throughout the building and require remediation.

The project is also needed to meet the expectations of modern day library users and establish a truly 21<sup>st</sup> century central library for the District. As the methods in which people use public libraries to navigate complex networks of information and convert that information into knowledge evolve, libraries have to adapt their operations and services accordingly. The DCPL has determined the following to be requirements of a 21<sup>st</sup> century central library:

- Open floor plan that includes clear and well defined horizontal and vertical circulation;
- Flexible interior and exterior spaces that promote collaboration and innovation, and that enhances library programming;
- Destination spaces distributed throughout the facility to promote user movement; and
- Connectivity to the city visually.

### 1.5 SCOPING

Public involvement and participation is an essential element of the NEPA and the NHPA processes by engaging citizens in the decision-making process through planning and development. NEPA regulations require an “early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.” To determine the scope of issues to be analyzed in depth in the EA for the project, NCPC announced a scoping period on September 17, 2014 that extended through October 31, 2014. NCPC announced the public scoping period for the project via electronic mail on September 17, 2014 to federal and district agencies, community groups and individuals. The DCPL also issued a press release on their public website announcing the project ([www.dclibrary.org/mlkfuture](http://www.dclibrary.org/mlkfuture)) and one was also placed on NCPC’s website. The email announcement and press release provided a project overview and invited the public to attend a public scoping meeting on October 7, 2014 at the MLK Jr. Library.

Approximately 27 people attended the meeting, including District employees, Area Neighborhood Commission (ANC) representatives, and members of the public. Attendees were invited to submit comments on the project electronically through the NCPC website and by mailing written comments to NCPC. Three verbal comments were given to team members at the scoping meeting and one formal written comment was provided by the public at the meeting.

During the public comment period, a total of ten written comments were received including letters from the Committee of 100 on the Federal City, the First Congregational United Methodist Church, the MLK Jr. Library Friends, the District Library Dynamos, and members of the public. All comments received during the scoping period were summarized in a Public Scoping Report (Stantec, 2014), which is included as Appendix A and incorporated herein by reference.

In addition to holding a scoping period for the public and the DCPL Public Outreach, the DCPL and NCPC consulted with federal and local agencies throughout the preparation of this EA. DCPL and NCPC have coordinated with the following agencies:

- U.S. Commission of Fine Arts (CFA)
- U.S. Fish and Wildlife Service (FWS)
- District Department of Energy and Environment (DOEE)
- District Department of Transportation (DDOT)
- District Historic Preservation Office (DC HPO)

**DCPL Public Outreach**

Along with the NEPA scoping period, DCPL solicited comments on the project through local focus group meetings and surveys with a wide range of District residents. To date the MLK Jr. Library has hosted 16 focus groups. Comments from these meetings were summarized by the DCPL and posted to their website.

DCPL also held meetings with the MLK Jr. Library Advisory Panel (Advisory Panel). The Advisory Panel was developed to provide insight and advice in the selection of the architectural team to design the rehabilitation and modernization of the MLK Jr. Library. Each member of the Advisory Panel was invited to join this group because of their expertise, their relationship with the building or both. An Orientation for the Advisory Panel was held on Friday, February 7, 2014. Once the design team was selected, the Advisory Panel has continued to meet and provide insight and advice to DCPL relative to the design of the MLK Jr. Library rehabilitation and modernization. Additional Advisory Panel meetings were held:

- April 11, 2014
- June 4, 2014
- January 20, 2015
- March 3, 2015
- March 25, 2015
- April 28, 2015
- May 14, 2015
- May 26, 2015
- July 9, 2015
- October 15, 2015
- July 21, 20126

The following is a list of the members of the Advisory Panel:

- David Bell -- BELL Architects
- Robin Diener – Library Renaissance Project
- David Garber – Advisory Neighborhood Commission
- Stuart Gosswein – Committee of 100
- Susan Haight – Federation of Friends of the DC Library
- Meg Maguire -- First Congregational United Church of Christ
- Jo-Ann Neuhaus -- Penn Quarter Neighborhood Association
- Barbara Reck – Catholic Charities
- John Tinpe –(Advisory Neighborhood Commission 2C01

- Gerry Widdicombe – DowntownDC Business Improvement District
- Patricia Zingsheim – DC Office of Planning

### **1.6 ENVIRONMENTAL ASSESSMENT PROCESS, AND PROCEDURES**

The NEPA process is intended to help public officials make decisions based on an understanding of environmental consequences, and to take actions that protect, restore, and enhance the environment. Decisions should be made based on accurate scientific analysis, expert agency comments, and public scrutiny of readily available environmental information. Federal agencies are obligated to follow the provisions of NEPA to identify and assess reasonable alternatives to the proposed action that would avoid or minimize any adverse effects upon the quality of the human environment before proceeding with the proposed action.

The level of NEPA analysis undertaken by an agency for a proposed action depends on the probable impacts. In order to determine the level of NEPA analysis required for the proposed rehabilitation and modernization of the MLK Jr. Library, the DCPL and NCPC examined potential impacts on the natural and human environment and considered the range of comments received during the scoping period. The impacts considered were based on reasonably foreseeable changes resulting from implementation of the proposed action. The following issues that could affect the environment and/or the proposed project were identified:

- Preservation of the historic significance of the MLK Jr. Library
- Replacement of buildings systems and remediation of hazardous materials.

Based on a review of these issues and because significant impacts are not anticipated, NCPC elected to prepare an EA for the rehabilitation and modernization of the MLK Jr. Library. This EA evaluates the probable impacts based on the reasonably foreseeable consequences of the proposed action and recommends measures to mitigate impacts, as appropriate.

## **2. ALTERNATIVES INCLUDING THE PROPOSED ACTION**

This section describes alternatives for meeting the purpose and need for the proposed action. Three action alternatives for rehabilitation and modernization are being considered for the MLK Jr. Library. The existing environment and potential impacts associated with the rehabilitation and modernization are described in Chapter 3, Affected Environment and Impacts to the Human Environment.

### **2.1 DESCRIPTION OF THE PROPOSED ACTION**

The DCPL is proposing to rehabilitate and modernize the MLK Jr. Library, located at 901 G Street, NW, Washington, DC. The project includes the construction of an addition on the roof that will include an event space. Specific areas to be renovated include: building envelope and cladding; glazing; site walls; plaza/loggia paving; loading dock, vehicle ramps; building systems including elevators; lighting; vertical circulation (stairs); and interior layout and configuration.

The proposed action would include many environmentally sustainable elements including making the building more energy efficient as well as more comfortable for occupants. DCPL would seek a minimum of LEED®-Silver certification from the U.S. Green Building Council. The following will be incorporated into the project: a renovated reading room; digital computer center; classrooms and training facilities; innovation and creativity commons; co-working and collaboration spaces; gathering spaces for performances, readings, and civic engagement; history center, flexible spaces for use by city agencies or like-missioned non-profits; and auxiliary spaces such as a café, a welcome center, and event space with catering kitchen.

### **2.2 ALTERNATIVES GIVEN DETAILED CONSIDERATION**

Four alternatives are discussed in detail in this EA, including the No-Action Alternative and three Action Alternative concept designs: Alternatives A, B, and C. These alternatives are described below.

#### ***No-Action Alternative***

The No-Action Alternative describes the action of continuing present management operations, conditions, and use. It does not imply the restriction of regular use and maintenance of the facility. The No-Action Alternative does not meet the Purpose and Need, but rather it is used as a basis from which to measure environmental consequences of the Action Alternatives.

Under the No Action Alternative, DCPL would continue its existing use of MLK Jr. Library and its current management and maintenance routine. This alternative proposes no addition to the building or reconfiguration of the MLK Jr. Library's interior or exterior features. Although DCPL

would address necessary repairs as they arise, there would be no general or comprehensive improvements made to the property (see Figure 2).



Figure 2. The MLK Jr. Library as it would appear under the No-Action Alternative

### ***Action Alternatives***

The proposed action analyzed in this document is the rehabilitation and modernization of the MLK Jr. Library, which includes the construction of a fifth floor addition. The DCPL would utilize the Leadership in Energy and Environmental Design (LEED®) Rating system to apply principles of sustainable design and development to this project. LEED® was developed by the U.S. Green Building Council (USGBC). LEED® consists of a set of prerequisites and credits with specific requirements for obtaining points in order to become a LEED® Green Building. LEED® follows consensus-based voluntary standards for sustainable buildings, while still meeting high-performance expectations. The LEED® rating system grades building plans on sustainable site design, energy savings, water efficiency, CO emissions, indoor air quality, and building materials (USGBC, 2010). The rating scale is scored on a point system with four levels of certification, in order of rating: Certified, Silver, Gold and Platinum. Under any of the action alternatives, the consolidated space would be required to achieve a LEED® Silver Rating. The LEED® rating would increase energy conservation and water conservation for both building construction and design.

***Alternative A: Fifth Floor Existing Screen Addition***

With Alternative A, a fifth floor addition will be constructed on the existing roof. This would require the removal of the existing screen walls and penthouse enclosure. Alternative A limits the addition's size to the existing footprint of the screen and core penthouse enclosures. The addition would generally have the same volume and visibility of the existing elements, although would be clad in a more transparent material. A glass railing would be installed along the perimeter of the roof, with a setback of five feet along each elevation from the existing parapet. The existing roof membrane and ballast would be removed and replaced. The new terrace would be paved and would feature a mix of raised planting beds, seating areas, and open space. The roof terrace would be lit to allow for use at night, but uplighting and spotlighting would be minimal. On the roof of the new addition, a vegetative roof would be installed to capture rainwater. This alternative would result in the smallest addition and the largest area of roof terrace (see Figure3).



**Figure3. Alternative A: Fifth Floor Existing Screen Addition**

***Alternative B: Fifth Floor Trapezoidal Addition***

A fifth floor addition will be constructed on the existing roof. This would require the removal of the existing screen walls and penthouse enclosure. The fifth floor addition would have an expanded footprint as compared to the existing screens and penthouses. The addition would have a trapezoidal form with curved corners. A glass railing would be installed along the perimeter of the roof, with a setback of five feet along each elevation from the existing parapet. The existing roof membrane and ballast would be removed and replaced. The new terrace would be paved and would feature a mix of raised planting beds, seating areas, and open space. The roof terrace would be lit to allow for use at night, but uplighting and spotlighting would be minimal. On the uppermost roof level, a green roof would be installed to reduce heat gain, improve the roof aesthetic and capture rainwater for irrigation of the fifth floor terrace. (see Figure 4).



**Figure 4. Alternative B: Fifth Floor Trapezoidal Addition**

***Alternative C: Fifth Floor Extruded Addition***

Alternative C proposes a fifth floor addition that extends directly upward from the existing wall plane, creating a continuous surface along the outer building elevations. All existing architectural elements would be repeated across the uppermost floor. This alternative would not create a perimeter plaza or garden, but would include the integration of interior courtyards into the fifth floor that would provide outer space. This alternative would create the largest amount of enclosed interior space and would be the most visible from the surrounding streetscape (see Figure5).



**Figure5. Alternative C: Fifth Floor Extruded Addition**

***Elements common to all action alternatives***

The following section provides descriptions of elements that would occur with the implementation of each of the Action Alternatives. Because the primary difference between the action alternatives relates to the form and size of the proposed fifth-floor addition, the elements listed below address building and site improvements below the proposed new addition. Elements common to all of the Action Alternatives include:

## Exterior - Building

**Steel Envelope and Cladding:** The project proposes to upgrade the exterior cladding to improve energy efficiency and address the deterioration of the glazing system. Exterior steel spandrel panels, column wrapping, vertical beams, and glazing components would be treated through mechanical or chemical means to remove existing paint and corrosion. Options are being explored to determine whether this could be done in situ or would require the removal and reinstallation of components. In either case, this treatment method would result in the retention of the vast majority of exterior steel components. The existing glazing components would likely be routed to create a deeper glazing channel to accommodate insulated or double-pane glass. The alteration would not be visible from the interior or exterior when fully assembled. Exterior steel elements would receive a coating consistent with the original finish and appearance.

**Glazing:** The existing glass would be removed and replaced with new glazing units. The existing butyl glazing tape would be removed and replaced with a waterproof gasket. The tint, color, texture, and transparency of the existing glazing would be replicated on the exterior surface and would not result in any changes to appearance of the glass or building façade. The preferred treatment and materials are still being refined to ensure consistency with the existing appearance.

**Brick Walls:** The exterior brick walls on the first story of the building will be retained. Walls will be cleaned and repointed as necessary, using treatment methods consistent with the Secretary of the Interior's Standards. Two new penetrations will be made on the north elevation of each core to allow for new egress and loading doors. The two existing openings will be retained.

**First Floor Core Exteriors:** The south cores will become the principal means of vertical circulation through the building for the public. A portion of the existing brick wall will be removed and replaced with glazing to allow a direct visual connection into the building (see Figure 6). Similarly, the existing steel panels and doors—currently used for egress—on the inner face of the cores will be removed and replaced with glazed openings.



Figure 6. Rendering of the new glazing and stairs

## Exterior - Site

**Loading Docks:** The existing loading configuration will be retained, with minor adjustments to allow for the creation of an informal performance space adjacent to the main lobby (Great Hall). The depth of the existing loading bays will be reduced slightly to allow for that area to be enclosed. A sloping ramp will allow trucks to back into the new loading docks. Portions of the loggia to the east and west will be used as temporary staging areas for loading. The existing curb configuration will be modified to comply with current streetscape requirements. The existing tapered configuration will be replaced with a nine-foot-radius curb (see Figure 7).

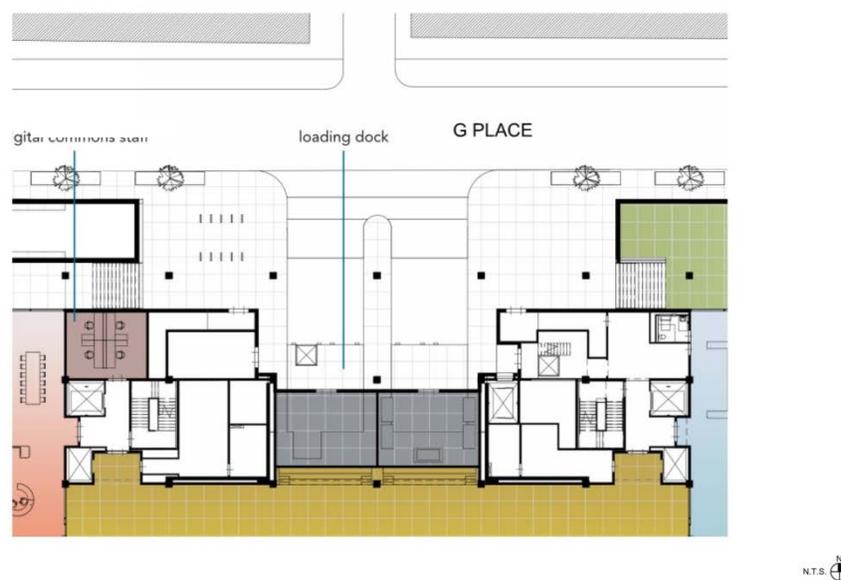


Figure 7. Diagram of Loading Dock

## Automobile Ramps:

Several options for the automobile ramps have been considered for each of the alternatives under consideration. These include:

- Option 1: The existing automobile ramps will remain in place. Portions of the surrounding walls will be lowered or removed to improve visibility across the site. Minor adjustments will be made to the ramp inlets and outlets to improve accessibility (see Figure 8).
- Option 2: Two-way Ramp into/out of the MLK Jr. Library Parking Garage. Under this option the egress ramp at 9<sup>th</sup> Street, NW would be removed and the ingress ramp from G Place would accommodate vehicles entering and exiting the garage. The direction of traffic along G Place, NW would be changed from one-way to two-way

traffic from 10<sup>th</sup> Street, NW to the Alley. From the Alley to 9<sup>th</sup> Street, NW, the traffic would remain one-way, eastbound. A limited signal would be installed on DCPL property to control vehicles exiting the MLK Jr. Library garage. Approximately two parking spaces would be removed to accommodate the traffic operational change. Geometric changes to the curb cut for the DCPL traffic and the curb adjacent to the church's parking garage entrance and the removal of a portion of the wall would also occur (see Figure 9).

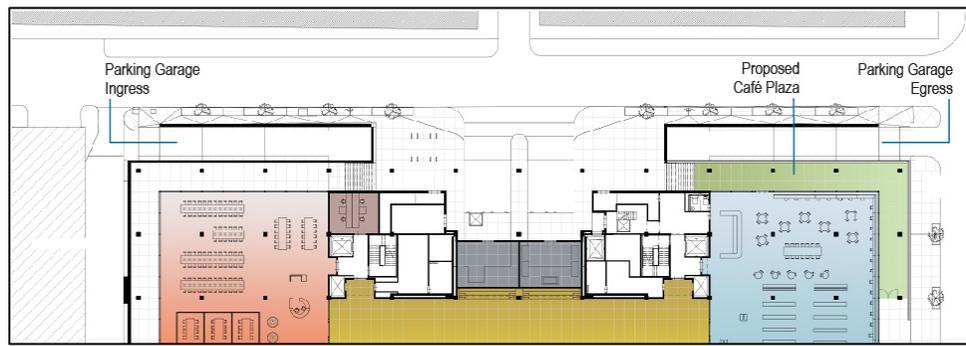


Figure 8. Automobile Ramps – Option 1

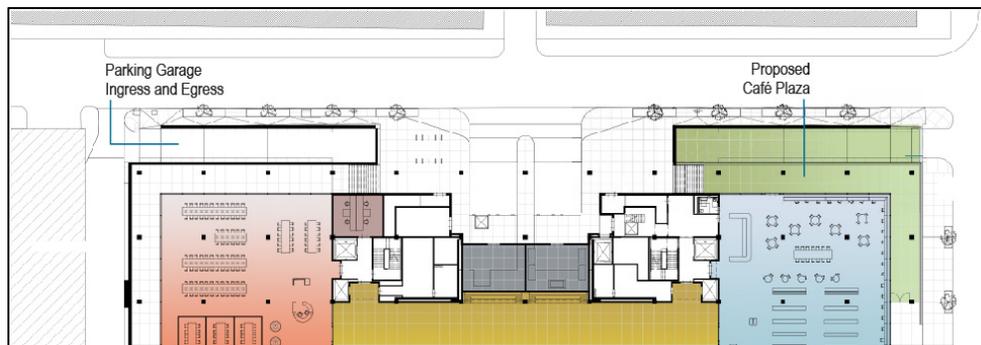


Figure 9. Automobile Ramps – Option 2

**Café:**

A café would be created on the first floor. It would be located within the existing East Reading Room. The café would include an outdoor patio (see Figure 11 and Figure 10).



Figure 11. Rendering of Café Patio under Option 1

Figure 10. Rendering of Café Patio under Option 2



**Plaza Paving:** The existing granite paving along the plaza will be repaired or replaced as necessary in areas where it currently exhibits structural or mechanical failure. If the material is to be replaced, an in-kind granite that is compatible with the existing material would be used. On the north side of the building, the plaza will be altered to accommodate changes to the existing loading dock, stairs, and automobile ramps. Those areas will be paved with granite to match the existing or will receive a new treatment that is compatible in material, color, scale, and texture with the adjacent finishes.

**Site Walls:** Portions of the existing brick walls will be lowered or removed around the site. This includes the walls around the east automobile ramp and at the southwest corner of the loggia. The existing, non-historic metal gates attached to the walls in these areas will be removed. The site walls to remain will be repaired or repointed as necessary, using treatment methods consistent with the Secretary of the Interior's Standards. The existing loggia on the northeast corner of the building would be enhanced to create a seasonal plaza area that would feature raised garden beds and café-style seating.

## Interior

**Elevators, Building-Wide:** The existing elevator enclosures and cabs will be removed or replaced, depending on the location.

**Systems, Building-Wide:** Systems will be removed and modernized throughout. This includes mechanical systems on the Mechanical/C and B levels, on the roof, and radiators throughout the building.

**Core Interiors, Building-Wide:** The four existing cores will be reconfigured to support new systems and circulation patterns. The southeast and southwest cores will become the main public cores for the building and the principal means of vertical circulation throughout the building. A monumental staircase will be introduced to each. The northeast and northwest cores will be primarily devoted to service and staff uses. In general, the form and exterior cladding of the cores will remain intact, although most of the interior walls, finishes, and fixtures will be removed.

**Lighting, Building-Wide:** All lighting will be removed and modernized throughout. On the first floor and on the building exterior, the appearance and composition of the lighting plan will be recreated using higher efficiency fixtures. On the stories above, lighting will be more altered with a variety of fixtures including suspended, pendant, and recessed, although in some cases the composition of the existing lighting plan will remain.

**Furniture, Building-Wide:** New furniture, including chairs and tables, bookshelves, desks, and seating elements will be introduced throughout the building. Some of these will be large-scale functional elements to visually enclose or define spaces. Furniture will feature curved and irregular shapes to distinguish it from the architecture of the building. All furniture will be removable.

**“Reading Ribbon” Desks, Building-Wide:** Fixed, table-height desks will be installed in limited areas along the perimeter glass walls, generally along the south, west, and east exterior walls on the second and third floors. Desks will be lit with an integrated task light.

**Mechanical/C Level:** The equipment rooms on this floor will remain, but the existing equipment and circulation will be replaced (see **Error! Reference source not found.**).

**B Level:** The B Level garage and mechanical rooms will be reconfigured, although its use as a parking garage will remain in the primary option. There is currently a small lobby on the south side of the B Level that provides access between the southeast core and parking garage. This lobby and its associated features will be removed and replaced with parking facilities (see Figure 19).

**A Level:** The A Level garage, mechanical, reading, and service spaces will be reconfigured to support new programmatic uses. The meeting room, exhibition hall, and lobby on this floor will be reconfigured and these spaces and their associated features will be removed (see Figure 20).



**Figure 12. Rendering of the Entrance Lobby ("Vestibule")**

**First Floor, Entrance Lobby ("Vestibule"):**

Portions of the existing east and west brick walls within the entrance lobby will be removed and replaced with glazed partitions, which will allow for a direct visual and functional connection between the entrance of the building and the new public cores (see Figure 12). The non-historic revolving doors currently in the outer vestibule wall will be removed and replaced with double-leaf doors to replicate the original design. A diagram of the first floor can be found in Figure 21 for Option 1 and Figure 22 for Option 2.

**First Floor, Main Lobby ("Great Hall"):** Within the main lobby, the masonry partition walls along the north wall (within the two center column bays and beneath the King mural) will be removed and replaced with an opening for sitting so that patrons can view informal events that would occur in the great hall (see Figure 13). Some of the original, fixed furniture pieces in the main lobby will be removed or relocated to accommodate new circulation patterns. The two symmetrical circulation desks at the southeast and southwest corners of the room will be shifted toward the outer edges of the room to allow direct access to the existing core doors. Their length will be truncated by several bays and they will be mounted on newly constructed bases. New granite flooring will be laid to cover their original bases. The existing information desk at the center of the room will be minimally altered on the interior to improve access. The wall-mounted shelves along the north and south walls (beneath the mural and behind the desks, respectively) will be removed.



**Figure 13. Rendering of the Opening Below the MLK Jr. Mural**

**First Floor, West Reading Room**

**(“Digital Commons”):** The reading room on the west side will be altered to better accommodate the digital commons (see Figure 14). Fixed enclosures will be introduced to the room to accommodate program uses such as classrooms, meeting rooms, and offices. The enclosures will be designed to be compatible with the character of the space. The existing glass perimeter walls will remain intact. The existing brick core walls will remain intact.



**Figure 14. Rendering of the Digital Commons Area**

**First Floor, East Reading Room:** The first floor reading room on the east side will be altered to support new uses, including a café and welcome center. The existing glass perimeter walls will remain intact, with the exception of the north wall, where a single pane of glass will be removed to create a doorway. This will provide direct access to the exterior plaza for a café space. The existing brick core walls will remain intact.



**Figure 15. Rendering of Community Alliance Space**

partition walls providing access to the east and west reading rooms will remain intact on the Second and Third Floors and new glass partitions will be added at the Fourth Floor. Existing elevator lobbies on the north wall will remain. On the fourth floor, the ceiling slab will be removed to support a two-story auditorium at the center of the space.

**Internal Corridors and Lobbies**

**(Second, Third, and Fourth Floors):** The central, column-free spaces on the second, third, and fourth floors are currently defined by internal masonry partitions that create a continuous corridor providing access to the perimeter of the space. The non-bearing masonry partitions will be removed to open the spaces and allow for public programming to be inserted (see Figure 15). The existing glass

**Second Floor:** The perimeter spaces on the second floor will be reconfigured to support new programmatic uses. The east and west reading rooms on the second floor are currently the largest open spaces in the building. These spaces will be retained with programmatic changes. Significant historic features and materials will be retained in these spaces. On both sides, new partition walls will be constructed in the space to provide enclosed meeting, instruction, and office spaces. These partition walls will be constructed of both solid and glazed elements and will be separated from the ceiling by glazed clerestory panels. The east reading room will become the new children's reading room and will feature an interactive slide. A diagram of the second floor can be found in Figure 23.

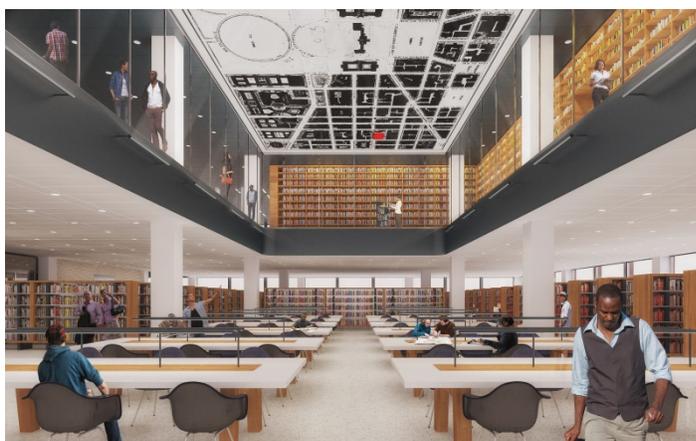


Figure 16. Rendering of Grand Reading Room, Third Floor

**Third Floor:** The perimeter spaces on the third floor will be reconfigured to support new programmatic uses. The west reading room will be retained and will remain a reading room. A partition wall will be constructed at the north end of the space to create an enclosed staff area. The east reading room currently houses the Black Studies Division and is divided from the perimeter stacks by a masonry partition wall. The walls and a portion of the

fourth floor slab will be removed to create a large reading room that visually connects with study spaces on the fourth floor above (see Figure 16). The floor/ceiling slab opening will be located at the center of the room and limited to one east-west columnar bay and two north-south columnar bays. The existing closed stacks around the perimeter of these reading rooms will be more substantially reconfigured. A diagram of the Third Floor can be found in Figure 24

**Fourth Floor:** The fourth floor currently houses the administrative offices of DCPL. With the exception of the central corridor and the Board and Director's Suite on the south side, this floor has been extensively altered since the building's completion. The perimeter spaces on the fourth floor will be reconfigured to support new programmatic uses. Because the central space on this floor will house a new auditorium in the proposed project, the existing Board and Director's Suite on the south side will be reconfigured to support meeting and conference spaces (see Figure 17). The original room configurations and associated fabric will be removed. A diagram of the Fourth Floor can be found in Figure 25.

**Fifth Floor Auditorium:** A two-story auditorium will be inserted into the center of the building on the fourth and fifth floors (see Figure 17). The auditorium will be surrounded on each floor by pre- and post-function lobbies and other associated uses. A diagram of the Fifth Floor can be found in Figure 26.



Figure 17. Rendering of the two-story auditorium

Figure 18. Mechanical/C Level

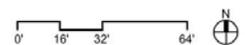
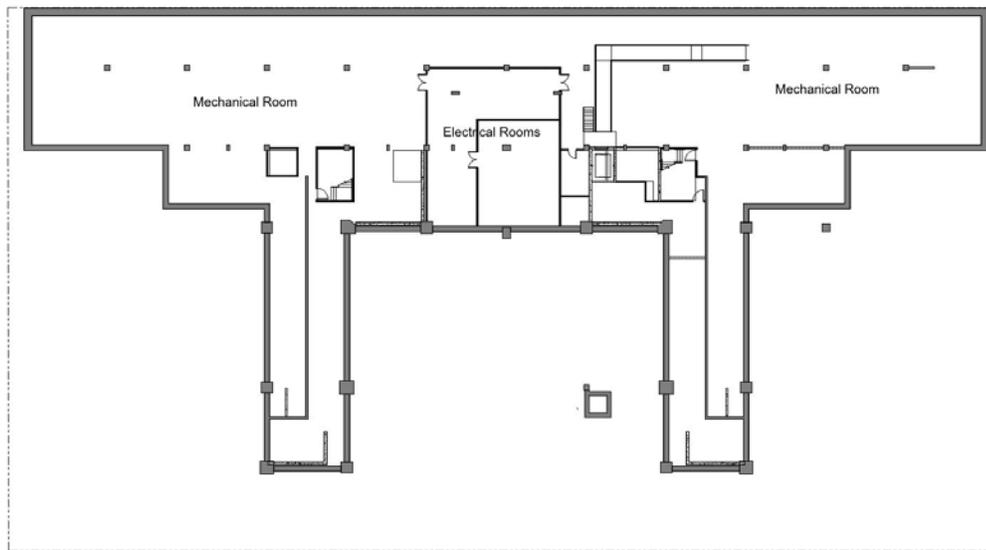


Figure19. B Level Diagram

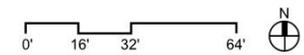
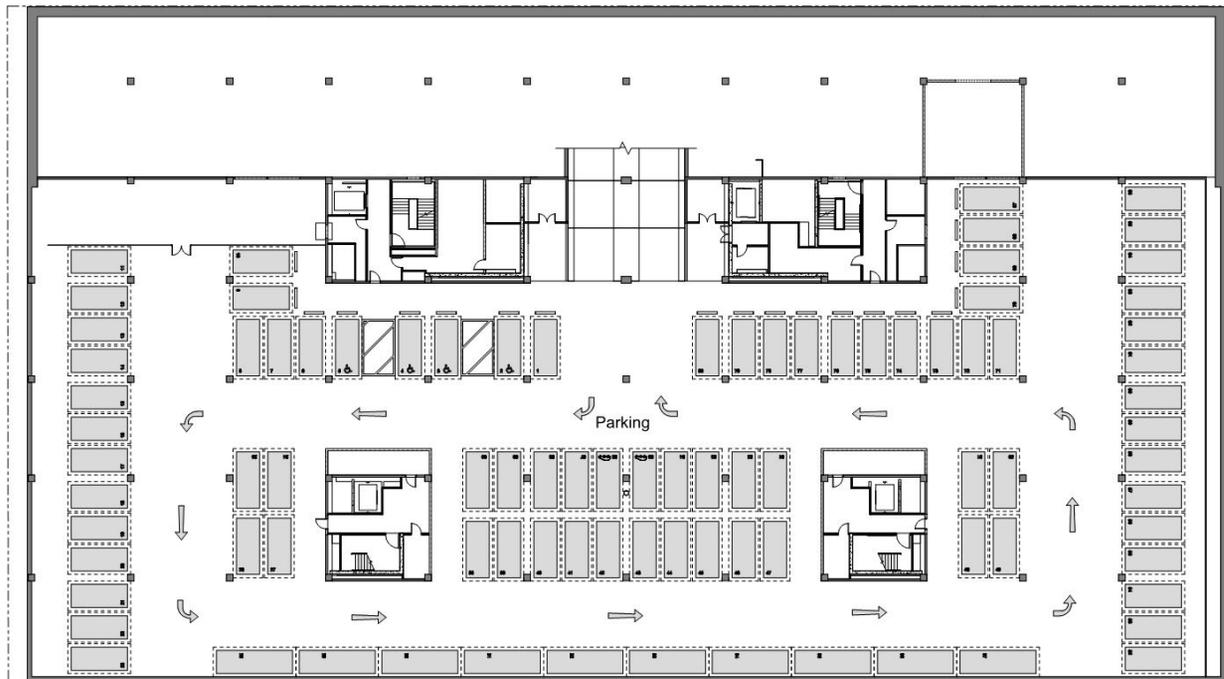


Figure 20. A Level Diagram

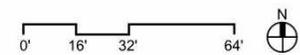


Figure 21. First Floor Diagram, Option 1

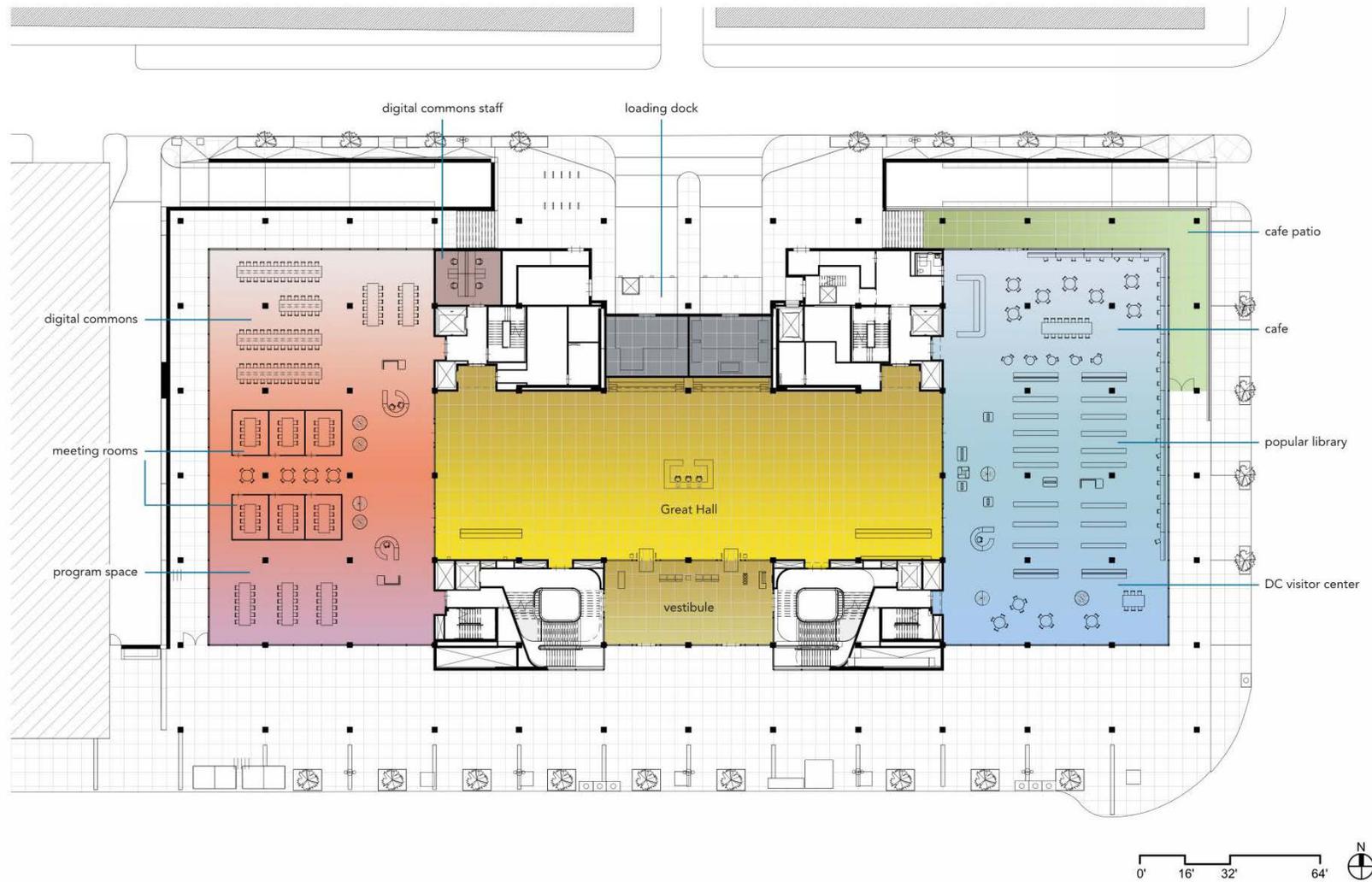


Figure 22. First Floor Diagram, Option 2

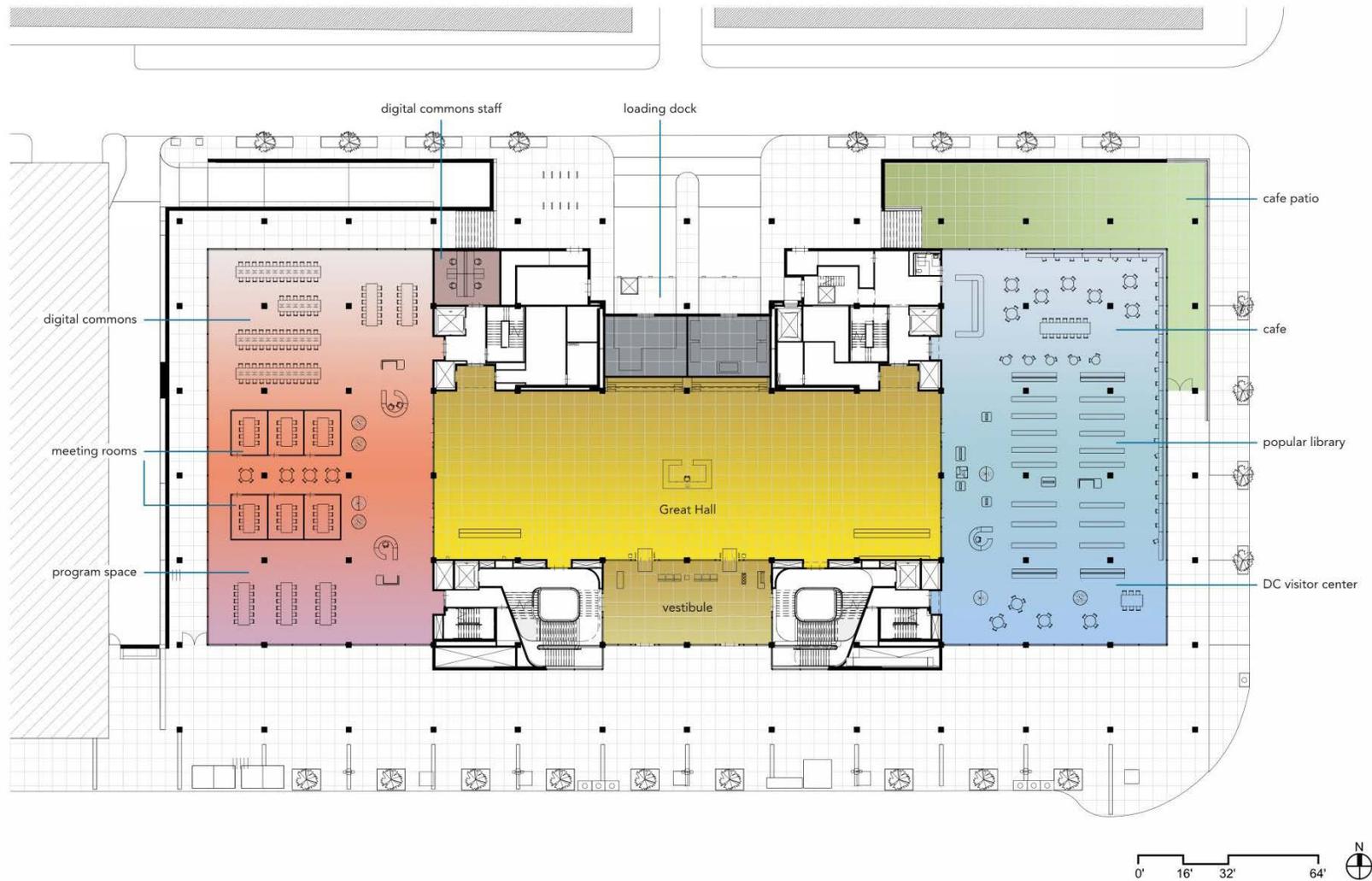


Figure23. Second Floor Diagram



Figure 24. Third Floor Diagram

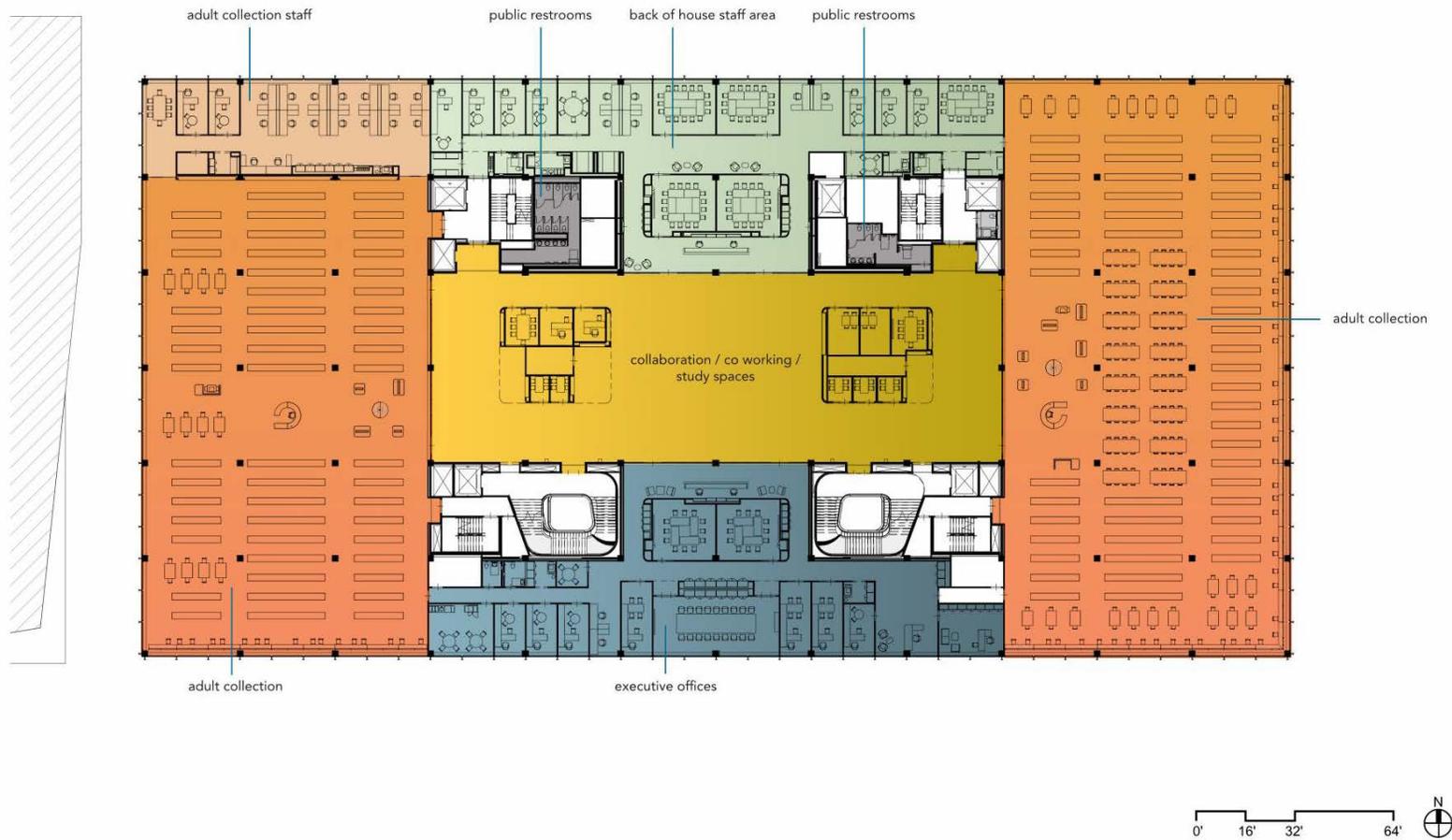


Figure25. Fourth Floor Diagram

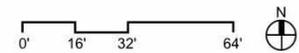
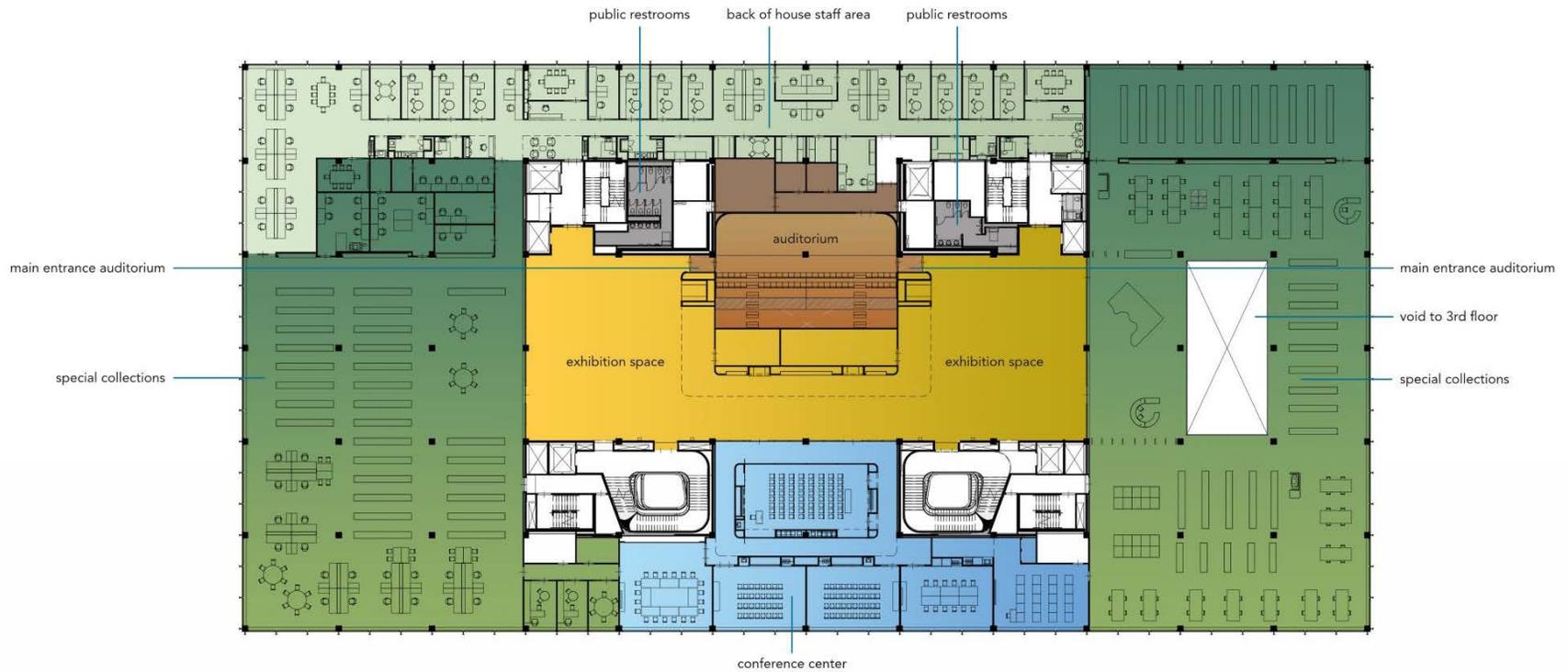
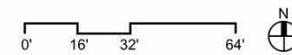
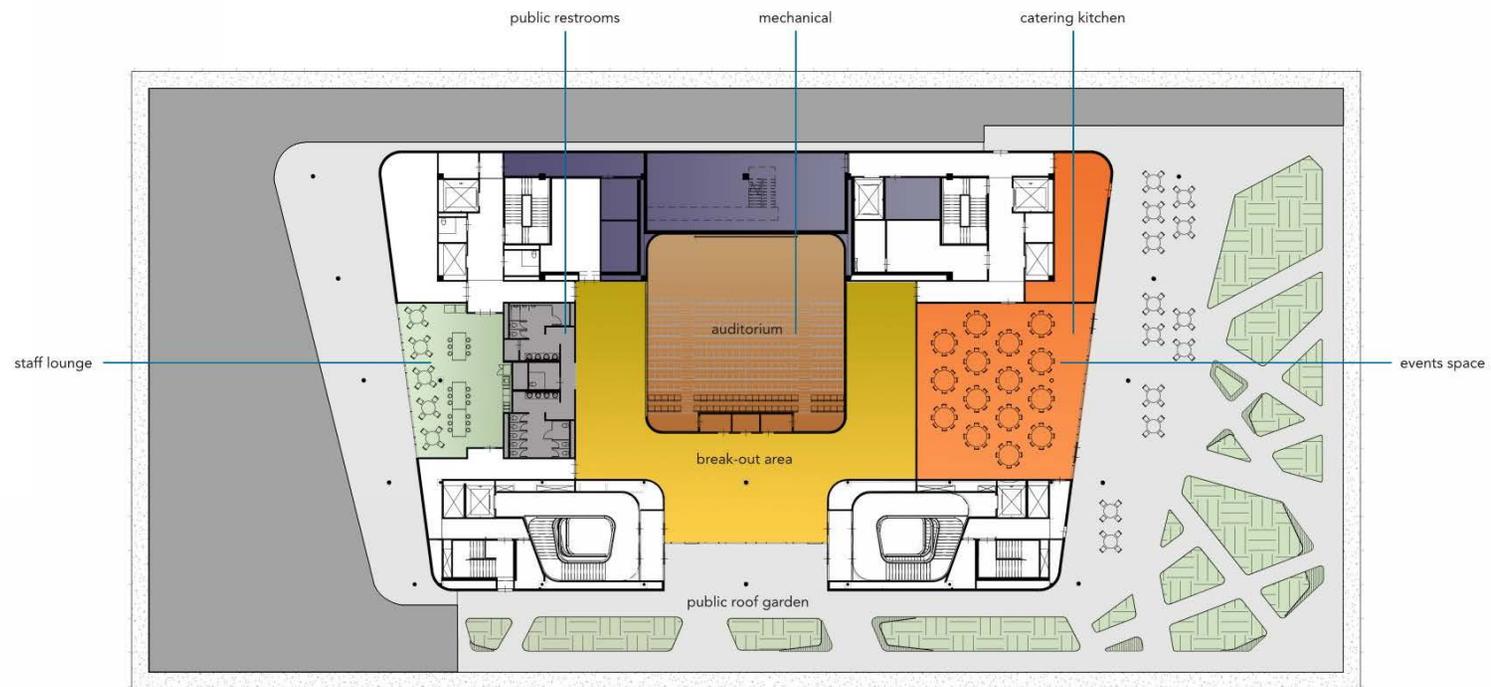


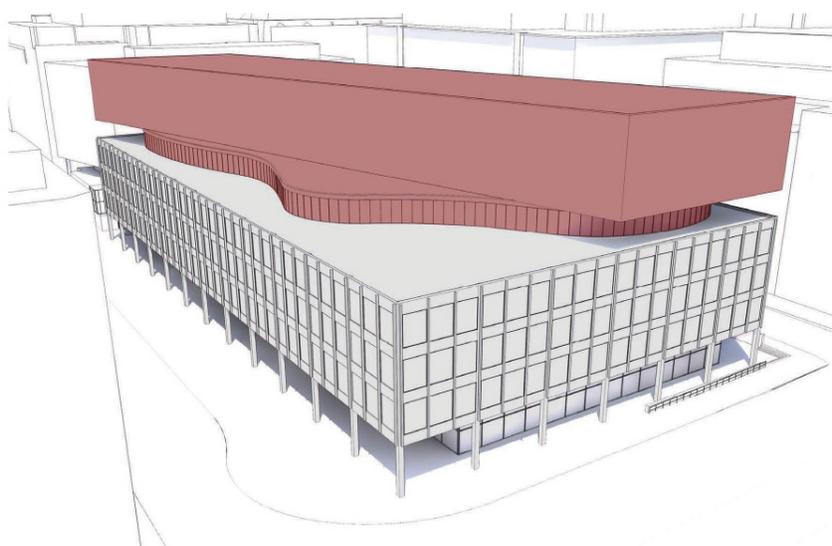
Figure 26. Fifth Floor Diagram



## 2.3 ALTERNATIVES CONSIDERED AND DISMISSED

### ***Modernization with 5th Floor Curvilinear Event Space + 3 Story Addition***

The DCPL considered adding a fifth floor event addition for event space and a three-story addition for use by a private entity. The fifth floor would be a curvilinear structure and would be set back at least 30 feet on all sides from the original building envelope. The addition would include executive offices, an event space, and a restaurant. The three-story addition would be rectangular in shape and would be dedicated to a partnership with a private entity to help defer the costs of the modernization of the MLK Jr. Library. Each story would add an additional 33,800 square feet. This rectangular addition would be angled across the top of the original building and the 5<sup>th</sup> floor addition, recalling the angled streets in the L'Enfant plan (see Figure27).



**Figure27. Dismissed Alternative – Modernization with 5<sup>th</sup> Floor Curvilinear Event Space + 3 Story Addition**

On January 28, 2015, the DC Public Library Board of Trustees adopted a resolution supporting the MLK Jr. Library modernization design approach as a stand-alone library with a fifth-floor addition. The Board determined that the addition of a three-story structure above the modernized library would not yield sufficient income to defray project costs. A three-story addition would jeopardize planned new library programming and would not provide additional mixed-use benefits beyond that of a one-story addition. Therefore, this alternative has been dismissed from consideration.

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### 3. AFFECTED ENVIRONMENT AND IMPACTS TO THE HUMAN ENVIRONMENT

This chapter of the EA describes the existing conditions of the human environment at the MLK Jr. Library site and the impacts of modernizing the MLK Jr. Library. Each of the alternatives described in Chapter 2, Alternatives would have varying impacts to natural resources, the social and economic environment, historic resources, and infrastructure (the transportation network and utilities).

Impacts can occur during construction as well as operation of the MLK Jr. Library. Impacts can also occur both directly, as well as indirectly or off site. Impacts can be cumulative when the MLK Jr. Library rehabilitation and modernization project is considered with other past, present and future projects.

Potential impacts are described in terms of:

- Intensity – are the effects negligible, minor, moderate, or major
- Type – are the effects beneficial or adverse;
- Duration – are the effects short-term, lasting through construction or less than one year, or long-term, lasting more than one year; and
- Context – are the effects site-specific, local, or even regional.

For the majority of resource areas, the thresholds for the intensity of impacts are defined as follows:

- Negligible, when the impact is localized and not measurable at the lowest level of detection;
- Minor, when the impact is localized and slight, but detectable;
- Moderate, when the impact is readily apparent and appreciable; or
- Major, when the impact is severely adverse, significant, and highly noticeable.

The effects on the human environment were assessed using best available scientific studies, guidance document and information. Resources used to analyze the impacts were obtained from federal, state, and local agencies. These include, but are not limited to, the following:

- U.S. Environmental Protection Agency (EPA) analyses and reports
- U.S. Department of Agriculture (USDA) NRCS Soil Surveys
- Federal Emergency Management Agency (FEMA) Floodplain Maps
- U.S. Fish and Wildlife Service (FWS) threatened and endangered species lists
- Environmental Site Assessments
- District Agencies
- Metropolitan Washington Council of Government (MWCOC) reports

A complete list of references is included at the end of this EA.

**CUMULATIVE IMPACTS ANALYSIS METHOD**

The CEQ regulations to implement NEPA require the assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). As stated in the CEQ handbook, “Considering Cumulative Effects” (CEQ 1997), cumulative impacts need to be analyzed in terms of the specific resource, ecosystem, and human community being affected and should focus on effects that are truly meaningful. Cumulative impacts are considered for all alternatives, including the No Action Alternative.

The methodology for determining cumulative effects is derived from using an “X+Y=Z” analysis where “X” represents the impacts of the alternative and “Y” is other past, present, and reasonably foreseeable future actions. When considered relative to each other, their combined contribution to the overall cumulative effect is “Z.” It is important to note that, due to the disparate scale and location of the proposed actions, effects from certain proposed actions could be moderate; but, when considered in the overall context, could constitute a relatively small incremental portion of the project area and contribute to a collective minor effect.

The analysis of cumulative impacts was accomplished using four steps:

*Step 1* — Identify Resources Affected - Fully identify resources affected by any of the alternatives. These include the resources addressed as impact topics in Chapters 3 of the document.

*Step 2* — Set Boundaries - Identify an appropriate spatial and temporal boundary for each resource. The spatial boundary for each resource topic is listed under each topic.

*Step 3* — Identify Cumulative Action Scenario - Determine which past, present, and reasonably foreseeable future actions to include with each resource. These are described in the table.

*Step 4* — Cumulative Impact Analysis - Summarize impacts of these other actions (X) plus impacts of the proposed action (Y), to arrive at the total cumulative impact (Z). This analysis is included for each resource in Chapter 3.

Table 1 provides a brief description of each of the projects used in the cumulative impacts analysis.

**Table 1. Cumulative Impacts Projects or Actions**

| <b>Cumulative Impact Projects</b> | <b>Description</b>  | <b>Status</b> |
|-----------------------------------|---|---------------|
| 900 New York Avenue Office        | Approximately 10 acre development including office, retail, residential, and hotel space. | Future        |
| 1000 F Street Office              | 92,160-square foot commercial building offering office and retail space.                  | Ongoing       |
| 900 G Street Office               | 113,000-square foot commercial building.  | Past          |

### **3.1 IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS**

As with any environmental analysis, there are resource issues that are dismissed from further analysis because the proposed action would cause a negligible or no impact. Negligible impacts are effects that are localized and immeasurable at the lowest level of detection. Therefore, these topics are briefly discussed and then dismissed from further consideration or analysis.

These resources are:

- Geology, Topography, and Soils
- Vegetation and Wildlife
- Threatened and Endangered Species
- Coastal Zone Management
- Floodplains
- Wetlands and Water Resources
- Population and Housing
- Taxes and Revenue
- Noise
- Archeological Resources
- Climate Change

#### ***Geology Topography, and Soils***

The project area is located within the Coastal Plain Physiographic Province (USGS, 1994), and is shown on the Washington West USGS 7.5-minute topographic quadrangle (see Figure 28. USGS Topographic Map

). The site is characterized by generally flat topography dominated by previously disturbed developed land. Soils at the proposed project site consist entirely of urban fill. All soils onsite have been previously disturbed. No grading, excavation, or soil disturbance is proposed. Therefore, geology, topography, and soils have been dismissed from further analysis.

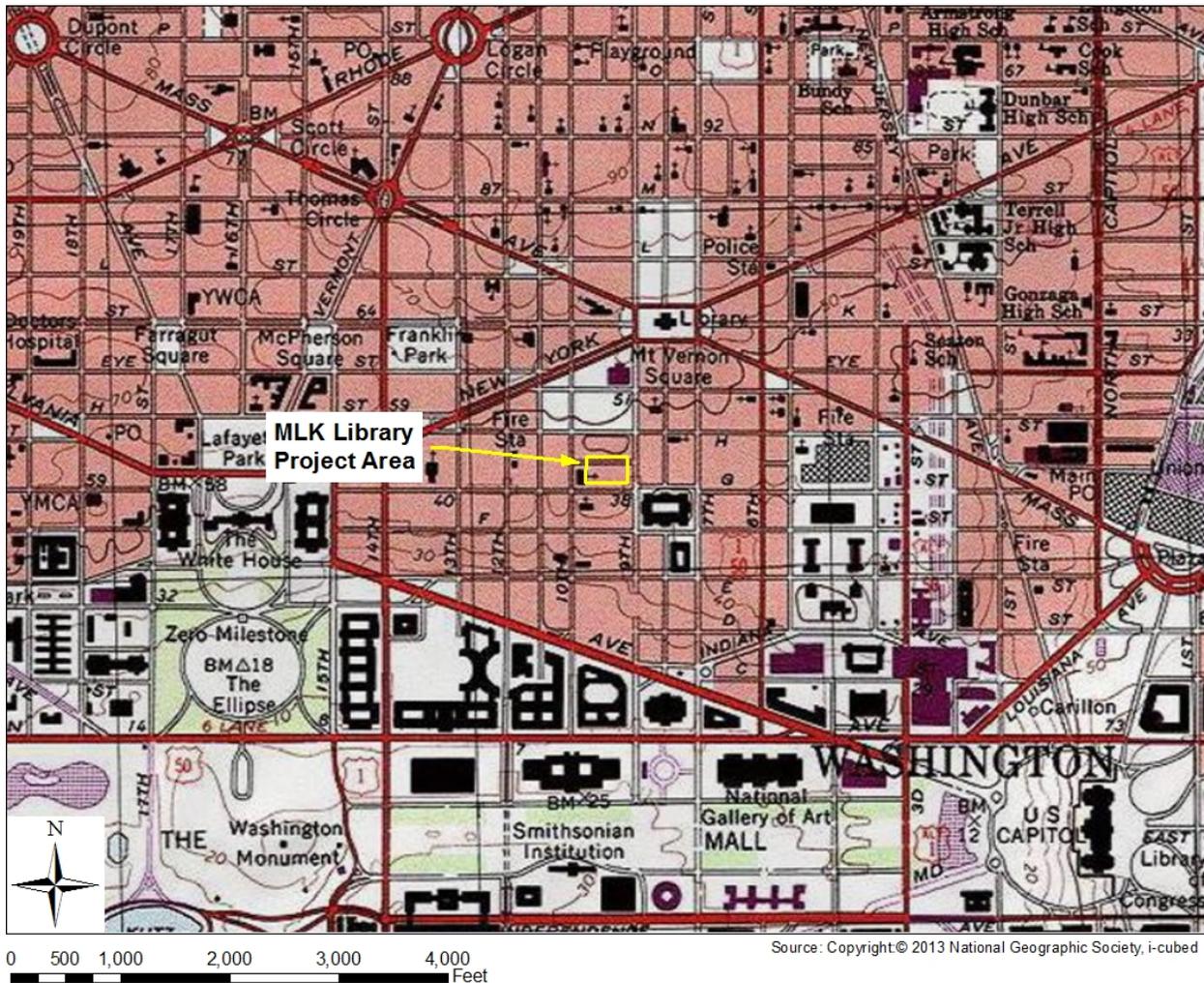


Figure 28. USGS Topographic Map

### ***Vegetation and Wildlife***

The MLK Jr. Library site is fully developed, with deciduous street trees planted approximately every 40 feet along G Street and 9<sup>th</sup> Street. The site is in a fully developed urban area consisting almost entirely of impervious surface. This environment may provide habitat for urban birds such as pigeons and sparrows.

All Action Alternatives propose the addition of a fifth floor terrace level, which would feature a mix of paved and vegetative elements. On the fifth floor roof, a vegetative roof would be

installed to capture rainwater. Additional vegetation would also create a small amount of habitat for urban and transient birds. This addition of green space would provide a negligible, long-term, beneficial impact to vegetation and wildlife.

Noise and vibration from construction activities may temporarily displace urban birds, but the surrounding area would provide similar habitat and birds would return after construction is complete. Some of the deciduous street trees would be removed and replanted after construction is complete. This would result in a negligible, short-term, adverse impact. Because the impacts to vegetation and wildlife would be negligible, vegetation and wildlife has been dismissed from further analysis.

### ***Threatened and Endangered Species***

The federal Endangered Species Act (ESA) of 1973, administered by the FWS, protects and recovers imperiled species and the ecosystems upon which they depend. Under the ESA, species may be listed as either endangered or threatened. “Endangered” means a species is in danger of extinction throughout all or a significant portion of its range. “Threatened” means a species is likely to become endangered within the foreseeable future. Under Section 7 of the ESA, federal agencies are required to consult with FWS to ensure that their actions do not adversely affect listed species.

On behalf of NCPC, Stantec consulted the FWS Information for Planning and Conservation (IPaC) system and the DOEE, formerly known as the Department of the Environment, in compliance with Section 7 of the ESA. No endangered or threatened species or critical habitats were identified in the vicinity of the project area. In a letter dated September 2, 2015, DOEE stated that according to the District’s Wildlife Action Plan, the MLK Jr. Library project area does not harbor any federally listed threatened or endangered species or ecologically sensitive communities. The existing site consists of an urban landscape with no natural vegetation, which is unlikely to provide valuable habitat. Due to the lack of listed species or habitat within the project area, threatened and endangered species have been dismissed from further analysis.

### ***Coastal Zone Management***

The Federal Coastal Zone Management Act of 1972 (CZMA) encourages states to “preserve, protect, develop, and where possible, restore or enhance the resources of the nation’s coastal zone” (16 U.S.C. § 1456). All federal development projects inside the coastal zone must comply with Section 307 of the CZMA. However, the District is not considered to be within the coastal zone. Therefore, the CZMA does not apply and coastal zone management has been dismissed from further analysis.

**Floodplains**

Federal activities within floodplains must comply with EO 11988: Floodplain Management, 33 C.F.R. 1977; and EO 13690: Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input. Per these executive orders, federal agencies are required to avoid adverse effects associated with the occupancy and modification of floodplains to the extent possible, thereby minimizing flood risk and risks to human safety (FEMA, 2006).

The MLK Jr. Library is located outside the 100-year and 500-year floodplains as depicted on the Flood Insurance Rate Map (FIRM) panel 1100010019C, effective September 27, 2010 (see Figure 29).

Because the proposed project is located outside the floodplain, the project is not expected to have a measurable effect on the frequency, elevation, intensity or duration of floods, nor would it impact floodplain function. Therefore, floodplains were dismissed from further analysis within this EA.



Figure 29. FEMA Flood Insurance Rate Map

***Wetlands and Water Resources***

The U.S. EPA and the U.S. Army Corps of Engineers (ACOE) are responsible for enforcing certain provisions of the Clean Water Act (CWA) (33 U.S.C. §1251 et seq.) which was enacted by Congress "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" including wetlands and Waters of the US (WOUS). One of the mechanisms adopted by Congress to achieve that purpose is a prohibition on the discharge of any pollutants, including dredged or fill material, into wetlands or WOUS except in compliance with other specified sections of the Act. In most cases, this means compliance with a permit issued pursuant to CWA §402 or §404. The CWA defines the term "discharge of a pollutant" as "any addition of any pollutant to navigable waters from any point source" and provides that "[t]he term 'navigable waters' means the waters of the United States, including the territorial seas[,]" (33 U.S.C. §1362(7), 33 C.F.R. §328.3(a), and 40 C.F.R. §230.3(s)). Discharges of dredged or fill material into wetlands and WOUS require a permit from the U.S. ACOE.

The U.S. ACOE defines wetlands as "areas saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for line in saturated soil conditions" (33 CFR 328.3). Wetlands generally include swamps, marshes, bogs, and similar areas. The technical approach for the identification and delineation of wetlands is that, except in certain abnormal situations, evidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a wetland determination.

The District also participates in the U.S. EPA's Chesapeake Bay Program, which directs the restoration of the Chesapeake Bay and its tributaries. In 2010, the EPA issued a Total Maximum Daily Load (TMDL) for the entire Chesapeake Bay watershed. The Bay TMDL is a 'pollution diet' or budget, that sets a maximum loading limit for Nitrogen, Phosphorous and Sediment that each jurisdiction can release to its waters which reach the Chesapeake Bay. The DOEE is the DC agency responsible for carrying out program activities related to the Bay within the District, including the preparation of the DC Watershed Implementation Plan (WIP) (2014). The WIP "set[s] nutrient and sediment reduction targets for various sources, including stormwater, agriculture, air deposition, wastewater, and septic systems" (Chesapeake Bay Watershed Agreement, 2014). The WIP explains in detail how DC would achieve and maintain the water quality benefits outlined in the Bay TMDL. The WIP also provides transparency and accountability throughout the Bay TMDL process, promotes adaptive management throughout the implementation process, and engages local partners to find ways to manage stormwater coming off of their District-based facilities/buildings. District partners include the Department

of Defense, US General Services Administration, the Smithsonian Institution, National Park Service, and many more.

In addition to the federal Chesapeake Bay Program, DOEE operates and implements its own version of Chesapeake Bay protection, which focuses on the Anacostia and Potomac Rivers, and Rock Creek – all of which drain into the Chesapeake Bay.

A desktop review of FWS National Wetland Inventory (NWI) mapping, topographic mapping, soils data, and the DOEE map of Known Wetlands within the District (DDOE Water Quality Division, 2001) indicated that no wetlands or WOUS are present onsite. According to the NRCS Web Soil Survey, soils at the proposed project site consist entirely of urban fill (NRCS, 2015). All soils onsite have been previously disturbed. No grading, excavation, or soil disturbance is proposed.

Due to the absence of wetlands or water resources on the site, and the lack of proposed land disturbance, water resources have been dismissed from further analysis.

### ***Population and Housing***

According to the online DC Zoning Map, the project area is within a Central Business (C-4) zoning district, which is comprised of retail and office centers for the District and the metropolitan area, and allows office, retail, housing and mixed uses (DCMR 11-750). Additionally, the site is within Downtown Development (DD) and Downtown Shopping (DD-SHOP) overlay districts (DCOZ, 2015). One condominium complex is located immediately south of the project site across G Street. No other residences were identified adjacent to the project area.

No housing is located on the project site. The project would not require the relocation of residents or employees into or out of the project area, and would therefore have no effect on population. No housing immediately adjacent to the alternative sites would be adversely affected by the proposed project. Therefore, population and housing has been dismissed from further analysis.

### ***Environmental Justice***

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” was issued on February 11, 1994 by President Clinton. This order directs Federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority or low-income populations.

A low-income individual is defined as any individual living below the poverty line, as derived from the Office of Management and Budget's (OMB) Statistical Policy Directive 14. A low-income population is defined as any census tract with a higher percentage of low-income individuals than the District population as a whole. A minority individual is defined as any individual that is nonwhite or identifies as Hispanic or Latino. A minority population is defined as any census tract with a higher percent minority than the District population as a whole.

Low-income and minority populations were identified through the review of U.S. Census Data from the 2010 Decennial Census and American Community Survey (ACS) 5-Year Estimates for 2013 (US Census, 2015a-b). The project area is located within Census Tract 58 in the District. Within Census Tract 58, 11.9 percent of the population is below the poverty level and 35.9 percent is nonwhite and/or Hispanic/Latino. These percentages are lower than the City rates of 18.6 percent below poverty level and 61.7 percent minority. Minority populations are present in Washington, DC and within the project area; however, no populations were identified as disproportionately affected by the proposed action. The MLK Jr. Library is a community facility that provides more than library services. These services include specialty labs, the Adult Literacy Center, the Center for Accessibility, and the College Information Center. These services are available to any District resident and would be continued with the rehabilitation and modernization of the MLK Jr. Library. Therefore, Environmental Justice was dismissed from further analysis.

### ***Taxes and Revenue***

The following taxes and revenues are collected by the District (DCCFO, 2015):

**Individual Income Taxes:** Individual income taxes are levied on all individuals who are domiciled in the District at any time during the tax year, or who maintains an abode in the District for 183 or more days during the year as follows:

- 4 percent on the first \$10,000 of taxable income
- \$400 + 6 percent on taxable income between \$10,001 and \$40,000
- \$2,200 + 8.5 percent on taxable income between \$40,001 and \$350,000
- \$28,550 + 8.95 percent of excess over \$350,001

Income from Social Security and up to \$3,000 of military retired pay, pension income or annuity income is excluded.

**Sales and Use Taxes:** For Tax Year 2015, the District imposes a 5.75 percent sales tax on taxable goods and services (exemptions from sales tax include groceries, prescription and non-prescription drugs, and residential utility services).

**Real Property Tax Rates:** The amount of tax due is determined by dividing the assessed value of the property by \$100, then multiplying that amount by the rate. For Tax Year 2015, the rate on residential real property is \$0.85 including multifamily units.

**Corporate Franchise and Unincorporated Franchise Taxes:** The District's franchise tax is imposed on all corporations and unincorporated businesses doing business in the District on the basis of the net taxable business income apportioned to the District. The franchise tax rate is currently 9.975 percent.

The MLK Jr. Library is owned by the District, and therefore is not subject to real property taxes. The proposed project would not change the ownership of the MLK Jr. Library building. The addition of an auditorium would potentially create revenue from private event rentals. The café would be operated by an independent entity and would generate small amounts of revenue from snack and beverage sales, which would also be subject to DC sales taxes. This would result in a negligible, long-term, beneficial impact to taxes and revenue. Therefore, taxes and revenue were dismissed from further analysis.

### **Noise**

Noise is regulated at local, state, and federal levels. The Noise Control Act of 1972 authorizes EPA to promulgate regulations establishing maximum permissible noise characteristics for products manufactured for interstate commerce. In addition, EPA was directed to publish information about the kind and extent of effects of various conditions to protect public health and welfare. This information has been used by other Federal agencies in establishing criteria applicable to their programs.

Noise levels surrounding the MLK Jr. Library are average for highly developed urban areas. Current noise sources surrounding the MLK Jr. Library include: traffic; heat, ventilation, air conditioning (HVAC) units; pedestrians; and nearby Metrorail Stations. Under any of the action alternatives, temporary increases in noise levels within the immediate vicinity of the site would be associated with construction activities. The operation of the MLK Jr. Library would generate noise similar to the current sources such as traffic and HVAC units. Therefore, no new noise sources would be created from the implementation of any of the action alternatives. These alternatives are located within an urban area and these types of noises are typical. Because there would be no additional noise impacts, except for temporary construction noises, noise was dismissed from further analysis.

***Archeological Resources***

The project proposes no new excavation and only limited penetrations into the surface level. Work would be contained within the existing footprint of the MLK Jr. Library foundations. The excavation necessary to construct the building in 1969 required sloped embankments that extended beyond this footprint. Consequently, it is highly likely that any potential archaeological deposits were already disturbed during the original construction of the building. Additionally, no ground disturbance is proposed as a result of the MLK Jr. Library rehabilitation and modernization. No impacts to archaeological resources are anticipated. Therefore, archaeological resources have been dismissed from further analysis.

***Waste Management***

The District Department of Public Works (DPW) manages the disposal of the District's solid waste materials. General waste is regulated under DCMR 21. Recyclable waste is regulated under the DC Solid Waste Management and Multi-Material Recycling Act of 1988 (DC Code §6-3403), which requires all government agencies and businesses to implement and manage a recycling program. A commercial recycling program includes separation of recyclables from other solid waste, ensuring an adequate number of containers for separated recyclables and hiring a licensed, registered recycling hauler to regularly pick up recyclables. Commercial and institutional waste is accepted at DPW's transfer stations and then disposed at Fairfax County's Energy Resource Recovery Facility in Lorton. Recycling materials are taken to a near-by Maryland facility where they are sorted and processed to be reused as raw materials.

Currently, trash and recycling generated from the MLK Jr. Library are stored in a trash room in the underground parking lot until it is removed and hauled away. Solid waste is collected daily from the loading dock along G Place, NW.

The modernized library would operate in a sustainable and waste efficient manner in compliance with LEED® green building practices; therefore, waste management was dismissed from further analysis.

***Climate Change***

Impacts of the proposed action on climate change would be mainly due to emissions of nitrous oxides and carbon dioxide from the burning of fuel in vehicles and equipment during construction. These emissions could result in incremental increases in greenhouse gases that contribute to global climate change. However, the emissions from the proposed project would be negligible in comparison to other local and regional sources of greenhouse gas emissions. The MLK Jr. Library would seek a minimum of LEED®-Silver certification from the U.S. Green Building Council, which would include making the building more energy efficient, further

reducing long-term greenhouse gas emissions, creating long-term, beneficial impacts. Because there would be a slight beneficial impact, climate change has been dismissed from further analysis.

### **3.2 IMPACT TOPICS ANALYZED IN DETAIL**

As with any environmental analysis, there are resource issues that are analyzed in further details to compare the environmental consequences of the No-Action Alternative with the Action Alternatives. Each of the alternatives described in Chapter 2 would have varying impacts to natural resources, the social and economic environment, historic resources, and infrastructure. The resources analyzed in detail in this EA are:

- Stormwater Management
- Air Quality
- Land Use Planning and Zoning
- Economy, Employment, and Income
- Community Facilities and Services
- Utilities
- Transportation
- Environmental Contamination
- Historic Resources

### **3.3 STORMWATER MANAGEMENT**

The MLK Jr. Library is part of DC Water's Combined Sewer Overflow System and therefore, both sanitary sewer lines and stormwater lines connect to the same discharge system. During extreme stormwater events, if the system becomes overloaded, combined sewer overflows (CSOs) may discharge directly into the Potomac River, negatively impacting water quality. The DC governing body for stormwater management is the Stormwater Management Section of the District Department of Energy and Environment (DOEE). The DC Storm Water Management Regulations (DCMR Title 21, Chapter 5) were established in 1988. However, on July 19, 2013, the District of Columbia Department of Energy and Environment (DOEE) released the 2013 Rule on Stormwater Management and Soil Erosion and Sediment Control (2013 stormwater rule), which amended 21 DCMR 5. The District also adopted a new Stormwater Management Guidebook (SWMG), incorporated herein by reference, which superseded an earlier 2003 version of the guidebook. Currently, there are no stormwater management facilities on the library property to control or treat stormwater runoff from the site. Because the MLK Jr. Library is not a federal facility, the Energy Independence and Security Act of 2007 (EISA) does not apply.

### ***Impacts to Stormwater***

#### **No-Action Alternative**

Under the No-Action Alternative, the rehabilitation and modernization of the MLK Jr. Library would not occur. Impervious surfaces on the site would not be increased or decreased. The existing stormwater runoff volume would be unchanged and would continue to be discharged into existing stormwater drainage systems.

#### **Alternative A**

Alternative A proposes a new fifth-floor event space, which would be paved and would feature a roof-top terrace garden containing a mix of raised planting beds, seating areas, and open space. The new addition under Alternative A would be roughly the same dimensions as the existing penthouse space. Because Alternative A would decrease the amount of impervious surfaces from the addition of a roof-top terrace garden; a beneficial, long-term, impact would result. Alternative A would be in compliance with the DOEE 2013 stormwater management rule.

There could be short-term impact from construction due to increased sediment flows. However, this would be minimized by implementing best management strategies (BMPs). This would create a negligible, short-term, adverse impact.

#### **Cumulative Impacts**

Past, present, and future development in the area would impact stormwater management. Each future project would have to provide for adequate stormwater management in accordance with federal and local policies. The rehabilitation and modernization of the MLK Jr. Library would beneficially contribute to the cumulative impacts by reducing the amount of impervious surface to the site.

#### **Mitigation Measures**

Construction impacts would be avoided and minimized as much as possible by implementing BMPs during construction including the development of a sediment and erosion control plan with DOEE.

#### **Alternative B**

Under Alternative B, the proposed fifth floor addition would be larger than the one proposed under Alternative A. A green roof and garden terrace would be provided to reduce heat gain, absorb rainwater and reduce runoff. These features would result in an overall net reduction in

impervious surface for the site. Overall, under Alternative B there would be a decrease in stormwater discharge to the combined sewer system resulting in a long-term, beneficial impact to stormwater management and water quality. Alternative B would be in compliance with the DOEE 2013 stormwater rule

There could be short-term impact from construction due to increased sediment flows. However, this would be minimized by implementing best management strategies (BMPs). This would create a negligible, short-term, adverse impact.

### **Cumulative Impacts**

Past, present, and future development in the area would impact stormwater management. Each future project would have to provide for adequate stormwater management in accordance with federal and local policies. The rehabilitation and modernization of the MLK Jr. Library would beneficially contribute to the cumulative impacts by reducing the amount of impervious surface to the site.

### **Mitigation Measures**

Construction impacts would be avoided and minimized as much as possible by implementing BMPs during construction including the development of a sediment and erosion control plan with DOEE.

### **Alternative C**

Under Alternative C, no vegetated garden area is proposed for the fifth-floor extruded addition. Although, Alternative C would not change the existing impervious area of the building and would not contribute additional stormwater to the existing combined sewer system, no stormwater management features would be added to the property. The project would not be in compliance with the DOEE 2013 stormwater rule. Overall, Alternative C would result in a minimal, long-term, adverse impact to stormwater management and water quality.

### **Cumulative Impacts**

Past, present, and future development in the area would impact stormwater management. Each future project would have to provide for adequate stormwater management in accordance with federal and local policies. The rehabilitation and modernization of the MLK Jr. Library would not contribute to the cumulative impacts because no additional impervious surface would be created.

## Mitigation Measures

Construction impacts would be avoided and minimized as much as possible by implementing BMPs during construction including the development of a sediment and erosion control plan with DOEE.

### 3.4 AIR QUALITY

Under the authority of the Clean Air Act (CAA) (U.S.C. Title 42, Chapter 85, 1970, as amended in 1990), the US EPA has developed National Ambient Air Quality Standards (NAAQS) for certain air pollutants (criteria pollutants) deemed harmful to public health and the environment. These criteria pollutants include: nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), ozone (O<sub>3</sub>), particulate matter (PM<sub>2.5</sub>/PM<sub>10</sub>), and lead (Pb). The EPA designates areas where ambient concentrations are below the NAAQS as being in “attainment” and designates areas where a criteria pollutant level exceeds the NAAQS as being in “nonattainment.”

Each state (or regional government) is required by EPA to develop a State Implementation Plan (SIP) that identifies the NAAQS attainment status for each pollutant and accounts for planned projects within the region that have potential to increase pollutant emissions. The Metropolitan Washington Council of Governments (MWCOG) website states that the Metropolitan Washington region is a nonattainment area for two of EPA’s criteria air pollutants: ozone and PM<sub>2.5</sub>. In response to the nonattainment designation, MWCOG has developed Strategic Implementation Plans to reduce ozone and PM<sub>2.5</sub> pollution. Each of the plans provide an inventory of existing conditions, a projection of future conditions in consideration of regional growth, and an outline of control strategies to achieve air pollutant reduction (MWCOG, 2015).

In accordance with the CAA, DOEE is responsible for air quality monitoring to protect public health and the environment. The DOEE carries out an EPA-approved air quality management program that includes monitoring, identifying and implementing control strategies, assessing the results of the control strategies, and measuring progress. Over the last 20 years, the DOEE reports that criteria pollutants have decreased significantly from historic levels due to the implementation of control measures. In the 1980s, the introduction of vehicles equipped with the catalytic converter helped to reduce nitrogen dioxide and carbon monoxide in the air, and the phasing out of leaded gasoline resulted in a significant drop in airborne lead levels. Controls at stationary sources have reduced sulfur dioxide and nitrogen dioxide. Ozone and particle pollution have also been reduced, but Metropolitan Washington remains in nonattainment (DOEE 2014).

The largest source of air emissions in the District is the operation of motor vehicles. To combat these emissions, DOEE has passed the Engine Anti-Idling Law (DCMR 20-900), which prohibits any vehicle to idle for more than three minutes while parked, stopped, or standing. Exceptions to this rule include the operation of power takeoff equipment such as dumping beds, cement mixers, content delivery equipment, etc.

According to a Phase I Environmental Site Assessment conducted in 2013, the MLK Jr. Library is listed on the U.S. Aerometric Information Retrieval System (AIRS) database. AIRS tracks airborne emissions and compliance data from industrial plants under the CAA. The database states that the MLK Jr. Library may potentially produce up to 100 tons of total particulate matter (PM) per year. No violations have been reported and the facility has been in compliance with the SIP and the CAA since it was listed in 2010 (ABE/TTL, 2013). In the area surrounding the MLK Jr. Library, air pollution generally stems from vehicle traffic and development activities. In particular, vehicle emissions contain volatile organic compounds (VOCs), which are a precursor to ozone. Ozone is formed where sunlight and high temperatures cause a photochemical reaction between VOCs and nitrogen oxides in the air. Excess nitrogen oxide in the atmosphere can result from agricultural, industrial, or wastewater management processes, or fuel combustion.

In addition to the regional ambient air quality standards, the CAA also imposes National Emission Standards for Hazardous Air Pollutants (NESHAP) for known indoor toxic air pollutants such as asbestos and lead, which are known or suspected to cause cancer or other serious health effects. In accordance with Section 112 of the CAA, EPA has established National Emission Standards for Hazardous Air Pollutants (NESHAP) (EPA, 2015c). Due to the age of the existing MLK Jr. Library building, which was built in 1972, it was necessary to identify potential indoor air toxics such as asbestos, lead, and polychlorinated biphenyls (PCBs), that may have been used during construction.

A hazardous materials inspection of the interior of the MLK Jr. Library was conducted by ABE Environmental in December 2013 (ABE, 2013) to identify asbestos-containing materials (ACMs), lead-based paint (LBP), polychlorinated biphenyls (PCBs), and elevated fungal spore levels. The building was found to contain reportable levels of asbestos, lead-based paint, and fungal spores. Further information on the results of the inspection is discussed in Section 3.11.

### ***Impacts to Air Quality***

#### **No-Action Alternative**

Under the No-Action Alternative, the rehabilitation and modernization of the MLK Jr. Library would not occur. No improvements would be made to the interior or exterior of the building.

The building's heating and cooling systems would continue to operate at their current levels of efficiency, and emissions from these systems would continue at current levels. There would be no change in traffic under the No-Action Alternative; therefore there would not be a change in air emissions from vehicles. Because no federal action would be taken, it would not be necessary to demonstrate conformance with the CAA.

Under the No-Action Alternative, hazardous building materials including lead, asbestos, and PCBs, along with mold would be removed from the building to the standards set by DC and federal regulations to safeguard the health of building occupants. Mitigation measures, described in Section 3.11 Environmental Contamination, would be implemented to ensure the health and safety of visitors and employees at the MLK Jr. Library during the remediation efforts. Remediation activities under the No-Action Alternative would result in a minor, long-term, direct, beneficial impact to interior air quality.

### **Alternatives A, B, and C: Action Alternatives**

Due to the difference in scale of the two types of air quality impacts, regional ambient air quality impacts and interior building air quality impacts are discussed separately below.

#### *Regional Air Quality Impacts*

EPA has developed a "Hot Spot Analysis" for determining if a project would have adverse impacts on levels of PM<sub>2.5</sub>. This analysis is not required for the MLK Jr. Library project because the project does not, "involve a significant increase in the number of diesel transit buses and diesel trucks on the facility" [(40 CFR 93.123(b)(1) as amended), and, in accordance with FHWA guidance, "40 CFR 93.123(b)(1)(i)]. The Action Alternatives would not result in an increase in diesel vehicles coming to the MLK Jr. Library. No increase in traffic is expected under any of the Action Alternatives; therefore there would be no long-term impacts to ozone from vehicular emissions. Under Option 2 for the automobile ramps, queue lengths for vehicles waiting to exit the parking garage may increase resulting in a minor, long-term, adverse impact to air quality.

Under any of the Action Alternatives, the DCPL would seek to achieve a minimum of LEED®-Silver rating for the building operations once the rehabilitation and modernization of the MLK Jr. Library is complete. A LEED®-Silver rating is listed as one of the voluntary Supplemental Control Measures in the Metropolitan Washington Council of Government's Strategic Implementation Plan. To achieve the LEED Silver rating, modern and efficient heating and cooling equipment would be installed as part of modernizing the MLK Jr. Library. These new systems would be more efficient and have lower emissions than current systems. Following the completion of the modernization project, the new building systems would generate emission below *de minimis* thresholds for VOCs or NO<sub>x</sub> of 50 tons per year and 100 tons per

year, respectively (US EPA, 2015). Projects with emission levels below *de minimis* thresholds are considered to be in conformity with the CAA. Therefore, after the rehabilitation and modernization of the MLK Jr. Library is complete, all Action Alternatives would result in a minor, direct, long-term, beneficial impact to regional ambient air quality.

During construction and modernization, the proposed modernization activities and use of construction vehicles and equipment under the Action Alternatives may temporarily generate fugitive dust, particulate matter, VOCs, and/or NO<sub>x</sub>, which are the precursors to ozone. These impacts would be temporary and negligible. Reasonable precautions would be taken to minimize these emissions in accordance with DCMR 20-600 through 606. Construction vehicles would not be permitted to idle for longer than three minutes at a time (or five minutes during below-freezing temperatures) unless engine idling is necessary for power takeoff equipment, in accordance with the DC Engine Anti-Idling Law.

#### *Indoor Air Quality Impacts*

Under all of the Action Alternatives, hazardous building materials including lead, asbestos, and PCBs, along with mold would be removed from the building to the standards set by DC and federal regulations to safeguard the health of building occupants. Mitigation measures, described in Section 3.11 Environmental Contamination, would be implemented to ensure the health and safety of visitors and employees at the MLK Jr. Library during the remediation efforts. Remediation activities under the Action Alternatives would result in a minor, long-term, direct, beneficial impact to interior air quality.

Construction and demolition activities that would occur as a result of rehabilitating the interior of the MLK Jr. Library would result in temporary increases in dust and airborne particulates. Without safety measures, this would result in increased health risks to construction workers. However, fugitive dust would be contained within the existing building and measures would be taken to protect construction workers, employees, and visitors from exposure to particulate matter. By employing these safety measures, all Action Alternatives would have a temporary, minor, direct, adverse impact related to interior air quality.

#### **Cumulative Impacts**

Past, present, and future projects within the District, including new development and building renovations, have affected air quality in the past and have the potential to affect air quality in the future. The rehabilitation and modernization of the MLK Jr. Library would not contribute to these cumulative adverse impacts because upon completion of the modernization project, the new building systems would generate emissions below *de minimis* thresholds.

## Mitigation Measures

See mitigation proposed under Section 3.11, Environmental Contamination for mitigation measures that would address air quality impacts. Reasonable precautions would be taken to minimize emissions from construction vehicles in accordance with DCMR 20-600 through 606. Construction vehicles would not be permitted to idle for longer than three minutes at a time (or five minutes during below-freezing temperatures) unless engine idling is necessary for power takeoff equipment, in accordance with the DC Engine Anti-Idling Law.

### 3.5 LAND USE PLANNING AND ZONING

#### *Regional Land Use and Planning*

Development within the District of Columbia is guided by *The Comprehensive Plan for the National Capital*, which includes goals, objectives, and planning policies to direct and manage growth. This plan contains both Federal Elements and District of Columbia Elements.

The Federal Elements of the Comprehensive Plan are prepared by NCPC and provide a policy framework for the federal government in managing its operations and activity in the National Capital Region. Federal elements include: Urban Design, Federal Workplace, Foreign Missions & International Organizations, Transportation, Federal Environment, Historic Preservation, Visitors & Commemoration and Parks & Open Space.

The District Elements focus specifically on the District of Columbia and contain a broad range of objectives and policies to help guide public decisions by District and federal agencies. The District Elements are broken down into Citywide Elements and Area Elements. Citywide elements include a broad range of planning topics that should be considered regardless of geographical location in the District. These include: Land Use, Transportation, Housing, Economic Development, Parks, Recreation and Open Space, Educational Facilities, Environmental Protection, Infrastructure, Urban Design, Historic Preservation, Community Services and Facilities, and Arts and Culture. Area Elements are divided geographically to focus on issues that are unique to particular parts of the District. Area Elements are divided into 10 areas: Capitol Hill, Central Washington, Far Northeast and Southeast, Far Southeast and Southwest, Lower Anacostia Waterfront and Near Southwest, Mid-City, Near Northwest, Rock Creek East, Rock Creek West and Upper Northeast.

#### *Federal Elements*

*The Federal Elements of the Comprehensive Plan for the National Capital* provide principles, goals, and planning policies for the growth and development of the national capital. The Federal Elements primarily address issues related to federal property and interests in the

National Capital Region. The Federal Facilities elements of the plan that are relevant to MLK Jr. Library include:

- **Historic Preservation:** This element includes policies to preserve, protect and rehabilitate historic properties in the National Capital Region and promote design and development that is respectful of the guiding principles established by the Plan of the City of Washington and the symbolic character of the capital's setting.
- **Urban Design:** This element includes policies to promote quality design and development in the National Capital Region that reinforces its unique role as the nation's capital and creates a welcoming and livable environment for people.

### *District Elements*

The Comprehensive Plan divides District Elements into two categories: Citywide Elements and Area Elements. Citywide Elements of the Comprehensive Plan relevant to the MLK Jr. Library project include Land Use, Environmental Protection, Urban Design, Historic Preservation, and Community Services and Facilities. The MLK Jr. Library project falls within the Central Washington Area Element.

### *Citywide Elements*

- **Land Use:** This element establishes the basic policies guiding the physical form of the city, and provides direction on a range of development, conservation, and land use compatibility issues.
- **Environmental Protection:** This element addresses the protection, restoration, and management of the District's land, air, water, energy and biologic resources. It provides policies and actions on important issues such as drinking water safety, the restoration of our tree canopy, energy conservation, air quality, watershed protection, pollution prevention and waste management, and the remediation of contaminated sites.
- **Urban Design:** The element describes the ways in which different aspects of the city's landscape - especially its buildings, streets, and open spaces - work together to define impressions of Washington and its neighborhoods.
- **Historic Preservation:** The Historic Preservation Element defines the District's role in promoting awareness of Washington history, identifying and preserving historic resources, and ensuring compatible design in historic neighborhoods
- **Community Services and Facilities:** This element provides policies and actions on health care facilities, child care and senior care facilities, libraries, police stations, fire stations, and other municipal facilities such as maintenance yards.

### *Area Elements*

- Central Washington: The Central Washington Planning Area encompasses 6.8 square miles that includes the “monumental core” of the city, the city’s Downtown, and employment areas. It is the seat of the federal government and contains the third largest concentration of office space in the United States. The major planning objectives for the Central Washington Planning Area include: a vision of a mixed use “living downtown” with high density housing, retail, entertainment, and offices.

### *Project Area Land Use, Planning and Zoning*

Pursuant to its enabling legislation, NCPC has zoning jurisdiction over the MLK Jr. Library as it is a District of Columbia property located in the central area (defined as the Downtown and Shaw Urban Renewal Areas). The Zoning Regulations for the District of Columbia (ZR) specifically exclude District of Columbia properties located within this geographic area from regulation by local zoning authorities. Therefore, because the library is located in the central area, NCPC possess authority to review and approve the rehabilitation and modernization of the MLK Jr. Library in accordance with zoning standards NCPC determines appropriate. Typically, NCPC looks to the ZR for guidance on reasonable and appropriate standards to apply. However, if NCPC determines a deviation from a particular provision in the ZR is appropriate, the deviated standard must be followed without resort to the District of Columbia’s Board of Zoning Adjustment for a variance.

A summary of the relevant local zoning is provided below. As noted, NCPC will consider the local zoning as guidance in its review of the proposed project.

According to the District of Columbia Generalized Land Use Map, there are 19 individual land use categories in the District (DCOP, 2012). The MLK Jr. Library is designated as “local public.” The existing land use categories found adjacent to the MLK Jr. Library include institutional, federal public, high density residential, and commercial. The future land use for the area surrounding the MLK Jr. Library is designated as Federal; high density commercial; and high density residential.

According to the online District Zoning Map, the MLK Jr. Library is zoned as C-4, Central Business District, and falls within the Downtown Development Overlay District (DD), as shown in Figure 30. The zoning designations adjacent to the MLK Jr. Library are also C-4 and fall within the DD. A C-4 designation permits matter-of-right development for major businesses and employment centers of high density development, including office, retail, housing, and mixed uses. The DD is applied to the core of the Downtown area in northwest Washington, DC, including sub-areas identified in the Comprehensive Plan as the Downtown Shopping District

(Retail Core), the Downtown Arts District, Gallery Place, Chinatown, Pennsylvania Quarter, Convention Center, and Mount Vernon Square. The general purposes of the DD Overlay District are to create a balanced mix of uses; to guide office development, which is favored by market forces, so as to further the land use objectives for retail, hotel, residential, entertainment, arts and cultural uses; to protect historic buildings and places while permitting sensitive and compatible new developments; to achieve desired land use and development policies; to guide building design to be generally consistent with the Downtown Element of the Comprehensive Plan; to foster growth opportunities for and retention of small and minority businesses; and to provide adequate and visually acceptable short-term parking and consolidated loading from streets other than F, G, and 7th Streets (DCOZ, 2015).

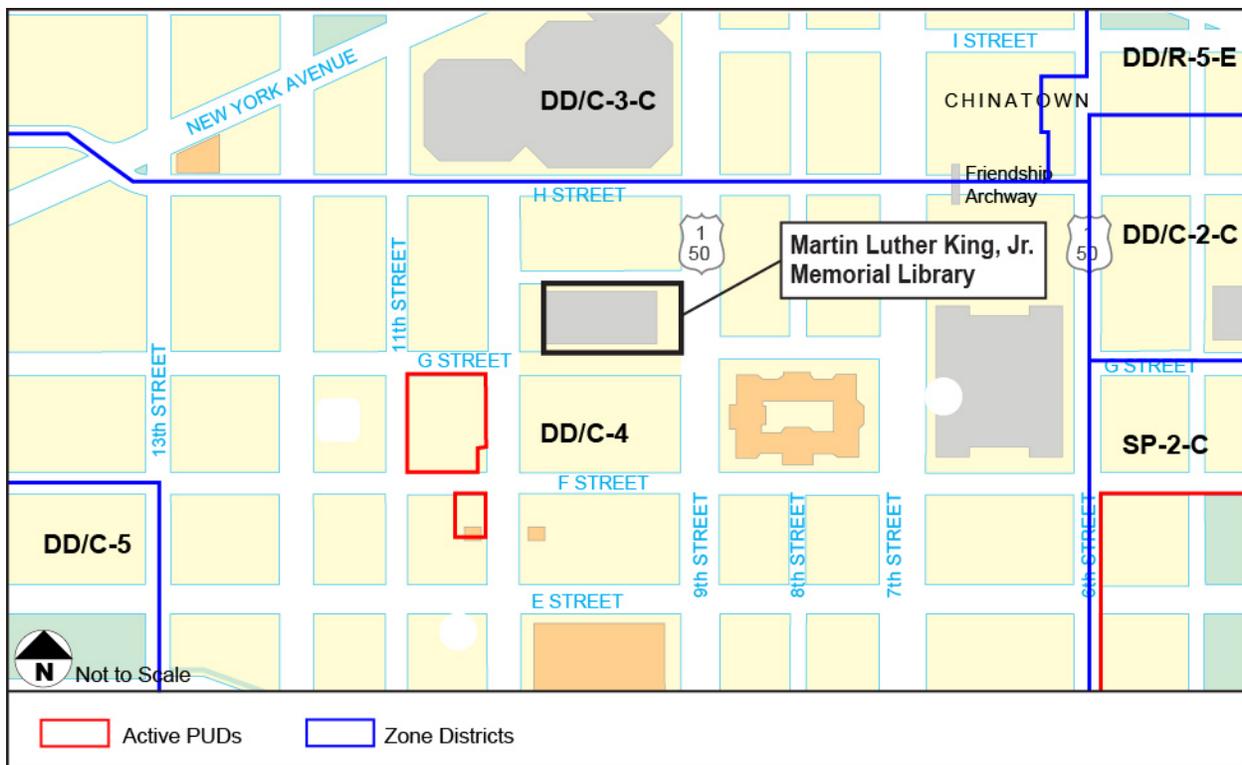


Figure 30. DC Zoning Map

**Impacts to Land Use Planning and Zoning**

**No-Action Alternative**

Under the No-Action Alternative, the rehabilitation and modernization of the MLK Jr. Library would not occur. No improvements would be made to the interior or exterior of the building. Therefore, no changes to the land use of the project site and no zoning amendments would be required. Therefore, there would be no impact to land use or zoning.

## **Alternatives A, B and C: Action Alternatives**

### *Regional Land Use and Planning*

Compatibility of Alternatives A, B, and C with the Federal and District of Columbia Elements of the Comprehensive Plan is described below.

#### *Federal Elements*

- **Historic Preservation:** The rehabilitation and modernization of the MLK Jr. Library is consistent with several policies related to the management of historic properties as well as design review. However, there would be an impact on the historic significance of the MLK Jr. Library under all of the action alternatives and there would be an adverse effect under Section 106. However, these impacts would be mitigated through a Memorandum of Agreement (MOA) with NCPD, DCPL, and the DC SHPO. The rehabilitation and modernization of the MLK Jr. Library would be consistent with the Preservation and Historic Features Element of the Comprehensive Plan.
- **Urban Design:** Rehabilitating and modernizing of the MLK Jr. Library would “complement the natural environment, provide visual orientation, enhance the District’s aesthetic qualities, emphasize neighborhood identities, and be functionally efficient.” Therefore, all the aspects of the rehabilitation and the modernization of the MLK Jr. Library would be consistent with Urban Design Element of the Comprehensive Plan.

#### *Citywide Elements*

- **Land Use:** The rehabilitation and modernization of the existing library facilities would not change the overall intended use of the MLK Jr. Library. Therefore, the Master Plan Alternative would be consistent with the Land Use Element of the Comprehensive Plan.
- **Environmental Protection:** Rehabilitating and modernizing the existing library facilities would not alter the natural and built environment. The DCPL would develop the site in a sustainable manner by seeking a minimum of LEED®-Silver certification from the U.S. Green Building Council, which would include making the building more energy efficient. Therefore, the rehabilitation and modernization of the MLK Jr. Library would be consistent with the Environmental Protection Element of the Comprehensive Plan.
- **Urban Design:** Rehabilitating and modernizing the MLK Jr. Library would provide an improved public space in and around the library by creating a world-class modern library that includes a children’s and teen area, specialty labs, Adult Literacy Resource Center,

Center for Accessibility, College Information Center and a café. Therefore, all the aspects of the rehabilitation and the modernization of the MLK Jr. Library would be consistent with Urban Design Element of the Comprehensive Plan.

- **Historic Preservation:** The rehabilitation and modernization of the MLK Jr. Library would have an impact on the historic significance of the MLK Jr. Library and there would be an adverse effect under Section 106 for all of the action alternatives. The impacts would be mitigated through a Memorandum of Agreement (MOA) with NCPC, DCPL, and the DC SHPO.
- **Community Facilities and Services:** The rehabilitation and modernization of the MLK Jr. Library fulfills part of this element by modernizing the MLK Jr. Library to include state-of-art library services and public space both within and outside the building. Therefore, the rehabilitation and modernization of the MLK Jr. Library would be consistent with the Community Facilities and Services Element of the Comprehensive Plan.

#### *Area Elements*

- **Central Washington Area:** The Plan recommends the preservation of buildings, places, and uses which express the history, culture, and heritage of the Central Washington Area. The rehabilitation and modernization of the MLK Jr. Library to provide space for cultural celebrations is consistent with this element. In addition, the Plan recommends protecting and enhancing Central Washington's historic resources by continuing to preserve the area's buildings and districts. While the rehabilitation and modernization of the library would create adverse impacts to the historic resource, NCPC, DCPL, and the DCSHPO would develop a MOA that would seek ways to avoid, minimize, or mitigate these adverse impacts. Therefore, DCPL would be consistent with the Central Washington Area Element of the Comprehensive Plan.

#### *Project Area Land Use, Planning and Zoning*

The rehabilitation and modernization of existing library facilities would not change the overall intended use of the MLK Jr. Library. The addition of a café and event space may be interpreted as changes in use. However, fast-food and prepared food establishments are permitted uses as a matter of right within a commercial business district, including C-4 (DCMR 11-701 through 756); therefore, the addition of a café is consistent with the C-4 zoning regulations.

The DD Overlay District (DCMR 11-1711) includes auditoriums, public halls, and general performing arts spaces on the list of preferred uses. Therefore, the fifth-floor addition and auditorium are consistent with the DD regulations. Since the changes proposed under all of the Action Alternatives are consistent with the existing local land use and zoning designations,

NCPC would not need to consider a deviation from the ZR, and there would be no impacts to land use planning and zoning.

### **Cumulative Impacts**

Because the action alternatives would have no impact on land use and zoning, the Action Alternatives would not result in cumulative impacts to this resource.

### **Mitigation Measures**

No mitigation measures are proposed for land use and zoning.

## **3.6 ECONOMY, EMPLOYMENT, AND INCOME**

Data from the American Community Survey (ACS) 5-Year Estimates from 2009-2013 were used to determine key financial and employment characteristics of the project area and the District and how these areas compare to the United States as a whole. The MLK Jr. Library is located in Census Tract 58, which was used to represent the project area for the purposes of this analysis (US Census Bureau, 2015a).

Over half of working residents in the District are employed in management and business occupations, followed by sales and office occupations (Figure 31). The three most common industry types that employ DC workers include the Professional, Scientific, Management, Administrative, and Waste Management industry, the Education, Healthcare, and Social Assistance industry, and Public Administration (Figure 32).

Occupations of Working Population of DC (ACS 2009-2013)

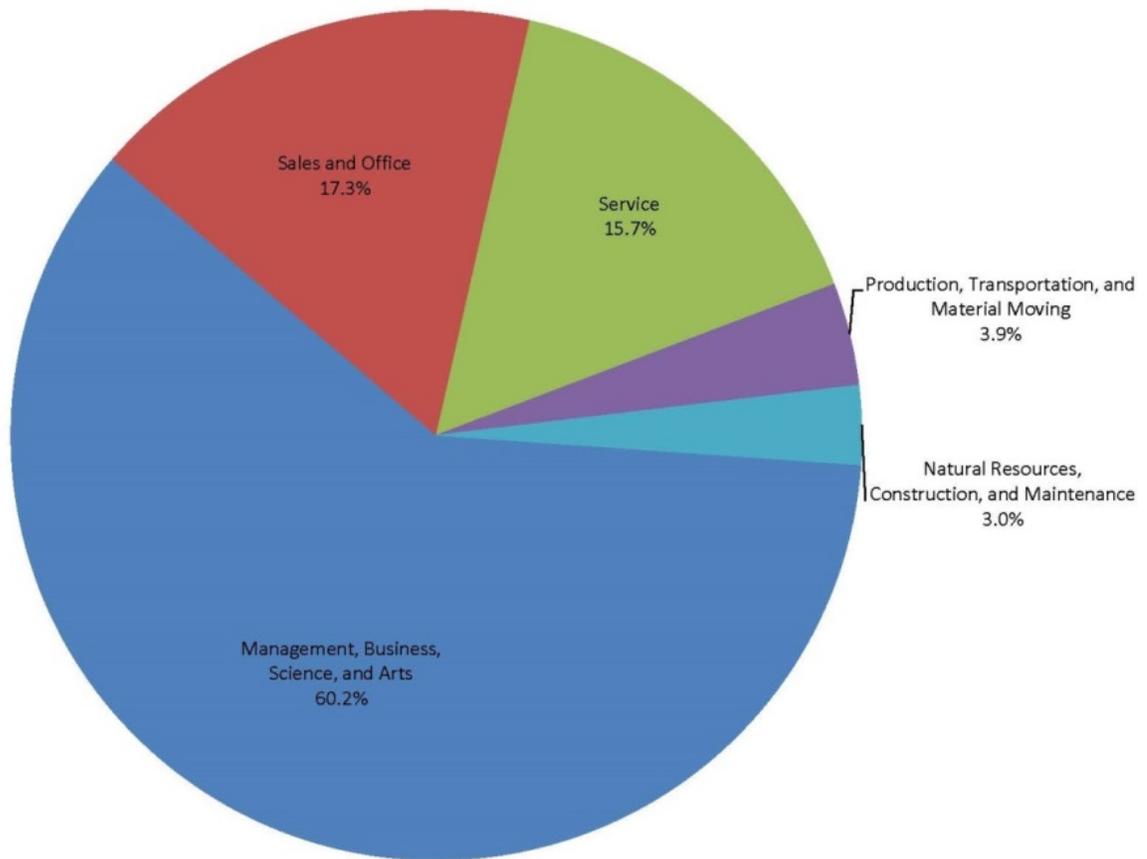


Figure 31. Occupations of Working Population of DC

Source: US Census, 2015

### Industry Types in DC

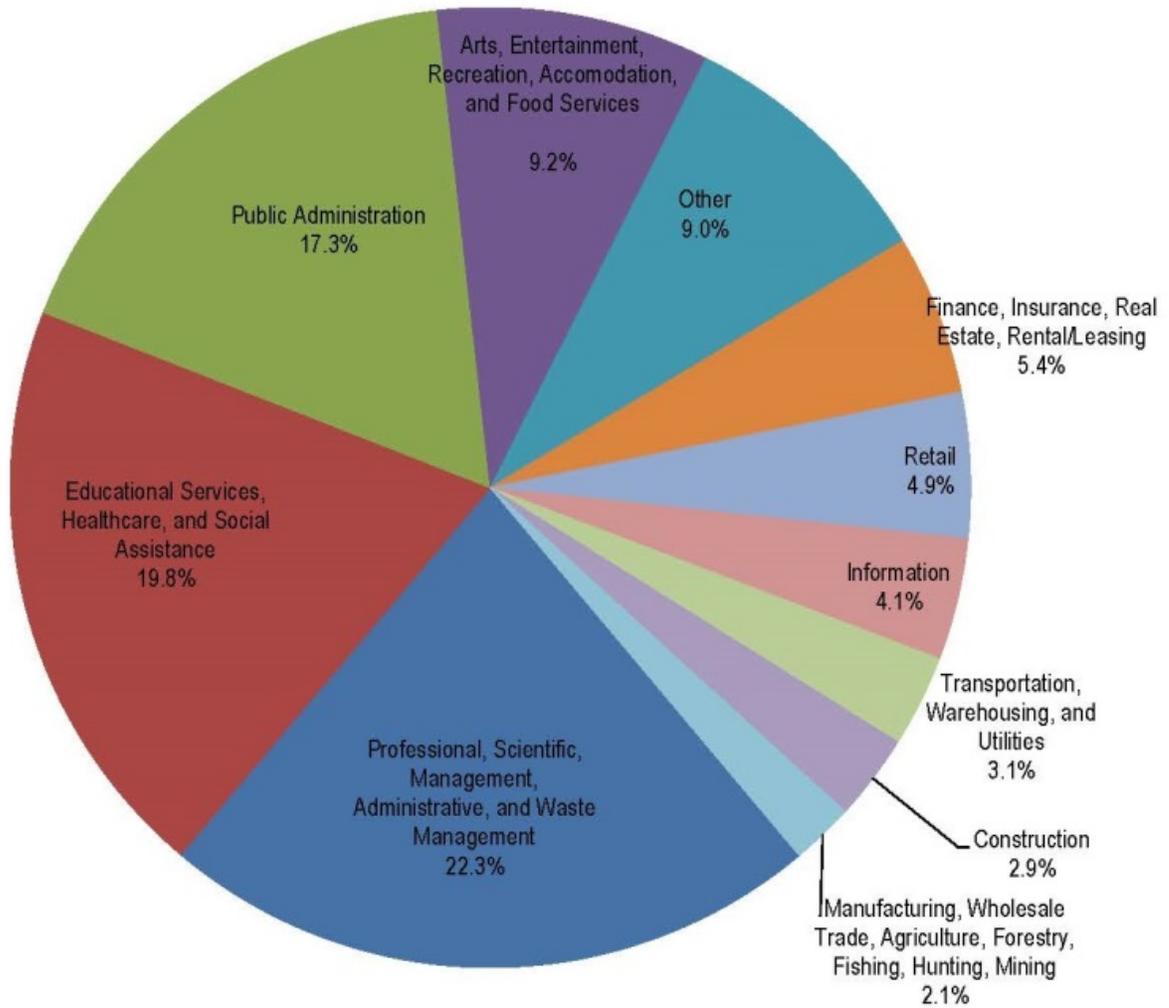


Figure 32. Industry Types in DC (Source: US Census, 2015)

The unemployment rate, median household income, and percentage of the population below the poverty level for Census Tract 58, the District, and the US are shown in Table 2.

Employment and Income Characteristics of the MLK Jr. Library Project Area

below.

**Table 2. Employment and Income Characteristics of the MLK Jr. Library Project Area**

| Characteristic              | Census Tract 58 | DC        | National Average |
|-----------------------------|-----------------|-----------|------------------|
| Unemployment Rate           | 1.6%            | 7.2%      | 5.4%             |
| Median Household Income     | \$ 118,194      | \$ 65,830 | \$ 53,046        |
| Percent Below Poverty Level | 11.9%           | 18.6%     | 15.4%            |

As of December 2014, the District's unemployment rate was 7.2 percent, higher than the national average of 5.4 percent (BLS, 2015). The percentage of unemployed individuals in Census Tract 58, in which the MLK Jr. Library is located, is 1.6 percent, which is lower than both the national and district percentages. According to the DC Comprehensive Plan, effective April 8, 2011, the District is projected to add 125,000 jobs. The District's goal is to link these jobs to District residents rather than commuters from Maryland or Virginia in an effort to reduce the unemployment rate in the city.

The median household income in the District is \$65,830, higher than the national average of \$53,046 (US Census, 2015b). The median household income in Census Tract 58 is \$118,194, more than double that of the District as a whole.

The percentage of individuals living below the poverty level in the District is 18.6 percent, higher than the percentage of individuals in Census Tract 58 (11.9 percent) and the United States (15.4 percent).

### ***Impacts to Economy, Employment and Income***

#### **No-Action Alternative**

Under the No-Action Alternative, the rehabilitation and modernization of the MLK Jr. Library would not occur. No improvements would be made to the interior or exterior of the building. No new employment opportunities would be created. Therefore, there would be no impacts to economy, employment, and income as a result of the No-Action Alternative.

**Alternatives A, B, and C: Action Alternatives**

No additional, full-time library staff would be hired as a result of the Action Alternatives. The addition of a café would create a small number of permanent jobs, resulting in a minor, direct, long-term, beneficial impact to area employment, and income taxes. Sales taxes would also be generated as a result of café sales.

The rehabilitation and modernization of the MLK Jr. Library under any of the Action Alternatives would result in a short-term need for construction workers; however, the number of required workers would be minimal, and this increase in temporary workers would not affect the population, income, or employment base of the surrounding community or the District. The increase in construction workers would result in a negligible, short-term, beneficial increase in employment opportunities and revenues for local businesses.

Overall, the proposed project is expected to have negligible to minor, short- and long-term, beneficial impacts to economy, employment, and income in the surrounding area.

**Cumulative Impacts**

Past, present and future development in the District has created revenue for the DC government and additional jobs for District residents, which has created beneficial cumulative impacts on economy, employment, and income. The Action Alternatives would add to these long-term beneficial cumulative impacts from the introduction of a café.

**Mitigation Measures**

No mitigation measures are proposed for economy, employment, and income.

**3.7 COMMUNITY FACILITIES AND SERVICES**

The following section describes community facilities and services in the vicinity of the project area including law enforcement, emergency response, fire protection, healthcare services, local schools and school systems, parks, recreational facilities, and designated open space.

The MLK Jr. Library itself is a community resource that provides much more than just books and media for checkout. The MLK Jr. Library also provides free public internet access; computers loaded with specialty software; a book printing machine for self-publishing; a Fabrication Lab with 3-D printers, computer-controlled laser cutters, and soldering equipment; a digital production lab; and enhanced meeting rooms. The Adult Literacy Resource Center is located in the MLK Jr. Library and provides basic reading, math, workforce readiness, and job skills training for adult DC residents. The MLK Jr. Library also hosts the Center for Accessibility, which provides adaptive technologies and usage training as well as networking events for the deaf,

visually impaired, elderly, and veteran communities. Starting February 1 of each year, the MLK Jr. Library partners with Community Tax Aid DC to provide income tax form preparation for qualified DC residents. The College Information Center offers a variety of programs and services to help meet the college planning needs of students and parents, including financial aid information, test prep, resume building, and job interview resources. The MLK Jr. Library also hosts entertainment and cultural enrichment events, such as movie nights, book clubs, concerts, writing and computer workshops, and children's events (DCPL, 2015).

The MLK Jr. Library is served by the District's First Police District (101 M Street SW, approximately 1.5 miles from the project area), Police Service Area (PSA) 101. The number of reported crimes in the First District has decreased from 6,900 crimes in 2008 to 6,091 in 2012 (MPDC 2015). These trends are consistent with declining crime rates throughout the District.

The DC Fire and Emergency Medical Services Department provides fire and rescue services for the MLK Jr. Library. The closest stations are located at Engine Company 2 at 500 F Street NW (approximately 1300 feet southeast); and Engine Company 16 located at 1018 13<sup>th</sup> Street NW (approximately 2000 feet northwest). Response times to the MLK Jr. Library from these locations vary.

Several hospitals are located in the vicinity of the proposed project. These include Howard University Hospital (1.3 miles north) and George Washington University Hospital (1.6 miles west).

The MLK Jr. Library falls within the school district boundaries for Thomson Elementary School (1200 L Street, NW), School Without Walls at Francis-Stevens (2425 N Street, NW), and Cardozo Education Campus (1200 Clifton Street, NW) (DCGIS 2015).

Two churches are located adjacent to the MLK Jr. Library to the west and south. No schools, parks, recreation facilities, playgrounds, or designated open space areas are located adjacent to the MLK Jr. Library. Businesses and public facilities in the area include museums, theaters, a sport and entertainment facility, restaurants, clothing stores, and other retail businesses. Other services found near the MLK Jr. Library include, but are not limited to, trash collection and mail service.

### ***Impacts to Community Facilities and Services***

#### **No-Action Alternative**

The No-Action Alternative represents a continuation of the existing conditions, operations and maintenance of the MLK Jr. Library. This alternative would not address deficient building systems or inadequate egress in the MLK Jr. Library. The MLK Jr. Library currently does not

provide an open floor plan that includes clear and well defined horizontal and vertical circulation. Hazardous building materials would be remediated to the minimum standards set by District and federal regulations to safeguard the health of building occupants. However, no improvements would be made to the interior or exterior of the building to increase square footage of usable public, staff, or mechanical space that would promote collaboration and innovation or would enhance library programming. The No-Action Alternative would have an overall minor, long-term, adverse impact from the lack of library improvements; while the remediation of hazardous building materials would create beneficial impacts to the MLK Jr. Library staff and its patrons.

The No-Action Alternative would not result in any changes in library usage; therefore, no increase in emergency services would be required and no increase in police or fire and rescue response times is anticipated. The proposed project would not result in the removal or alteration of any adjacent properties or facilities. Therefore, no long-term adverse impacts to surrounding community facilities or services are anticipated.

### **Alternatives A, B, and C: Action Alternatives**

Under the Action Alternatives, the MLK Jr. Library would be rehabilitated and modernized into an efficient, user-friendly library. The interior of the building would be comprehensively renovated to support a new library program. The addition of a fifth-floor auditorium would create opportunities for cultural events, education, and entertainment. A café would entice visitors to stay in the MLK Jr. Library for longer periods of time. By renovating the building's heating, cooling, plumbing, electrical and elevator systems to LEED®-Silver standards, the Action Alternatives would create a safer, more comfortable, and more environmentally sustainable facility. The services provided by the specialty labs, Adult Literacy Resource Center, the Center for Accessibility, the College Information Center, and other specialty programs would continue to be provided. Overall, the Action Alternatives would result in moderate, long-term, direct, beneficial impacts to the community facilities and services.

The Action Alternatives would not result in any road closures or detours during construction; therefore, no impacts to police or fire and rescue response times are anticipated. The proposed project would not result in the removal or alteration of any adjacent properties or facilities. Therefore, no long-term adverse impacts to surrounding community facilities or services are anticipated.

Construction activities for the proposed project would require the temporary closure of the MLK Jr. Library. To mitigate for this temporary impact, DC Public Library, with the support of the Board of Library Trustees, is taking a decentralized approach to interim MLK Jr. Library services.

It will offer services in a number of locations that include a new “Library Express” location that will house the Library’s Center for Accessibility and Adult Literacy Department. DCPL would offer expanded hours at all of its branches to encourage MLK Jr. Library users to visit neighborhood branches. DCPL is still determining how much of the MLK Jr. Library collections would be available during the rehabilitation and modernization. In addition to the normal holds process, DCPL would rely on other services including Inter-library loan (ILL) and the reciprocal borrowing agreements that are currently in place with neighboring public library systems in Virginia and Maryland. Other services, including the Library’s Special Collections and its Labs, would be accessible with the help of partner organizations with whom DCPL is currently in discussion. . Some temporary impacts related to construction noise may affect places of worship, businesses and public facilities in the vicinity of the project. These impacts would be short-term and would only occur during construction hours – Monday through Saturday from 7 am to 7pm, as designated by the DC Department of Consumer and Regulatory Affairs (DCRA, 2015). Therefore, the Action Alternatives would result in minor, short-term, direct, adverse impacts to community facilities and services.

### **Cumulative Impacts**

Past, present and future development has adversely and beneficially impacted community facilities and services within the District, which has created cumulative impacts to community facilities and services. The MLK Jr. Library Rehabilitation and Modernization would beneficially contribute to the long-term cumulative impacts to the community facilities and services from the creation of opportunities for cultural events, education, and entertainment and a café that would entice visitors to stay in the library for longer periods of time. DCPL is still determining how much of the MLK Jr. Library collections would be available during the rehabilitation and modernization. In addition to the normal holds process, DCPL would rely on other services including Inter-library loan (ILL) and the reciprocal borrowing agreements that are currently in place with neighboring public library systems in Virginia and Maryland. Other services, including the Library’s Special Collections and its Labs, would be accessible with the help of partner organizations with whom DCPL is currently in discussion.

### **Mitigation Measures**

During the construction, library services at the MLK Jr. Library would be offered in a number of locations that include a new “Library Express” location that will house the Library’s Center for Accessibility and Adult Literacy Department. DCPL would offer expanded hours at all of its branches to encourage MLK Jr. Library users to visit neighborhood branches.. The modernization of the MLK Jr. Library would occur during normal construction hours set by

DCRA – Monday through Friday, 7 am – 7 pm to minimize disruptions to surrounding community facilities.

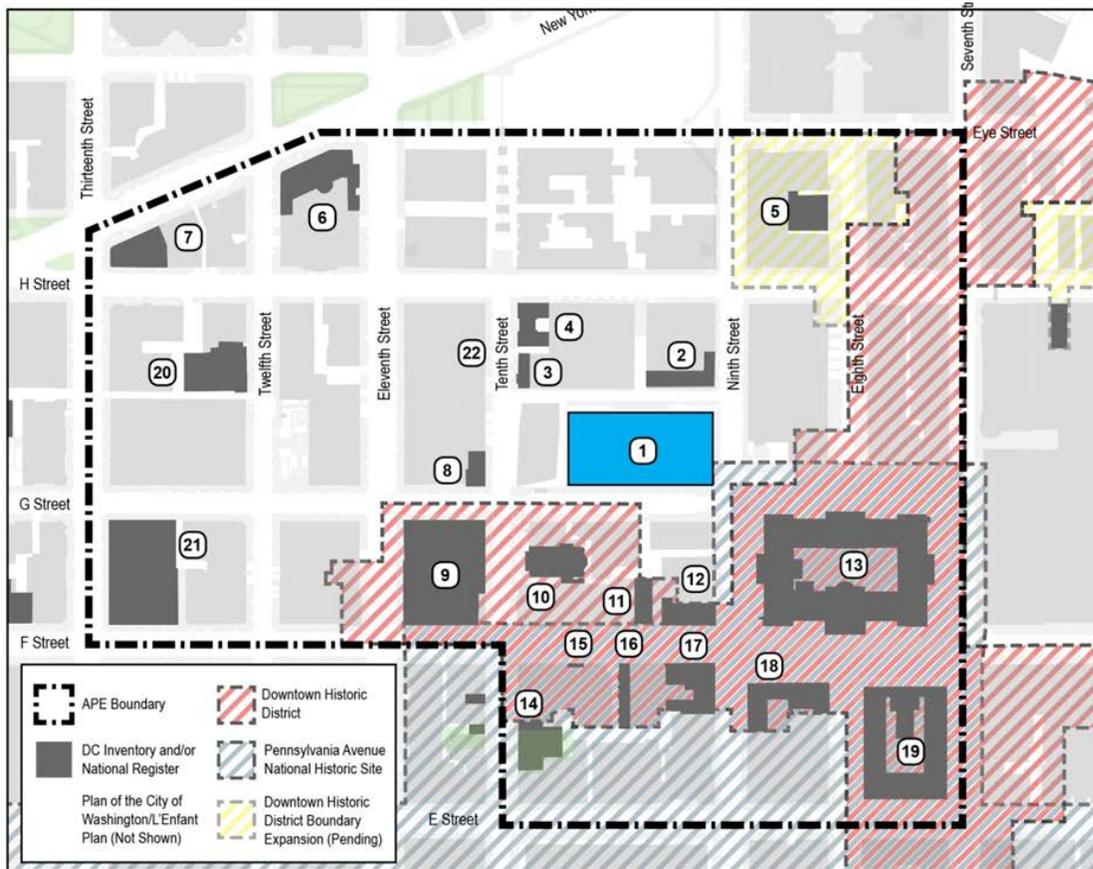
### **3.8 HISTORIC RESOURCES**

This section describes the historic properties present at the project site and in the surrounding area. This information is derived from the National Register of Historic Places, National Historic Landmark, District of Columbia Inventory of Historic Sites, determinations of eligibility, historic photographs, maps, and other documentation, and site reconnaissance and observation.

Section 106 of the National Historic Preservation Act (NHPA) requires that federal agencies consider the effects of their actions on properties listed, or eligible for listing, in the National Register of Historic Places. NCPC is conducting Section 106 consultation concurrent with the environmental review process mandated by NEPA (36 CFR 800.8). After initiating the Section 106 compliance process, NCPC, in consultation with the DC State Historic Preservation Office (DC SHPO) and consulting parties, identified historic properties within the project's Area of Potential Effect (APE). As defined by 36 CFR 800.16(d), the APE represents "the geographic area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist."

The APE for the modernization and rehabilitation of the MLK Jr. Library is bounded by 13th St, New York Avenue, 7th Street, E Street, 10th Street, and F Street, NW (see Figure 33). The APE includes views and viewsheds from the surrounding area to the project site. The boundaries reflect the outer limits from which views toward the property may reasonably generate adverse effects (i.e. changes to the setting of historic resources), particularly along the surrounding streets.

The boundaries of the APE overlap with portions of the Downtown Historic District, the Pennsylvania Avenue National Historic Site, the L'Enfant Plan/Plan of the City of Washington, and the pending Downtown Historic District Boundary Expansion. It also includes a number of individual resources listed in the DC Inventory of Historic Sites (DC Inventory) and/or the National Register of Historic Places (National Register). Three National Historic Landmarks, the Patent Office, Ford's Theatre, and General Post Office, are located within the APE. Descriptions for historic properties in the APE are provided below.



| #  | Property  | Designation* | #  | Property                                     | Designation*  |
|----|---|--------------|----|--|---------------|
| 1  | <b>MLK Jr. Library</b>                            | DC, NRHP     | 13 | <b>Patent Office</b>                         | DC, NRHP, NHL |
| 2  | <b>Victor Building</b>                            | DC           | 14 | <b>Ford's Theatre National Historic Site</b> | DC, NRHP, NHL |
| 3  | <b>Mercantile Savings Bank</b>                    | DC           | 15 | <b>Atlantic Building</b>                     | DC            |
| 4  | <b>Daniel Webster School</b>                      | DC           | 16 | <b>National Union Building</b>               | DC, NRHP      |
| 5  | <b>Washington Hebrew Congregation</b>             | DC           | 17 | <b>Washington Loan and Trust Company</b>     | DC, NRHP      |
| 6  | <b>Greyhound Bus Terminal</b>                     | DC           | 18 | <b>LeDroit Block</b>                         | DC, NRHP      |
| 7  | <b>Masonic Temple</b>                             | DC, NRHP     | 19 | <b>General Post Office</b>                   | DC, NRHP, NHL |
| 8  | <b>McLachlen Building</b>                         | DC, NRHP     | 20 | <b>Chesapeake and Potomac Telephone Co.</b>  | DC, NRHP      |
| 9  | <b>Woodward &amp; Lothrop</b>                     | DC           | 21 | <b>Homer Building</b>                        | DC            |
| 10 | <b>Saint Patrick's Church</b>                     | DC           |    |  |               |
| 11 | <b>Equitable Cooperative Building Association</b> | DC, NRHP     |    |  |               |
| 12 | <b>Old Masonic Temple</b>                         | DC, NRHP     |    |  |               |

\*DC=DC Inventory of Historic Sites; NRHP=National Register of Historic Places; NHL=National Historic Landmark

**Figure 33. Area of Potential Effects (APE)**

Source: EHT Tracerics, Inc.

## Martin Luther King Jr. Memorial Library

**Location:** 901 G Street, NW

**Designation:** DC Inventory of Historic Sites, 2007; National Register of Historic Places, 2007



**Figure 34. MLK Jr. Library**

*Source: EHT Tracerics, Inc.*

Standing in sharp contrast to its environs, the MLK Jr. Library is a sleek, glass-and-steel-clad building that serves as the main branch of the District's public library system. Constructed between 1969 and 1972, the building was among the last works of legendary Modernist architect Ludwig Mies van der Rohe, whose death in 1969 precluded him from seeing the building's completion. It was also his only executed library design. Four stories tall with a recessed, first-story loggia, the building is characteristic of Mies van der Rohe's work, which distilled architecture into its essential components of structure and envelope. In 1971, the MLK Jr. Library board voted to dedicate the building in the memory of Dr. Martin Luther King, Jr., as the first memorial to the assassinated civil rights leader in the District. The building's landmark designation extends to its principal interior public spaces on the first floor.

Apart from MLK Library's significant connection to the legacy of Martin Luther King, which is primarily expressed through commemorative and programmatic elements throughout the building, the library's primary architectural significance is connected to its International Style and Miesian design features. The following are character-defining features of the building and site:

**Site**

1. Continuous granite paving (extending to interior)
2. Beige brick site walls used to provide enclosure to building and ramps and mediate changes in grade
3. General organization of site and separation of public and utilitarian functions

**Building (exterior)**

1. Prevailing sense of symmetry, rectilinearity, and horizontality
2. General form and massing, including flat roof and recessed first story loggia and colonnade
3. Beige brick cladding around cores and loading dock
4. First story clear glazing systems
5. Upper story curtain wall glazing system, including black-painted steel components, bronze-tinted glazing, and typical Mies construction details

**Building (interior)**

1. General plan organization defined by four cores and central, column-free spaces
2. Use of large volumes and open floor plans, particularly in principal public spaces and reading rooms
3. Extensive use of glazing partitions and general sense of transparency
4. Limited color and material palette including painted steel and aluminum components, beige brick, and granite.
5. Repeating bands of fluorescent strip lighting
6. Upper floor central enclosures and corridors
7. Custom-designed furniture in main lobby and reading rooms (reading room furniture has since been removed)

**Downtown Historic District**

*Location:* 7<sup>th</sup> Street, NW, between Pennsylvania Avenue and Eye Street; F Street, NW between 7<sup>th</sup> and 11<sup>th</sup> Streets; and H and Eye Streets, NW, between 5<sup>th</sup> and 7<sup>th</sup> Streets

*Designation:* DC Inventory of Historic Sites, 1982 (effective 1994); National Register of Historic Places, 2001

With two hundred contributing resources, the Downtown Historic District is among the smaller of the city's historic districts, yet it is also one that captures the greatest breadth and diversity of architectural and historical development. Beginning in the early nineteenth century, growth of a commercial corridor along Seventh Street radiated north from the newly established Center Market. Federal investment in the 1830s added the Patent Office and General Post Office buildings, two imposing edifices that anchored the center of the district and stimulated additional growth, drawing both trade and professional classes to the area. In the second half of the nineteenth century, growth continued north along Seventh Street, dominated by a mix of department stores, dry goods businesses, and furniture stores. Development shifted westward in the twentieth century, with a number of grand department stores lining F Street by the mid-1920s.

Although primarily commercial in nature, the Downtown Historic District includes a number of significant religious, institutional, and federal buildings, in addition to several residential groupings. Its period of significance dates from 1830 to 1940.

### **Pennsylvania Avenue National Historic Site**

*Location:* Approximately bound by Constitution Avenue; 1<sup>st</sup> and 3<sup>rd</sup> Streets; E, F, and G Streets; 15<sup>th</sup> Street and East Executive Avenue, NW

*Designation:* DC Inventory of Historic Sites, 1973; National Historic Site and National Register of Historic Places, 1966 (amended and documented 2007)

Documenting patterns of development along the federal city's most important vista and ceremonial route, the Pennsylvania Avenue National Historic Site is organized around Pennsylvania Avenue between the U.S. Treasury Building and Peace Circle at First Street, NW. The National Historic Site includes a diverse array of buildings, public spaces, memorials and sculpture, and views and vistas that illustrate the development of the avenue between the creation of the L'Enfant Plan and the late-twentieth century. The district includes 111 contributing resources with a period of significance dating from 1791 to 1962, although a number of contributing resources postdate that period. The significance of the Pennsylvania Avenue National Historic Site is reflected in the number of contributing resources that have achieved national significance in their own right, including the U.S. Treasury Department Building, the Old Post Office, the National Archives, the Patent Office, a portion of the L'Enfant Plan, and the entirety of the Federal Triangle Historic District.

## **L'Enfant Plan/Plan of the City of Washington**

*Designation:* DC Inventory of Historic Sites, 1964 (expanded 1997); National Register of Historic Places, 1997

The L'Enfant Plan is the largest and most comprehensive example of a Baroque city plan in the United States. The plan is the masterpiece of Pierre Charles L'Enfant, a French architect and civil engineer asked by Washington to survey the site of the future capital and recommend locations for its important building. L'Enfant returned with a Baroque city plan based on European precedents, with a coordinated system of radiating avenues and vistas overlaid upon an orthogonal grid of streets. L'Enfant's grandiose vision—which relies on geometric, visual, symbolic, and hierarchical patterns—has come to define the physical character of the national capital.

The L'Enfant Plan was realized incrementally throughout the eighteenth and nineteenth centuries. Major federal buildings were erected on some of the original appropriations purchased by the federal government in 1792, including the White House, Capitol, and Old Patent Office. Others were improved and maintained as landscaped parks, including Lafayette Square, President's Park, and the Mall. During the 1870s, a number of municipal improvements were taken throughout Washington by the Office of Public Buildings and Grounds. The Office undertook to improve the avenues, resulting in the improvement of the plan's major circles and squares as well as the acknowledgement of the lesser parks and reservations. This trend continued throughout the 1880s and 1890s, with dozens of additional reservations being identified and improved.

In the twentieth century, evaluating and improving the L'Enfant Plan was a fundamental component of the McMillan Commission's recommendations. The Commission revived a number of L'Enfant elements while recasting them to meet the ideals of the City Beautiful movement. The result was an elegant and monumental city plan that became a national model for urban planning.

The L'Enfant Plan is composed of three principal contributing elements:

- Reservations and Appropriations
- Streets and Avenues
- Vistas

The L'Enfant Plan is significant as a representation of two centuries of civic, design, and political ideals. During the past two centuries, it has provided a framework for the dramatic growth of Washington, DC as well as innumerable nationally significant events, serving continuously as the setting for national political expression.

**Downtown Historic District (Boundary Increase)**

*Location:* 600 and 800 blocks of H Street NW; 800 block of 8<sup>th</sup> Street, NW; and 700 and 800 blocks of 6<sup>th</sup> Street, NW

*Designation:* Pending

A Landmark Application for the historic district boundary increase has been submitted to DC HPO for review by the Historic Preservation Review Board. The landmark application proposes the expansion of the existing boundaries of the Downtown Historic District to augment the description of religious institutions, alley dwellings, and residential buildings as they contributed to the growth and character of the neighborhood. The boundary expansion also allows Essex Court (within Square 453) to be included in the district in its entirety. Essex Court represents the largest and most physically intact collection of alley buildings within Downtown.

The application also expands the scope of the original nomination to include a more detailed discussion of the growth of Chinatown within Downtown throughout the twentieth century. Beginning in the 1930s, the city's Chinese population relocated to this area of Downtown, bringing with them a unique culture, mix of businesses, and architectural vocabulary. A corresponding expansion in the district's period of significance—to 1986—has also been proposed for those buildings contributing to the history and character of Chinatown.

The proposed Downtown Historic District Boundary Increase includes fifteen contributing buildings and one contributing structure.

## Victor Building

*Location:* 724-726 9<sup>th</sup> Street, NW

*Designation:* DC Inventory of Historic Sites, 1992



**Figure 35. Victor Building**

*Source: EHT Tracerics, Inc.*

Former headquarters of patent agent Victor J. Evans & Co., the Victor Building was first constructed in 1909 with additions in 1911 and 1925. The first two phases were designed in the Italian Renaissance Revival style by Appleton P. Clark; the third was designed in the Neo-Classical style by Waddy B. Wood. Both Clark and Wood were prominent local architects whose distinguished careers rested on the quality of their variants on Neo-Classical precedent. The building is significant for its association with these architects, as well as for its illustration of trends in local commercial development in the wake of the 1902 McMillan Commission Plan.

## Daniel Webster School

*Location:* 723-729 10<sup>th</sup> Street, NW

*Designation:* DC Inventory of Historic Sites, 1999 (confirmed 2000)



**Figure 36. Webster School (above left) and Mercantile Savings Bank (above right)**

*Source: EHT Tracerics, Inc.*

Named for orator Daniel Webster, the red brick, Romanesque Revival-style building at the southeast corner of Tenth and Eighth Streets, NW, was completed in 1882. Designed by then-Architect of the Capitol Edward Clark, the twelve-room school was constructed by Bright and Humphrey, also the builders of the Pension Building (now the National Building Museum). The three-story building is elevated on a partially exposed basement story and has a hipped roof, with limited stone details and corbelled brick along the cornice line. It is a relatively austere example of the red brick, Victorian-era buildings that characterized the public architecture of Washington after the Civil War. Between 1924 and 1949, the school taught a specialized curriculum focused on English language and citizenship classes, part of a larger, post-World War I trend to assimilate immigrants into American society.

## Mercantile Savings Bank

*Location:* 719-721 10<sup>th</sup> Street, NW

*Designation:* DC Inventory of Historic Sites, 1994

The Mercantile Savings Bank exhibits the typical characteristics of the small, early-twentieth century savings banks once common to DC. Designed by local architect Julius Wenig, the building was completed in 1912. It is a modest interpretation of the Beaux Arts style, two stories tall and clad in buff brick and limestone, with numerous decorative elements distributed throughout. Details include brick pilasters framing the main entrance, ample brick quoining,

and keystone volutes. The roof is concealed behind a continuous cornice lined with prominent modillions, surmounted by a brick parapet.

### **Washington Hebrew Congregation (Greater New Hope Baptist Church)**

*Location:* 816 8<sup>th</sup> Street, NW

*Designation:* DC Inventory of Historic Sites, 1964



**Figure 37. Washington Hebrew Congregation**

*Source: EHT Tracerics, Inc.*

The former Washington Hebrew Congregation, now the Greater New Hope Baptist Church, visually dominates the 800 block of Eighth Street, NW. Designed by architects Stutz & Pease in the Exotic Revival style, the building featured a monochromatic sandstone façade; a handsomely detailed interior; monumentally scaled stained glass windows; lance-like corbelling along the roof parapet; and two towering, engaged belfries with domed roofs (the roofs were removed circa 1970). When completed in 1897, the building's architectural style and physical prominence were intended to distinguish and reflect that of its Jewish congregation. The congregation remained in the building until the 1950s, when it was sold to the predominantly African American Greater New Hope Baptist Congregation, reflecting a twentieth-century demographic shift in downtown, as well as much of the District. The property is also a contributing resource to the proposed Downtown Historic District Boundary Increase.

## Greyhound Bus Terminal

*Location:* 1100 New York Avenue, NW

*Designation:* DC Inventory of Historic Sites, 1987



**Figure 38. Greyhound Bus Terminal**

*Source: EHT Tracerics, Inc.*

The streamlined, sculptural profile of the former Greyhound Bus Terminal characterizes it as one of New York Avenue's most recognizable landmarks, as well as one of the city's most significant works of Art Moderne architecture. Completed in 1940, the building was designed by Wouldiam S. Arrasmith, a Louisville-based architect who designed approximately sixty Greyhound terminals during the 1930s and 1940s. From its outer edges, the building's low-slung profile gradually ascends in a series of ribbon-windowed, curve-walled setbacks, terminating in a mock tower and marquee. The building is clad in honed limestone and polished granite with polished aluminum details throughout.

### Masonic Temple (National Museum of Women in the Arts)

*Location:* 1250 New York Avenue, NW

*Designation:* DC Inventory of Historic Sites, 1984; National Register of Historic Places, 1987



**Figure 39. Masonic Temple**

*Source: EHT Tracerics, Inc.*

The property currently occupied by the National Museum of Women in the Arts was originally constructed in 1907-1908 to serve as the new home of the Grand Lodge of the District of Columbia, which until then had been located at Ninth and G Streets, NW (in a building that still stands). The building was designed by the local firm Wood, Donn, and Deming, which included the well-known Washington architect Waddy Butler Wood. Designed in the Neo-Classical Revival style, the building occupies a wedge-shaped lot. Its façade organization replicates that of a Doric column, with a banded limestone base, banded brick shaft, and elaborate terra cotta entablature and attic story. The frieze incorporates Masonic symbolism.

## McLachlen Building

*Location:* 1001 G Street, NW

*Designation:* DC Inventory of Historic Sites, 1985; National Register of Historic Places, 1986



**Figure 40. McLachlen Building**

*Source: EHT Tracerics, Inc.*

Designed by noted Beaux Arts architect Jules Henri de Sibour and completed in 1911, the McLachlen Building is a nine-story, steel-frame office building in downtown Washington, DC. It was developed to house the McLachlen Banking Company, which remained in the building until 1968. Clad in white granite and glazed terra cotta, the building is a sophisticated example of Beaux Arts architecture imprinted upon the Chicago commercial style. Notable features include the Doric entrance portico, textured spandrel panels, and a dentile cornice. The building is significant for its architectural character, its designer de Sibour, and its association with Washington's history of banking and commerce.

## Woodward & Lothrop

*Location:* 1025 F Street, NW

*Designation:* Contributing Resource to the Downtown Historic District; DC Inventory of Historic Sites, 1964



**Figure 41. Woodward & Lothrop**

*Source: EHT Tracerics, Inc.*

The substantial façade of the former Woodward & Lothrop Department Store was built over several major phases between 1901 and 1926. Woodward & Lothrop opened their first store in the District in 1880. After swiftly outgrowing a number of buildings, they consolidated their retail empire in its current location and gradually constructed additions to achieve the form the building has today. Designed by architect Henry Ives Cobb and completed in 1902, the first portion facing G Street was soon followed by additions in 1912, 1913, 1925, and 1926. By the time of the building's completion, Woodward & Lothrop occupied nearly the entirety of its square. Despite the number of additions, the building has an architectural homogeneity defined by clean Neo-Classical elements, crisply detailed in stone, brick, metal, and terra cotta. The building is significant for its association with the golden age of department store development, a time when Woodward & Lothrop rivaled the likes of Macy, Wanamaker, Bloomingdale, Field, and Hudson.

## Saint Patrick's Church

*Location:* 615 10<sup>th</sup> Street, NW

*Designation:* Contributing Resource to the Downtown Historic Site; DC Inventory of Historic Sites, 1964



**Figure 42. Saint Patrick's Church**

*Source: EHT Tracerics, Inc.*

Saint Patrick's Church is a prime example of a grandiose, Gothic Revival-style building constructed within the confines of a constricted, urban lot. The church was designed by Laurence J. O'Connor and completed in 1874, with additions in 1904. The building is clad in rusticated bluestone laid in a random ashlar pattern. The main (west) façade adopts the Roman triumphal arch prototype, with pointed arches embellished with intricate stone carving. The central entry is contained within a squat, projecting tower, with a monumentally scaled, stained glass rose window at its center. In addition to its architecture, the resource is significant for its association with Saint Patrick's Parish, the first Catholic parish in the City of Washington. The church is located on property purchased by the parish in 1794.

The adjacent Saint Patrick's Church Rectory, at 619 Tenth Street, NW, is not included in the individual designation but is a contributing resource to the Downtown Historic District.

## Equitable Co-operative Building Association (and Interior)

*Location:* 915 F Street, NW

*Designation:* Contributing Resource to the Downtown Historic District; DC Inventory of Historic Sites, 1994 (including banking hall interior); National Register of Historic Places, 1994



**Figure 43. Equitable Co-operative Building Association (under construction)**

*Source: EHT Tracerics, Inc.*

The building located at 915 F Street is wholly dominated by its white marble portico, composed of colossal Ionic columns in antis supporting a flat entablature and attic. “1879 – EQUITABLE – 1912” is inscribed along the frieze. As the inscription suggests, the building was completed in 1912 to house the Equitable Co-operative Building Association, founded in 1879. The Association was formed as an alternative to private banks, offering mortgage loans to member-shareholders at reasonable rates. Only three years after its foundation, it was the largest organization of its kind in the country.

The building was likely designed jointly by well-established Washington architects Frederic B. Pyle and Arthur B. Heaton, their only known collaboration. In addition to the monumental portico, the façade features a more delicately scaled brick-and-marble vestibule. Included within the DC Inventory listing for the building is the interior banking room. Monumental in scale and classical in detail, the vaulted space occupies most of the building’s volume. The resource is significant for the clarity and quality of its architectural conception, for its association with the role of financial institutions in the growth of Washington, DC, and for its association with John Joy Edson, the Equitable Association’s cofounder and longtime president.

The Equitable Co-operative Building Association meets the criteria established under Multiple-Property Document *Banks and Financial Institutions in Washington, DC, 1790-1960*.

### **Julius Lansburgh Furniture Co., Inc. (Old Masonic Temple)**

*Location:* 901 F Street, NW

*Designation:* Contributing Resource to the Downtown Historic District; DC Inventory of Historic Sites, 1964; National Register of Historic Places, 1974



**Figure 44. Old Masonic Temple**

*Source: EHT Tracerics, Inc.*

Facing the prominent intersection of Ninth and F Streets, NW, the Old Masonic Temple is a monumentally scaled, four-story building located across from the former Patent Office. Designed by renowned Washington architecture firm Cluss and Kammerheuber, the building was executed in the French Renaissance style, albeit without the characteristic mansard roof. Of brick construction, the building is clad in stone throughout. The first story is clad in gleaming ashlar granite with engaged Doric columns around its principal entrances. Above this visual plinth, the building is clad in brownstone with decorative details—including elaborate window surrounds and hoods, belt courses, and engaged pilasters—carved from green Nova Scotia freestone.

Upon its completion in 1870, the building became the Washington headquarters of the Masons, an auspicious and influential fraternal organization. With a large portion of its second story devoted to large and elegant public halls, the building played host to a number of balls,

receptions, and dinners during its occupation by the Masons. The Masons outgrew the building and relocated their headquarters in 1908. For most of the twentieth century, the building was owned and occupied by the Julius Lansburgh Furniture Company. The building's elaborate and variegated façade, vivid details, and monumental scale contribute to its architectural significance.

### **Patent Office (National Portrait Gallery and National Museum of American Art)**

*Location:* 801 F Street, NW

*Designation:* Contributing Resource to the Downtown Historic District and Pennsylvania Avenue National Historic Site; DC Inventory of Historic Sites, 1964; National Register of Historic Places, 1966; National Historic Landmark, 1965



**Figure 45. Patent Office**

*Source: EHT Tracerics, Inc.*

The Patent Office building, now the Smithsonian Institution's National Portrait Gallery and National Museum of American Art, is among the nation's signal architectural assets. The square it occupies was designated by L'Enfant as the site of a non-denominational public church, which came to be represented by scientific ingenuity and invention. Designed by a compendium of architects including Robert Mills and Thomas U. Walter, the building is a tour de force of the Greek Revival style, exerted through its four colossal Doric porticos. First constructed in four phases between 1836 and 1867, the building was damaged by fire in 1877, at which time architects Cluss & Schulze remodeled portions of the interior in the Renaissance Revival style. The building's south wing is clad in Aquia Creek sandstone (used in both the Capitol and White House); the north, east, and west wings are clad in white marble; the exposed basement story

is clad in banded granite. An idiosyncratic feature of the building is the bowed wall opposite the original (south) entry, which encloses a set of curved, cantilevered stairs, a contribution of Mills. The courtyard has been recently refurbished and enclosed beneath a curvilinear glass ceiling.

As one of the earliest and most ambitious of federal buildings in the capital, the Patent Office has served as the locus of important events in the sciences, arts, literature, politics, and preservation.

### Ford's Theatre National Historic Site

*Location:* 511, 516, and 517 10<sup>th</sup> Street, NW; and 509 11<sup>th</sup> Street, NW

*Designation:* Contributing Resource to the Pennsylvania Avenue National Historic Site; DC Inventory of Historic Sites, 1973; National Register of Historic Places, 1966 (documented 1982); National Historic Landmark, 1966



**Figure 46. Ford's Theatre (above left) and Petersen House (above right)**

*Source: EHT Tracerics, Inc.*

The following buildings contribute to the National Historic Site:

- Ford's Theatre (511 10<sup>th</sup> Street, NW); DC Inventory of Historic Sites, 1964
- Lincoln Museum and Library (housed at Ford's Theatre); DC Inventory of Historic Sites, 1964
- Petersen House (516 10<sup>th</sup> Street, NW); DC Inventory of Historic Sites, 1964; National Register of Historic Places, 1966
- Star Saloon (509 11<sup>th</sup> Street, NW)
- Campbell Building (517 10<sup>th</sup> Street, NW)

Ford's Theatre National Historic Site is a collection of buildings focused on the 1865 assassination of President Abraham Lincoln and its immediate aftermath. The centerpiece of

the collection is the 1863 Ford's Theatre, the site of the assassination. Although it was used as an office building for the majority of its existence, the building has since been restored to its 1865 appearance. The National Historic Site also includes the 1849 Petersen House (the site of Lincoln's death), the 1863 Star Saloon (a three-story brick addition to the theater), the 1878 Campbell Building, and a collection of Lincoln-related books and artifacts.

### National Union Building

*Location:* 918 F Street, NW

*Designation:* Contributing Resource to the Downtown Historic District and Pennsylvania Avenue National Historic Site; DC Inventory of Historic Sites, 1973; National Register of Historic Places, 1990



**Figure 47. National Union Building (above left) and Atlantic Building (above right)**

*Source: EHT Tracerics, Inc.*

The National Union Building is a slim, six-story building designed in the Romanesque Revival style and clad in rock-faced brownstone. Although not especially large, 1890 building is visually imposing, with giant stone arches; clustered colonnettes; and foliated carving around its capitals, cornices, and archivolt. Another notable feature of the building's exterior is the series of oriel windows along its western side, which project into an interior alley. A flat frieze above

the fourth story bears the building's historic name, "National Union Building." The building is significant as a representative work of commercial Romanesque Revival architecture, as well as for its association with Glenn Brown. Brown, who both designed the building and had his offices there, was highly influential in the architectural profession for his role as an activist, organizer, and proponent of the City Beautiful movement.

### **Atlantic Building**

*Location:* 928-930 F Street, NW

*Designation:* Contributing Resource to the Downtown Historic District and Pennsylvania Avenue National Historic Site; DC Inventory of Historic Sites, 1973

Completed in 1888, the Atlantic Building was the first of the three major Romanesque Revival-style commercial buildings to be erected on F Street. It was also among the first buildings in the city to house a passenger elevator, and one of the last early "skyscrapers" to be constructed of load-bearing masonry walls. Six stories tall, the building's main façade is clad in a mix of red sandstone, terra cotta, granite, and pressed brick and is organized in a cascade of Roman arches held by vertical masonry piers. Despite its stolid exterior façade, the building had a complex floor plan that permitted it to draw natural light into its interior. Developed speculatively by a coalition of investors and designed by architect James G. Hill, the building historically occupied by attorneys, real estate agents, and the USDA Forest Service between 1905 and 1940.

## Washington Loan and Trust Company

*Location:* 900 F Street, NW

*Designation:* Contributing Resource to the Downtown Historic District and Pennsylvania Avenue National Historic Site; DC Inventory of Historic Sites, 1964; National Register of Historic Places, 1971



**Figure 48. Washington Loan and Trust Company**

*Source: EHT Tracerics, Inc.*

Opposite the former Patent Office across the intersection of Ninth and F Streets, NW, the Washington Loan and Trust Company is a nine-story, Romanesque Revival-style building completed in 1891. Clad in rock-faced granite concealing a hybrid steel and masonry structural system, the building's façade is composed of three distinct horizontal layers that convey heaviness yet also verticality. The building's architect, James G. Hill, also designed several other Romanesque Revival buildings along F Street. Until 1954, the building was the home of the eponymous organization, the first trust company established in the District. An addition designed by Arthur B. Heaton and completed in 1927 expanded the building six additional bays along F Street. Heaton's addition managed to replicate the appearance and color of the original building almost exactly. The building is significant for its Romanesque Revival architecture as well as for its association with the growth of commerce in Washington.

**LeDroit Block (F Street, NW, South Side of 800 Block)**

*Location:* 800-810, 812, 814-816, and 818 F Street, NW; 527 9<sup>th</sup> Street, NW

*Designation:* Contributing Resource to the Downtown Historic District and Pennsylvania Avenue National Historic Site; DC Inventory of Historic Sites, 1973; National Register of Historic Places, 1974



**Figure 49. LeDroit Block**

*Source: EHT Tracerics, Inc.*

Bookmarked by the 1875 LeDroit Building on the east side and the 1892 Warder building on the west, the 800 block of F Street, NW is a fine collection of five, late-nineteenth-century commercial buildings. The highly varied scales, materials, and decorative elements displayed by these buildings create a lively and engaging streetscape, in sharp contrast to the imposing, carefully composed facades of the nearby federal buildings. Together, the buildings that form the LeDroit Block are significant as early and intact examples of commercial architecture in downtown Washington, DC.

### General Post Office (General Land Office)

*Location:* 700 F Street, NW

*Designation:* Contributing Resource to the Downtown Historic District and Pennsylvania Avenue National Historic Site; DC Inventory of Historic Sites, 1964; National Register of Historic Places, 1969; National Historic Landmark, 1971



**Figure 50. General Post Office**

*Source: EHT Tracerics, Inc.*

The former General Post Office shares a number of qualities with the massive, Greek Revival edifice it faces across F Street, the former Patent Office. Designed by Robert Mills and Thomas U. Walter and completed in two stages between 1839 and 1866, the building is one of the city's preeminent architectural and historical landmarks. Unlike the Patent Office, however, the General Post Office has a delicacy and intricacy of detail, most notably conveyed through the Corinthian columns and pilasters that line its three-story façade. One of the first Italian Renaissance Revival-style federal buildings and also one of the first to be constructed of marble, the building also features a number of structural, fireproofing, and other technical innovations.

First serving as the City Post Office and the headquarters of the Post Office Department and later transferred to the Department of the Interior, the building has served a number of federal offices, most recently that of the U.S. Tariff Commission.

## Chesapeake and Potomac Telephone Company (Old Main Building and Dial Exchange)

*Location:* 722 and 720 12<sup>th</sup> Street, NW

*Designation:* DC Inventory of Historic Sites, 1985; National Register of Historic Places, 1988



**Figure 51. Chesapeake and Potomac Telephone Company**

*Source: EHT Tracerics, Inc.*

These two properties were developed and operated by the Chesapeake and Potomac Telephone Company, and together reflect the growth of that company as well as the modernization of the telephone industry during the first half of the twentieth century. The Old Main Building (722 12<sup>th</sup> Street) was constructed in 1903-1904, a reflection of the rapidly expanding market for telephone-using businesses in the downtown area. The Dial Exchange (730 12<sup>th</sup> Street) was constructed in 1927-1928, allowing for the subsequent conversion from manual to dial telephone systems. The latter building is also significant for its Art Deco façade ornamentation, designed by the architecture firm Voorhees, Gmelin, and Walker.

## Homer Building

*Location:* 601 13<sup>th</sup> Street, NW

*Designation:* DC Inventory of Historic Sites, 1983



**Figure 52. Homer Building**

*Source: EHT Tracerics, Inc.*

The Homer Building is a large commercial office building with exposures on Thirteenth, F, and G Streets, NW. Originally constructed in 1913 to 1914, the building was designed by Appleton P. Clark, Jr., a local architect who achieved prominence through his refined interpretations of Neo-Classical Revival styles. The building's façade is organized into wide bays contained within terra cotta-clad pilasters. The first three stories of windows and storefronts are vertically ganged, divided by pressed metal spandrels and grilles. Above this, the fourth story forms a continuous horizontal band, terminated by a dentile cornice. As originally constructed, the building was four stories tall. The original façade was incorporated into a new addition, completed in 1990, which extended the building's height by an additional eight stories.

### ***Impacts to Historic Resources***

#### **Criteria of Adverse Effect**

Section 106 of the NHPA requires federal agencies to consider the effects of their actions ("undertakings") on historic properties. The implementing regulations of Section 106 (36 CFR § 800) define "effect" as an "alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register" and requires that the lead agency, in consultation with the State Historic Preservation Office, determine whether the effect is

adverse. An undertaking's effect may be classified as adverse: "...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).

Impacts to historic properties can take the form of physical impacts to a property, alterations to the property's setting, the introduction of visual or audible elements to the property (or its immediate vicinity), and other actions. Impacts resulting from a project may or may not represent an "adverse effect" to identified historic resources. The criteria of adverse effect must be applied to evaluate whether a project would result in an adverse effect to historic properties. These criteria provide a basis for determining the project's potential effect on historic properties.

Potential effects to historic resources include both 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.

For the purposes of this document, a finding of beneficial impact or negligible or minor adverse impact would result in a finding of "no adverse effect" under Section 106 of the NHPA; a moderate or major adverse impact would result in a finding of "adverse effect" under NHPA.

### **No-Action Alternative**

Under the No-Action Alternative, DCPL would continue its existing use of MLK Jr. Library and its current management and maintenance routine. This alternative would not result in any changes to the overall integrity or the character-defining features of the historic properties within the APE. The No-Action Alternative would have no direct or indirect impacts on historic properties. For purposes of Section 106 of the NHPA, there would be no adverse effect on historic properties.

### **Cumulative Impacts**

Because the No Action Alternative would have no impact on historic properties, the No Action Alternative would not contribute to cumulative impacts to these resources.

### **Alternatives A, B, C: Action Alternatives**

Under all of the action alternatives, there would be direct, long term adverse impacts to the MLK Jr. Library as character-defining features of the building would be altered or removed which would reduce the integrity of the property. The construction of new elements such as an

addition would also alter the character of the building and cause adverse impacts. For purposes of Section 106 of the NHPA, there would be an adverse effect on MLK Jr. Library.

The construction of an addition under all alternatives will alter the form and massing of the MLK Jr. Library. While the form of the addition varies from Alternative A, B, and C, all of the proposed additions would lower the design and material integrity of the building. The addition proposed under Alternative A would generally have the same volume and visibility of the existing penthouse screens and enclosures and would result in the smallest addition and largest area of roof terrace. Therefore, the impact of the addition under Alternative A would be less than under Alternatives B and C. Under Alternative B, the addition would have a trapezoidal form with curved corners. The trapezoidal form would minimize the visibility of the addition from the ground, particularly from 9th and G Streets, NW. Under Alternative C, the addition would extend directly upward from the existing wall plane, creating a continuous surface along the outer building elevations. The addition proposed under Alternative C would be the most visible of the alternatives under consideration and has the potential to create a false sense of historical development (i.e., that the building was designed and originally constructed as a five-story building).

Additional direct adverse impacts to the MLK Jr. Library would result under all the action alternatives from the alteration or removal of character-defining features of the building and site. The following alterations would cause adverse impacts to exterior elements of the building: removal of the penthouse screens and enclosures; replacement of glazing; removal of portions of the plaza paving; removal of the automobile ramps (option 2); lowering or removal of the brick site walls; removal of portions of the brick walls from the south cores on the first story; removal of portions of the brick building walls on the north cores on the first story; and removal of the steel panel and doors on the south cores on the first story.

Under all action alternatives, alterations to the interior of the building will also contribute to the direct adverse impacts to MLK Jr. Library. The following alterations would cause adverse impacts by reducing the integrity of the building: Removal or replacement of elevators; modernization and alterations of lighting systems; introduction of new furniture and reading ribbon desks; removal of the A Level exhibition hall, meeting room, and lobby and associated features; removal of east and west brick walls within the entrance lobby; removal of two brick walls on the north side of the main lobby under the existing mural; relocation or removal of built-in furniture in the main lobby and the associated removal of original flooring material; construction of two structures/enclosures in west reading room; new exterior door on north wall of east reading room; removal of masonry partition within central area of second, third, and fourth floors; removal of masonry partition and portion of ceiling/floor slab in third floor

east reading room; removal of the fourth floor Board and Director's suite and associated features; and removal of fourth floor ceiling/floor slab to create a two-story auditorium.

Along with the long-term direct adverse impacts on MLK Jr. Library, there would be short-term indirect adverse impacts during construction due to the visual impact of construction equipment and materials staging. The short term indirect adverse impacts would not constitute an adverse effect under Section 106 of the NHPA.

There would not be any long term or short term direct impacts on the following historic properties in the APE: Downtown Historic District (and Boundary Increase); Pennsylvania Avenue National Historic Site; Plan of the City of Washington; Victor Building; Mercantile Savings Bank; Daniel Webster School; Washington Hebrew Congregation; Greyhound Bus Terminal; Masonic Temple; McLachlen Building; Woodward & Lothrop; Saint Patrick's Church; Equitable Co-operative Building Association; Old Masonic Temple; Patent Office; Ford's Theatre National Historic Site; Atlantic Building; National Union Building; Washington Loan and Trust Company; LeDroit Block; General Post Office; Chesapeake and Potomac Telephone Company; and Homer Building. There would be no physical alterations to any of these properties under the action alternatives and there would be no direct impacts. For purposes of Section 106 of the NHPA, there would be no adverse effect on these resources.

There would be no indirect impacts to the following historic properties in the APE: Mercantile Savings Bank; Daniel Webster School; Washington Hebrew Congregation; Greyhound Bus Terminal; Masonic Temple; McLachlen Building; Woodward & Lothrop; Equitable Co-operative Building Association; Old Masonic Temple; Ford's Theatre National Historic Site; Atlantic Building; National Union Building; Washington Loan and Trust Company; LeDroit Block; General Post Office; Chesapeake and Potomac Telephone Company; and Homer Building. Given the distance from MLK Jr. Library to these resources, there would be negligible to no visual impacts to these resources and therefore no adverse impact and no adverse effect for purposes of Section 106 of the NHPA.

Due to their proximity to MLK Jr. Library, there is the potential for indirect effects to the Downtown Historic District, Pennsylvania Avenue National Historic Site, Saint Patrick's Church, Victor Building, and Patent Office. The proposed rooftop additions under all action alternatives have the potential to alter views from these historic properties. Under Alternative A and B, the proposed additions are set back from the edge of the building and therefore would be minimally visible and not impact the level of integrity of these resources. There would be no indirect adverse impacts and no adverse effect under Section 106 of the NHPA. Under Alternative C, the proposed addition would be more visible than under Alternatives A and B as the addition would not be set back from the building edge. While the addition would be visible,

and may impact the setting of the historic properties, the integrity of the properties would not be diminished and it would be a minor adverse impact and no adverse effect under Section 106 of the NHPA.

To assess the indirect effects that the proposed fifth floor addition would have on the contributing vistas of the Plan of the City of Washington, DCPL completed a visual analysis of the impact of the proposed alternatives from surrounding viewsheds.

For Alternatives A and B, the analysis indicated that, because the proposed addition would be set back from the existing roof edge, it would be minimally visible from adjacent viewsheds. Of the surrounding viewsheds, the addition would be most visible from Seventh and G Streets, but it would be a minor change to the existing view and therefore would not be an adverse effect to the historic vista. Refer to Figure 53 through Figure 56 for the view of the proposed addition from surrounding viewsheds.



**Figure 53. Seventh and G Streets, facing west: Alternative A (left) Alternative B (right)**

*Source: Mecanoo/Martinez + Johnson*



**Figure 54. Tenth and G Streets, facing east: Alternative A (left) Alternative B (right)**  
*Source: Mecanoo/Martinez + Johnson*



**Figure 55. Ninth and G Streets, facing northwest: Alternative A (left) Alternative B (right)**  
*Source: Mecanoo/Martinez + Johnson*



**Figure 56. Ninth and H Streets, facing southwest: Alternative A (left) Alternative B (right)**

*Source: Mecanoo/Martinez + Johnson*

For Alternative C, the analysis indicated that, because the proposed addition would extend directly upward from the existing wall plane, it would create a continuous surface along the outer building elevations and it would be visible from surrounding viewsheds. Although the addition proposed under Alternative C would be more visible from the surrounding streetscape, it has no potential to block or impede views along the contributing streetscapes of the Plan of the City of Washington. Therefore, there would be a minor, long-term adverse impact to the existing view. For the purposes of Section 106 of the NHPA, there would not be an adverse effect on the historic vistas. Refer to Figure 57 through Figure for the view of the proposed addition from surrounding viewsheds.



**Figure 57. Tenth and G Streets, facing west: Alternative C**



**Figure 58. Tenth and G Streets, facing east: Alternative C**



Figure 59. Ninth and H Streets, facing northwest: Alternative C



Figure 59. Ninth and G Streets, facing southwest: Alternative C

### Cumulative Impacts

Past, present, and future development has the potential to cumulatively impact historic resources. The MLK rehabilitation and modernization would have adverse impacts to the Mies van der Rohe library building. The proposed 5<sup>th</sup> floor addition under Alternative C would be the most visible of the alternatives and has the potential to create a false sense of historical development. All alternatives would add to the overall long-term, adverse cumulative impacts to historic resources.

### Mitigation Measures

In an effort to minimize impacts on historic properties, and as part of the Section 106 process, NCPC, DCPL, and DCSHPO are developing a Memorandum of Agreement (MOA). The MOA will outline measures that will seek to avoid, minimize, or mitigate the impacts of the proposed rehabilitation and modernization on the MLK Jr. Library. Mitigation measures may include an exhibit highlighting the historic significance of the building and MLK Jr. Library's role as the first memorial to Dr. King in the District of Columbia, photographic documentation, and preservation of character-defining features. The MOA will document the mitigation measures and stipulate that consultation will continue through the design process.

### 3.9 UTILITIES

DC Water provides sewer, stormwater drainage and water service to the MLK Jr. Library. The building is served by a 16-inch water line that runs under 9th Street, NW. Twelve to 18-inch sanitary sewer lines and 15-inch storm water lines serve the building and run under G Street, NW. The MLK Jr. Library is part of DC Water's Combined Sewer Overflow system and therefore both the sanitary sewer line and the stormwater line connect to the same discharge system.

Electric power to MLK Jr. Library is provided by Potomac Electric Power Company (PEPCO) through transmission lines that run overhead in front of the building.

### ***Impacts to Utilities***

#### **No-Action Alternative**

The No-Action Alternative represents a continuation of the existing conditions, operations and maintenance of the MLK Jr. Library. The No-Action Alternative would not address deficient building systems or inadequate egress that currently exists in the building. In addition, no improvements would be made to the interior or exterior of the building. No utilities would be upgraded and/or replaced under the No-Action Alternative. Therefore, the No-Action Alternative would not result in any impacts to existing utilities.

#### **Alternatives A, B and C: Action Alternatives**

Under the Action Alternatives, the MLK Jr. Library would seek to achieve a minimum of LEED®-Silver rating for the MLK Jr. Library rehabilitation and modernizations, which would include increased energy efficiency. To meet the requirements for LEED®-Silver certification, new energy efficient equipment such as energy efficient lighting, HVAC systems, and passive solar heating and lighting would replace existing, less efficient systems, reducing the MLK Jr. Library's energy demand. Therefore, the Action Alternatives would result in a decrease in the total electric consumption as compared to the existing building. Through the use of water conservation measures such as low flow water fixtures, automatic fixture sensors, a vegetated rooftop terrace, and sedum fifth floor roof, the Action Alternatives would result in a decrease of the total water consumption in DC Water's wastewater and potable water systems. During the rehabilitation and modernization of the MLK Jr. Library, utilities would not be replaced and or upgraded leading to the building. Overall, the proposed project would result in a minor, long-term, direct, beneficial impact to existing utilities.

The modernization and rehabilitation of the MLK Jr. Library would not require increased usage of any utilities that serve the MLK Jr. Library. No new connections to utilities would be needed and no connections would be moved or permanently removed during construction although temporary water or electric shut offs may be necessary.

#### **Cumulative Impacts**

Past, present, and future development in the area would place additional demands on the existing utilities. While the utility companies plan for regional growth, each future project would have to prepare studies to determine if their supply is adequate. The rehabilitation and modernization of the MLK Jr. Library would not contribute to these cumulative impacts because

modernizing the MLK Jr. Library would include measures to increase energy efficiency while decreasing the total water consumption.

### **Mitigation Measures**

No mitigation measures are proposed for impacts to utilities.

#### **3.10 TRANSPORTATION**

A Transportation Impact Study (TIS) was conducted by Stantec Consulting Services Inc. in July 2016 (Stantec, 2016). The TIS was developed using the DDOT Design and Engineering Manual, and DDOT Guidelines for Comprehensive Transportation Review Requirements and included in Appendix D. The results of that study are summarized below.

Transportation in Washington, DC is comprised of a complex network of pedestrian, bicycle, vehicle, and mass transit systems. Generally, the City's transportation systems are developed and maintained by the District Department of Transportation (DDOT).

Roadways within the study area that would be directly impacted by the proposed project are listed below.

- 9<sup>th</sup> Street, NW – 9<sup>th</sup> Street, NW is classified as a minor arterial road. In the vicinity of the site, 9<sup>th</sup> Street, NW is a three-lane, one-way southbound roadway, with a marked parking lane along the east side of the road and a marked bike lane between the right lane and center lane. The right lane is marked as a “bus-only” lane. The curb parking lane is restricted to two-hour parking from 7:00 AM to 6:30 PM, Monday through Friday. 9<sup>th</sup> Street, NW carries approximately 16,700 vehicles per day according to the DDOT 2013 Traffic Volume Map and has a posted speed limit of 25 mph.
- 10<sup>th</sup> Street, NW – 10<sup>th</sup> Street, NW is classified as a collector road. In the vicinity of the site, 10<sup>th</sup> Street, NW is a two-lane one-way southbound roadway, with marked parking lanes along both sides of the road and a marked bike lane between the west side parking lane and right travel lane. The curb parking lane is restricted to two-hour parking from 7:00 AM to 6:30 PM, Monday through Friday. 10<sup>th</sup> Street, NW carries approximately 2,800 vehicles per day according to the DDOT 2013 Traffic Volume Map and the posted speed limit is 25 mph.
- G Street, NW – G Street, NW is classified as a collector road. In the vicinity of the site, G Street, NW is a two-lane two-way roadway, with unmarked parking lanes along both sides of the road. The curb parking lane is time restricted and varies from 15-minute parking, 2-hour parking, and 4-hour handicap parking between 7:00 AM to 6:30 PM,

Monday through Friday. G Street, NW carries approximately 6,000 vehicles per day according to the DDOT 2013 Traffic Volume Map and the posted speed limit is 25 mph.

- G Place, NW – G Place, NW is classified as a local street. G Place, NW is a one-lane one-way eastbound roadway, with unmarked parking lanes along north side of the road. Non-metered curb parking has no time restriction and seven of these parking spaces are reserved for law enforcement. Metered curb parking is restricted to two-hour parking.
- F Street, NW – F Street, NW is classified as a collector road. In the vicinity of the site, F Street, NW is a four-lane undivided two-way roadway, with unmarked parking lanes along both sides of the road. The curb parking lane is time restricted to 2-hour parking between 7:00 AM to 6:30 PM, Monday through Friday. F Street, NW carries approximately 7,900 vehicles per day according to the DDOT 2013 Traffic Volume Map and the posted speed limit is 25 mph.
- H Street, NW – H Street, NW is classified as a minor arterial road. In the vicinity of the site, H Street, NW is a four-lane undivided two-way roadway, with marked parking lanes along both sides of the road. The curb parking lane is time restricted to 2-hour parking between 9:30 AM to 4:00 PM, Monday through Friday. During the peak hours, 7:00 AM to 9:30 AM and 4:00 PM to 6:30 PM, Monday through Friday, curb parking is prohibited along H Street, NW. During the peak periods of weekday traffic this roadway provides three lanes on each direction. H Street, NW carries approximately 15,600 vehicles per day according to the DDOT 2013 Traffic Volume Map and the posted speed limit is 25 mph.
- 8th Street, NW – 8th Street, NW is classified as a collector road. In the vicinity of the site, 8th Street, NW is a two-lane two-way roadway, with unmarked parking lanes along both sides of the road. The curb parking lane is restricted to two-hour parking from 7:00 AM to 6:30 PM, Monday through Friday. 8th Street, NW carries approximately 2,000 vehicles per day according to the DDOT 2013 Traffic Volume Map and the posted speed limit is 25 mph.

The site adjacent intersections are described below.

- 9<sup>th</sup> Street, NW at G Street, NW is a signalized intersection. The one-way southbound approach has three approaching lanes (one shared left turn/through lane, one through lane, and one shared right turn/through lane) with no receiving lanes. The one-way northbound approach has three receiving lanes only. The westbound approach has one left turn lane, one through lane and one receiving lane. The eastbound approach has one shared right turn/through lane and one receiving lane. Pedestrian ramps and countdown pedestrian signals are provided at all corners of this intersection. Marked

pedestrian crosswalks are provided at both legs along 9<sup>th</sup> Street, NW, with raised pedestrian crosswalks provided at both legs along G Street, NW.

- 9<sup>th</sup> Street, NW at G Place, NW is an unsignalized “T” intersection with stop control for the eastbound approach. The one-way southbound approach has three through lanes with no receiving lanes. The one-way northbound approach has three receiving lanes only. The one-way eastbound approach has one right turn lane. There is a garage exit located right next to the eastbound approach. A marked pedestrian crosswalk is provided on the west leg.
- 10<sup>th</sup> Street, NW at G Street, NW is a signalized intersection. The one-way southbound approach has two approaching lanes (one shared left turn/through lane and one shared right turn/through lane) with no receiving lanes. The one-way northbound approach has two receiving lanes and the westbound approach has one shared left turn/through lane and one receiving lane. The eastbound approach has one shared right turn/through lane and one receiving lane. Pedestrian ramps and countdown pedestrian signal are provided at all corners of this intersection. Marked pedestrian crosswalks are provided on the north, south and west legs. Raised pedestrian crosswalks are provided on the east leg.
- 10<sup>th</sup> Street, NW at G Place, NW is an unsignalized “T” intersection with no traffic control for vehicle or pedestrian movements. The one-way southbound approach has two approaching lanes (one through lane and one shared left turn/through lane) with no receiving lanes. The one-way northbound approach has two receiving lanes and the one-way westbound approach has one receiving lane. Marked pedestrian crosswalks and ramps are provided on the east leg.

### ***Traffic Operations Analysis***

Existing traffic operations were measured using Level of Service (LOS) criteria. LOS is a qualitative measure of traffic conditions through a given roadway intersection or segment. Intersection LOS is measured in terms of “A” through “F” with LOS A representing little or no delay and LOS F representing congestion with excessive delay and standing queues. LOS E is typically accepted as a minimum threshold limit for peak hour conditions in an urban area such as Washington, DC. The peak hour condition is the highest volume determined by reviewing four consecutive 15-minute intervals. As such, the peak hours for each intersection vary, based on this volume determination.

To determine traffic volumes on the roadway network in the vicinity of the MLK Jr. Library, traffic counts were performed at the following intersections on Tuesday, October 28, 2014, Wednesday, October 29, 2014, Tuesday, April 21, 2015, Wednesday, April 22, 2015, Saturday,

September 26, 2015 and Saturday, October 3, 2015 for weekday AM and PM peak periods and Saturday peak period:

- 9th Street, NW at G Street, NW
- 9th Street, NW at G Place, NW
- 9th Street, NW at H Street, NW
- 9th Street, NW at F Street, NW
- 10th Street, NW at G Street, NW
- 10th Street, NW at G Place, NW
- 10th Street, NW at H Street, NW
- 10th Street, NW at F Street, NW
- 8th Street, NW at G Street, NW
- 8th Street, NW at H Street, NW

Existing traffic signal timings used were provided by DDOT. The existing traffic volumes and traffic signal timing data modeled using traffic modeling software. The Highway Capacity Manual (HCM) LOS and delay results of the analysis are presented in Table 3. Existing Levels of Service

below. HCM output reports are contained in Transportation Impact Study.

From the results of the analysis, the signalized intersection of 9<sup>th</sup> Street, NW and G Street, NW, is currently operating at LOS E during the PM peak hour. All other signalized study intersections are operating at LOS D or better.

The unsignalized intersection at 8<sup>th</sup> Street, NW and H Street, NW is currently operating at LOS F on its northbound approach during the AM peak hour. The same LOS F is observed at the intersection of 8<sup>th</sup> Street, NW and G Street, NW on its southbound approach during the PM peak hour. The intersection of 9<sup>th</sup> Street, NW and G Place, NW is operating at LOS E on its eastbound approach during the AM peak and at LOS F during the PM peak hour.

The queue lengths for existing conditions are presented below in Table 4. Existing Queues

In general, there are no issues with the queues observed in the study area. The intersection of 9<sup>th</sup> Street, NW and G Street, NW shows long queues on the eastbound and southbound approaches during the PM peak hour. While the southbound queue length of approximately 605 feet seems to extend beyond its intersection with H Street, NW, in reality it does not. A number of vehicles come from two mid-block sources of traffic, the intersection with G Place, NW, and the MLK Jr. Library parking garage, which account for a small portion of the queue length shown in Table 4. Existing Queues

Table 3. Existing Levels of Service

| Intersection Approach / Movement             | Traffic Control                      | AM Peak          |                                  | PM Peak          |                                  | SAT Peak         |                                  |
|--|--------------------------------------|------------------|----------------------------------|------------------|----------------------------------|------------------|----------------------------------|
|  |                                      | LOS <sup>1</sup> | Control Delay (sec) <sup>1</sup> | LOS <sup>1</sup> | Control Delay (sec) <sup>1</sup> | LOS <sup>1</sup> | Control Delay (sec) <sup>1</sup> |
| 9th Street, NW at F Street, NW               | Signalized                           | C                | 30.2                             | C                | 33.0                             | C                | 27.1                             |
| 10th Street, NW at F Street, NW              | Signalized                           | C                | 29.1                             | C                | 28.8                             | C                | 29.6                             |
| 9th Street, NW at G Street, NW <sup>2</sup>  | Signalized                           | C                | 33.8                             | E                | 72.9                             | D                | 54.0                             |
| 10th Street, NW at G Street, NW              | Signalized                           | C                | 32.5                             | C                | 34.4                             | C                | 26.9                             |
| 9th Street, NW at H Street, NW <sup>2</sup>  | Signalized                           | C                | 21.5                             | C                | 27.7                             | C                | 24.1                             |
| 10th Street, NW at H Street, NW <sup>2</sup> | Signalized                           | D                | 43.4                             | C                | 33.9                             | C                | 29.4                             |
| 8th Street, NW at H Street, NW               | Stop Control on NB and SB Approaches |                  |                                  |                  |                                  |                  |                                  |
| Northbound                                   |                                      | F                | 612.7                            | -                | -                                | F                | 96.1                             |
| Southbound                                   |                                      | -                | -                                | -                | -                                | F                | 85                               |
| Eastbound / Left                             |                                      | B                | 14.0                             | C                | 22.3                             | A                | 9.7                              |
| Westbound / Left                             |                                      | B                | 14.2                             | D                | 31.3                             | B                | 10.3                             |
| 8th Street, NW at G Street, NW               | Stop Control on SB Approach          |                  |                                  |                  |                                  |                  |                                  |
| Southbound                                   |                                      | B                | 14.9                             | F                | 204.2                            | E                | 47.4                             |
| Eastbound / Left                             |                                      | A                | 8.2                              | A                | 9.4                              | A                | 9.4                              |
| 9th Street, NW at G Place, NW                | Stop Control on EB Approach          |                  |                                  |                  |                                  |                  |                                  |
| Eastbound                                    |                                      | E                | 39.5                             | F                | 50.9                             | C                | 23.6                             |
| 10th Street, NW at G Place, NW               | No Control <sup>3</sup>              |                  |                                  |                  |                                  |                  |                                  |

<sup>1</sup> HCM 2010 Output

<sup>2</sup> HCM 2000 Output

<sup>3</sup> For non-controlled intersections, the HCM analysis is not applicable

Table 4. Existing Queues

| Existing Traffic 2015                       |                           |                           |                           | Existing Traffic 2015                       |                           |                           |                           |
|---|---------------------------|---------------------------|---------------------------|---|---------------------------|---------------------------|---------------------------|
| Intersection Approach / Movement            | AM Peak                   | PM Peak                   | SAT Peak                  | Intersection Approach / Movement            | AM Peak                   | PM Peak                   | SAT Peak                  |
|   | Queue (feet) <sup>1</sup> | Queue (feet) <sup>1</sup> | Queue (feet) <sup>1</sup> |   | Queue (feet) <sup>1</sup> | Queue (feet) <sup>1</sup> | Queue (feet) <sup>1</sup> |
| 9th Street, NW at F Street, NW              |                           |                           |                           | 9th Street, NW at H Street, NW              |                           |                           |                           |
| Southbound                                  | 22                        | m51                       | m18                       | Southbound                                  | 134                       | 181                       | 168                       |
| Eastbound                                   | 86                        | 195                       | 47                        | Eastbound                                   | 156                       | 258                       | 153                       |
| Westbound                                   | 100                       | 104                       | 95                        | Westbound                                   | 147                       | 82                        | 90                        |
| 10th Street, NW at F Street, NW             |                           |                           |                           | 10th Street, NW at H Street, NW             |                           |                           |                           |
| Southbound                                  | 30                        | 57                        | 17                        | Southbound                                  | 150                       | 250                       | 107                       |
| Eastbound                                   | 84                        | 146                       | 121                       | Eastbound                                   | 188                       | 284                       | 177                       |
| Westbound                                   | 100                       | 40                        | 130                       | Westbound                                   | 160                       | 89                        | 112                       |
| 9th Street, NW at G Street, NW              |                           |                           |                           | 8th Street, NW at H Street, NW <sup>2</sup> |                           |                           |                           |
| Southbound                                  | 457                       | #605                      | #539                      | Northbound                                  | 208                       | -                         | 83                        |
| Eastbound                                   | #266                      | #505                      | 129                       | Southbound                                  | -                         | -                         | 65                        |
| Westbound / Left                            | 97                        | 151                       | 48                        | Eastbound / Left                            | 8                         | 10                        | 3                         |
| Westbound / Through                         | 131                       | 151                       | 64                        | Westbound / Left                            | 15                        | 18                        | 3                         |
| 10th Street, NW at G Street, NW             |                           |                           |                           | 8th Street, NW at G Street, NW <sup>2</sup> |                           |                           |                           |
| Southbound                                  | 177                       | 173                       | 41                        | Southbound                                  | 28                        | 320                       | 55                        |
| Eastbound                                   | 282                       | 294                       | 137                       | Eastbound / Left                            | 8                         | 5                         | 5                         |
| Westbound                                   | 82                        | 244                       | 136                       | 9th Street, NW at G Place, NW <sup>2</sup>  |                           |                           |                           |
| 10th Street, NW at G Place, NW <sup>3</sup> |                           |                           |                           | Eastbound                                   | 25                        | 100                       | 20                        |

<sup>1</sup> Synchro 9 - 95% Queue Length

<sup>2</sup> HCM 2010 - 95% Queue Length, assuming vehicle length of 25 feet

<sup>3</sup> Intersection configuration is not allowed in HCM analysis

m - Volume for 95th percentile queue is metered by upstream signal

# - 95th percentile volumes exceed capacity. Queue may be longer. Queue shown is maximum after two cycles.

### Public Transportation Facilities

The following public transportation facilities are available in the vicinity of the MLK Jr. Library:

**Metro Rail** - The MLK Jr. Library is easily accessed by both Metro Center and Gallery Place Chinatown stations. The Metro Center Station is on the Blue, Orange, Red, and Silver Lines, and is a transfer station between the Red Line and the already-joined Blue, Orange and Silver Lines. The closest Metro entrance to the MLK Jr. Library at the Metro Center stop is located at the intersection of 11th Street, NW at G Street, NW. The Metro Rail is 0.1-mile walking distance from the MLK Jr. Library.

The Gallery Place Chinatown Station serves the Green, Red and Yellow Lines. It is a transfer station between the Red Line and the Green/Yellow Lines. The closest Metro entrance to the MLK Jr. Library at the Gallery Place Chinatown station is located at the southeast corner of the

intersection of 9th Street, NW at G Street, NW and has a walking distance of 260 feet from the MLK Jr. Library.

An assessment of the capacity of these two stations was done based on the review of three reports prepared by the Washington Metropolitan Area Transit Authority (WMATA). “Metrorail Station Access and Capacity Study”, 2008, “Transit Ridership Trends and Markets”, 2009, and the “2011 – 2020 Capital Needs Inventory”, 2010. As presented in these documents, these stations were identified among the stations with the highest current and future ridership and peak-hour transfers. Furthermore, one of the reports found that “preset demand (2008) at Metro Center already exceeds its capacity”.

Recommendations to improve capacity at each of these stations and to improve transfer activities between the two stations were provided in the reports. The proposed improvements included the following: adding platform-to-platform vertical capacity (vertical circulation), widening the platforms, extending mezzanines, and a pedestrian interconnection between the two stations. The implementation of these improvements would enhance accessibility of the Metrorail system at these two stations and would provide adequate capacity for future needs. It should be noted that the anticipated trips generated by the MLK Jr. Library would not significantly add to station capacities.

Bus Routes – The MLK Jr. Library is accessed by several bus routes. A field visit was conducted on Wednesday, September 2, 2015 to assess existing conditions of all transit stops in the study area. The stops were evaluated based on ADA compliance, and the presence of a bus shelter and bench at each location. The bus stops routes are shown in Figure 60.

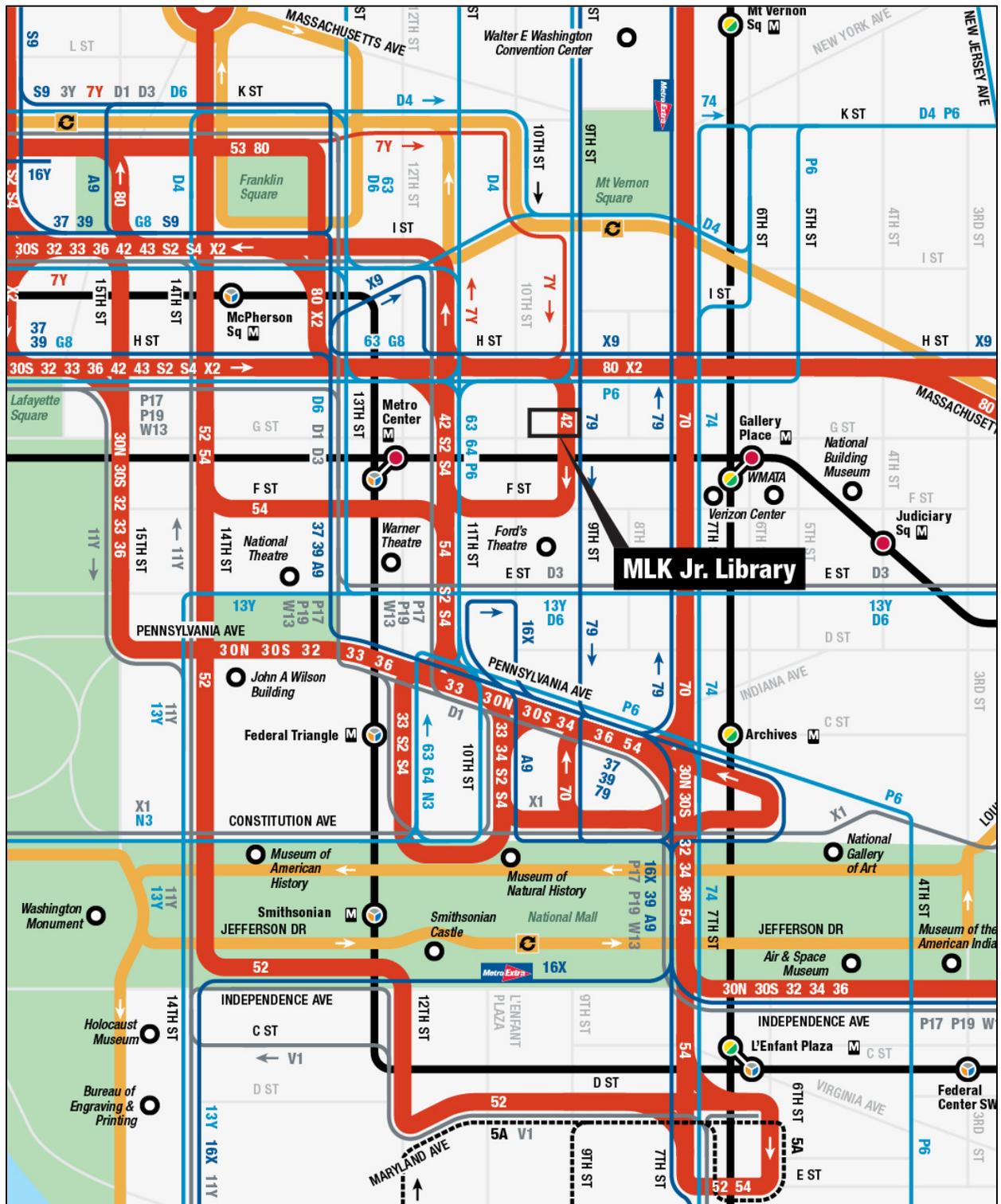


Figure 60. Bus Stops and Routes

***Pedestrian and Bicycle Facilities***

The MLK Jr. Library is located in a highly urbanized area. Sidewalks are provided along all roadways surrounding the MLK Jr. Library, including 9<sup>th</sup> Street, NW, 10<sup>th</sup> Street, NW, G Place, NW, G Street, NW, H Street, NW and F Street, NW.

A field visit was conducted on Wednesday, September 2, 2015 to assess existing conditions of all sidewalks, ramps, and crosswalks within the study area. Crosswalks are provided on G Place, NW only for the west leg at the intersection with 9<sup>th</sup> Street, NW and only for the east leg at the intersection with 10<sup>th</sup> Street, NW. At the other study intersections, crosswalks are provided for all legs. In addition, a crosswalk is also provided in front of the main entrance of the MLK Jr. Library, at the mid-block of G Street, NW.

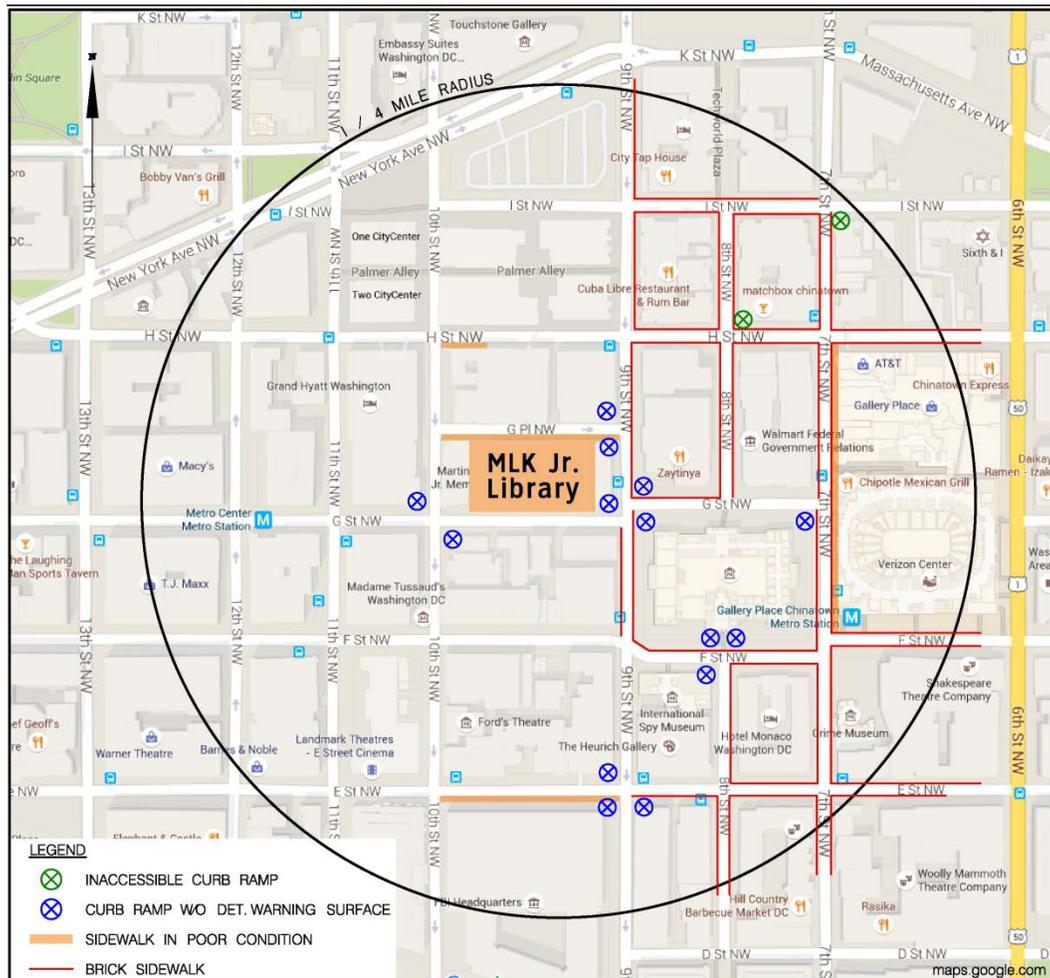
The sidewalk and ramp assessment conducted within ¼-mile radius showed that approximately 28 percent of the total sidewalk consists of brick /pavers sidewalk and 72 percent consists of concrete sidewalk. From the evaluation, approximately four percent of the total sidewalk is in need of repairs or is deficient. The deficiencies were classified into the following two categories:

- General deficiencies, the sidewalk is accessible but is uneven.
- Difference in elevation, the sidewalk shows difference in elevations of ¼-inch or greater.

The ramp assessment showed that approximately 11 percent of the ramps do not have a detectable warning surface and only two percent are deficient and are not accessible. Ramps were evaluated based on the following categories:

- Curb Ramp with detectable warning surface
- inaccessible or deficient curb ramp

Figure 61 presents the assessment results of the field visit.



**Figure 61. Sidewalk Facilities around the MLK Jr. Library**

A ½-mile bicycle facility assessment was also conducted on September 2, 2015. It included an analysis of connectivity between the MLK Jr. Library, the transit stops and the Metrorail stations. In addition, the location of bike racks was also surveyed.

Bike racks are installed at the main entrance of the MLK Jr. Library to provide bike parking for cyclists. The Capital Bikeshare station is located at the southeast side of the building at the corner of 9<sup>th</sup> and G Streets, NW. Capital Bikeshare is a 365-day DC bike sharing program that services the metro area. Other nearby Capital Bikeshare stations are shown in Figure 62.

Marked bike lanes are located along the west side of both 9<sup>th</sup> Street, NW and 10<sup>th</sup> Street, NW. The G Street, NW segment with no marked bike lanes between 9<sup>th</sup> Street, NW and 10<sup>th</sup> Street, NW is recognized as a bicycle-friendly road. In general, there is good connectivity between the Metrorail stations and the MLK Jr. Library. Likewise, most of the bus transit stops are connected

to the MLK Jr. Library through bicycle lanes. Bicycle routes in the surrounding area of the MLK Jr. Library are shown in Figure 62. Bike Facilities around the MLK Jr. Library



Figure 62. Bike Facilities around the MLK Jr. Library

### ***Parking Facilities***

The MLK Jr. Library does not accommodate public parking in its underground garage. The 100-space garage is accessible for employees and limited vendors only. Access to the parking garage is via G Place, NW. Employees/limited vendors enter the garage from the west ramp along G Place, NW and exit the garage from the east ramp onto 9<sup>th</sup> Street, NW. According to the MLK Jr. Library Facilities Maintenance crew, the garage parking spaces are utilized before 9:00 AM when the MLK Jr. Library opens and remain near almost at capacity all day. Library

visitors may either use the metered parking spaces on streets near the MLK Jr. Library or park in any of the approximately 54 paid parking garages located within the ¼-mile radius.

A review of the availability of off-street parking for MLK Jr. Library events was conducted based on the existing paid parking garages and the obligations those garages may have with the Verizon Center. It was observed that Verizon Center uses an internet-based application called Parking Panda, which identifies all of the nearby parking availability and provides the user with information on all of the available parking garages, prices and distance to the venue. MLK Jr. Library patrons have the same opportunity to find parking as the Verizon Center patrons.

Figure 63 shows the location of the off-street parking garages open to the public within ¼-mile around the site.



Figure 63. Off-Street Parking Facilities

### **Impacts to Transportation**

The rehabilitation and modernization of the MLK Jr. Library project was analyzed for two different cases, Future Conditions without the rehabilitation and modernization (No Action) and Future Conditions with the rehabilitation and modernization (Action Alternatives). For the purposes of this study, the MLK Jr. Library rehabilitation and modernization project is expected to be completed by 2020.

### **No-Action Alternative**

Under the No Action analysis, each of the intersections were analyzed to determine future traffic levels without the proposed project, which provides a baseline for the comparison of the potential impacts from the proposed project. The No Action Alternative volumes were obtained by combining the existing traffic volumes with the traffic levels from planned development. Approved developments which are not yet constructed or occupied are included in the planned development traffic. A list of approved planned developments was obtained from the DDOT and the DC Office of Planning. The developments include the following:

- 900 New York Avenue Office
- 1000 F Street Office

As directed by DDOT, trip generation tables were developed for these developments based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9<sup>th</sup> Edition, peak hour of adjacent traffic, assuming 40 percent non-auto mode split. The results are shown Table 5.

**Table 5. Trip Generation – Approved Developments**

| Project: 1000 F St, NW       |          |          |     |     |       |     |     |       |          |     |       |
|------------------------------|----------|----------|-----|-----|-------|-----|-----|-------|----------|-----|-------|
| Alternatives                 | Quantity | Unit     | AM  |     |       | PM  |     |       | Saturday |     |       |
|                              |          |          | In  | Out | Total | In  | Out | Total | In       | Out | Total |
| Office, ITE 710              | 85       | 1,000 SF | 117 | 16  | 133   | 22  | 105 | 127   | 20       | 17  | 37    |
| Retail, ITE 820              | 7        | 1,000 SF | 4   | 3   | 7     | 12  | 14  | 26    | 18       | 16  | 34    |
| Total Trips                  |          |          | 121 | 19  | 140   | 34  | 119 | 153   | 38       | 33  | 71    |
| Total Vehicle Trips          |          |          | 72  | 12  | 84    | 20  | 71  | 91    | 22       | 20  | 42    |
| Project: 900 New York Avenue |          |          |     |     |       |     |     |       |          |     |       |
| Alternatives                 | Quantity | Unit     | AM  |     |       | PM  |     |       | Saturday |     |       |
|                              |          |          | In  | Out | Total | In  | Out | Total | In       | Out | Total |
| Office, ITE 710              | 553.5    | 1,000 SF | 760 | 104 | 863   | 140 | 685 | 825   | 129      | 109 | 238   |
| Retail, ITE 820              | 29.3     | 1,000 SF | 17  | 11  | 28    | 52  | 57  | 109   | 73       | 68  | 141   |
| Total Trips                  |          |          | 777 | 115 | 891   | 192 | 742 | 934   | 202      | 177 | 379   |
| Total Vehicle Trips          |          |          | 466 | 69  | 535   | 115 | 445 | 560   | 121      | 107 | 228   |

The LOS for the intersections were then analyzed using HCM methodology and the results are summarized in Table 6. Existing traffic signal timings were used in the background traffic analysis to allow a direct comparison with the existing traffic condition.

**Table 6. Background Level of Service (No-Action Alternative Build-Out Year 2020)**

| Intersection Approach / Movement             | Traffic Control                      | AM Peak          |                                  | PM Peak          |                                  | SAT Peak         |                                  |
|--|--------------------------------------|------------------|----------------------------------|------------------|----------------------------------|------------------|----------------------------------|
|  |                                      | LOS <sup>1</sup> | Control Delay (sec) <sup>1</sup> | LOS <sup>1</sup> | Control Delay (sec) <sup>1</sup> | LOS <sup>1</sup> | Control Delay (sec) <sup>1</sup> |
| 9th Street, NW at F Street, NW               | Signalized                           | C                | 31.4                             | C                | 34.8                             | C                | 27.7                             |
| 10th Street, NW at F Street, NW              | Signalized                           | C                | 30.2                             | C                | 31.3                             | C                | 28.9                             |
| 9th Street, NW at G Street, NW <sup>2</sup>  | Signalized                           | C                | 34.8                             | F                | 85.1                             | E                | 59.4                             |
| 10th Street, NW at G Street, NW              | Signalized                           | D                | 52.5                             | E                | 63.8                             | C                | 24.9                             |
| 9th Street, NW at H Street, NW <sup>2</sup>  | Signalized                           | C                | 21.7                             | C                | 27.7                             | C                | 22.3                             |
| 10th Street, NW at H Street, NW <sup>2</sup> | Signalized                           | E                | 73.9                             | F                | 256.1                            | D                | 37.0                             |
| 8th Street, NW at H Street, NW               | Stop Control on NB and SB Approaches |                  |                                  |                  |                                  |                  |                                  |
| Northbound                                   |                                      | F                | 1415.4                           | -                | -                                | F                | 218.6                            |
| Southbound                                   |                                      | -                | -                                | -                | -                                | F                | 166.1                            |
| Eastbound / Left                             |                                      | C                | 16.1                             | D                | 25.1                             | B                | 10.1                             |
| Westbound / Left                             |                                      | C                | 15.5                             | E                | 42.0                             | B                | 10.8                             |
| 8th Street, NW at G Street, NW               | Stop Control on SB Approach          |                  |                                  |                  |                                  |                  |                                  |
| Southbound                                   |                                      | C                | 15.6                             | F                | 281.1                            | F                | 56.7                             |
| Eastbound / Left                             |                                      | A                | 8.3                              | A                | 9.4                              | A                | 9.5                              |
| 9th Street, NW at G Place, NW                | Stop Control on EB Approach          |                  |                                  |                  |                                  |                  |                                  |
| Eastbound                                    |                                      | E                | 40.6                             | F                | 64.2                             | C                | 24.7                             |
| 10th Street, NW at G Place, NW               | No Control <sup>3</sup>              |                  |                                  |                  |                                  |                  |                                  |

<sup>1</sup> HCM 2010 Output

<sup>2</sup> HCM 2000 Output

<sup>3</sup> For non-controlled intersections, the HCM analysis is not applicable

Under the No-Action Alternative, the LOS at the signalized intersection of 9<sup>th</sup> Street, NW and G Street, NW, would degrade from LOS E to LOS F with an additional delay of 7.2 seconds during the PM peak hour. All other signalized study intersections operate at LOS D or better during both peak periods.

The unsignalized intersection at 8<sup>th</sup> Street, NW and H Street, NW would operate at LOS F on its northbound approach during the AM peak hour; a delay increase of 320 seconds would be experienced. A LOS F would be observed at the intersection of 8<sup>th</sup> Street, NW and G Street, NW on its southbound approach during the PM peak hour; a delay increase of 43 seconds is shown. The intersection of 9<sup>th</sup> Street, NW and G Place, NW would operate at LOS E on its eastbound approach during the AM peak and at LOS F during the PM peak hour.

The queue lengths for the background conditions are presented in Table 7. Minor increases in queue lengths are observed throughout the study area when compared to the existing condition.

**Table 7. Queue Lengths Under the No-Action Alternative**

| Background Traffic 2020                     |                           |                           |                           |
|---|---------------------------|---------------------------|---------------------------|
| Intersection<br>Approach / Movement         | AM Peak                   | PM Peak                   | SAT Peak                  |
|   | Queue (feet) <sup>1</sup> | Queue (feet) <sup>1</sup> | Queue (feet) <sup>1</sup> |
| 9th Street, NW at F Street, NW              |                           |                           |                           |
| Southbound                                  | 23                        | m51                       | m16                       |
| Eastbound                                   | 109                       | 221                       | 62                        |
| Westbound                                   | 127                       | 121                       | 116                       |
| 10th Street, NW at F Street, NW             |                           |                           |                           |
| Southbound                                  | m35                       | 143                       | 61                        |
| Eastbound                                   | 131                       | 200                       | 149                       |
| Westbound                                   | 131                       | 46                        | 127                       |
| 9th Street, NW at G Street, NW              |                           |                           |                           |
| Southbound                                  | 474                       | #667                      | #562                      |
| Eastbound                                   | m#203                     | m#494                     | 136                       |
| Westbound / Left                            | 98                        | 153                       | 49                        |
| Westbound / Through                         | 142                       | 163                       | 69                        |
| 10th Street, NW at G Street, NW             |                           |                           |                           |
| Southbound                                  | m222                      | m170                      | 67                        |
| Eastbound                                   | 480                       | 506                       | 158                       |
| Westbound                                   | 100                       | 577                       | 155                       |
| 9th Street, NW at H Street, NW              |                           |                           |                           |
| Southbound                                  | 172                       | 232                       | 184                       |
| Eastbound                                   | m73                       | m158                      | m163                      |
| Westbound                                   | 190                       | 98                        | 115                       |
| 10th Street, NW at H Street, NW             |                           |                           |                           |
| Southbound                                  | 411                       | #637                      | 305                       |
| Eastbound                                   | #511                      | #988                      | #432                      |
| Westbound                                   | #396                      | 202                       | 217                       |
| 8th Street, NW at H Street, NW <sup>2</sup> |                           |                           |                           |
| Northbound                                  | 285                       | -                         | 143                       |
| Southbound                                  | -                         | -                         | 105                       |
| Eastbound / Left                            | 10                        | 10                        | 3                         |
| Westbound / Left                            | 17.5                      | 25                        | 3                         |
| 8th Street, NW at G Street, NW <sup>2</sup> |                           |                           |                           |
| Southbound                                  | 30                        | 400                       | 70                        |
| Eastbound / Left                            | 7.5                       | 5                         | 5                         |
| 9th Street, NW at G Place, NW <sup>2</sup>  |                           |                           |                           |

|   |    |     |    |
|---|----|-----|----|
| Eastbound                                   | 25 | 125 | 23 |
| 10th Street, NW at G Place, NW <sup>3</sup> |    |     |    |

<sup>1</sup> Synchro 9 - 95% Queue Length m - Volume for 95th percentile queue is metered by upstream signal

<sup>2</sup> HCM 2010 - 95% Queue Length, assuming vehicle length of 25 feet

<sup>3</sup> Intersection configuration is not allowed in HCM analysis

# - 95th percentile volumes exceed capacity. Queue may be longer. Queue shown is maximum after two cycles.

**Alternatives A, B, and C: Action Alternatives**

In order to determine the traffic impacts of land development, proposed land uses were converted into trips associated with each mode. A trip is generally defined as the use of a particular mode (vehicle, pedestrian, bicycle or transit) to travel into or out of a defined traffic analysis zone. After applying mode share percentages, the trips generated by the proposed project that include vehicular, pedestrian, bicycle and transit are shown in Table 8.

**Table 8. Trip Generation**

| Alternatives      | Quantity | Unit     | AM |     |       | PM  |     |       | Saturday |     |       |
|-------------------|----------|----------|----|-----|-------|-----|-----|-------|----------|-----|-------|
|                   |          |          | In | Out | Total | In  | Out | Total | In       | Out | Total |
| Proposed (7/2016) | 33.228   | 1,000 SF | 25 | 10  | 35    | 116 | 126 | 243   | 119      | 105 | 224   |

The intersections were then analyzed and the results of the analysis of the Action Alternatives are shown in Table 9. The results of the analysis indicate the following:

- At the expected completion of the MLK Jr. Library, rehabilitation and modernization, the signalized intersection of 9<sup>th</sup> Street, NW and G Street, NW, is anticipated to operate at LOS F, with an additional delay of 4.4 seconds during the PM peak hour. All other signalized study intersections operate at an LOS D or better during both peak hour periods.
- The unsignalized intersection of 8<sup>th</sup> Street, NW and H Street, NW would operate at LOS F on the northbound approach during the AM peak hour; no delay increase is observed. An LOS F is anticipated at the intersection of 8<sup>th</sup> Street, NW and G Street, NW along its southbound approach during the PM peak hour; a delay increase of 31 seconds is anticipated. The intersection of 9<sup>th</sup> Street, NW and G Place, NW would operate at LOS E on its eastbound approach during the AM peak and at LOS F during the PM peak hour with a delay increase of 2.6 seconds.

**Table 9. Action Alternatives Level of Service (Action Alternatives Build-Out Year 2020)**

| Intersection<br>Approach / Movement          | Traffic<br>Control                   | AM Peak          |                                     | PM Peak          |                                     | SAT Peak         |                                     |
|--|--------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|------------------|-------------------------------------|
|  |                                      | LOS <sup>1</sup> | Control Delay<br>(sec) <sup>1</sup> | LOS <sup>1</sup> | Control Delay<br>(sec) <sup>1</sup> | LOS <sup>1</sup> | Control Delay<br>(sec) <sup>1</sup> |
| 9th Street, NW at F Street, NW               | Signalized                           | C                | 31.4                                | C                | 34.9                                | C                | 27.8                                |
| 10th Street, NW at F Street, NW              | Signalized                           | C                | 30.2                                | C                | 31.4                                | C                | 28.7                                |
| 9th Street, NW at G Street, NW <sup>2</sup>  | Signalized                           | C                | 34.9                                | F                | 91.2                                | E                | 62.2                                |
| 10th Street, NW at G Street, NW              | Signalized                           | D                | 52.6                                | E                | 70.5                                | C                | 25.1                                |
| 9th Street, NW at H Street, NW <sup>2</sup>  | Signalized                           | C                | 21.9                                | C                | 28.1                                | C                | 22.7                                |
| 10th Street, NW at H Street, NW <sup>2</sup> | Signalized                           | E                | 74.0                                | F                | 259.9                               | D                | 37.4                                |
| 8th Street, NW at H Street, NW               | Stop Control on NB and SB Approaches |                  |                                     |                  |                                     |                  |                                     |
| Northbound                                   |                                      | F                | 1435.5                              | -                | -                                   | F                | 249.5                               |
| Southbound                                   |                                      | -                | -                                   | -                | -                                   | F                | 198.0                               |
| Eastbound / Left                             |                                      | C                | 16.2                                | D                | 25.4                                | B                | 10.2                                |
| Westbound / Left                             |                                      | C                | 15.5                                | E                | 45.3                                | B                | 10.9                                |
| 8th Street, NW at G Street, NW               | Stop Control on SB Approach          |                  |                                     |                  |                                     |                  |                                     |
| Southbound                                   |                                      | C                | 15.7                                | F                | 329.8                               | F                | 67.6                                |
| Eastbound / Left                             |                                      | A                | 8.3                                 | A                | 9.5                                 | A                | 9.6                                 |
| 9th Street, NW at G Place, NW                | Stop Control on EB Approach          |                  |                                     |                  |                                     |                  |                                     |
| Eastbound                                    |                                      | E                | 41.1                                | F                | 72.4                                | D                | 25.8                                |
| 10th Street, NW at G Place, NW               | No Control <sup>3</sup>              |                  |                                     |                  |                                     |                  |                                     |

<sup>1</sup> HCM 2010 Output<sup>2</sup> HCM 2000 Output<sup>3</sup> For non-controlled intersections, the HCM analysis is not applicable

The queue lengths for the Action Alternatives are presented in Table 10. The results show that slight increases in queue lengths are anticipated throughout the study area, when compared to the background condition. The longest added queue length is observed on the SB approach of the 8<sup>th</sup> Street, NW and G Street, NW intersection. An additional length of 33 feet, equivalent to 1.3 vehicles, would be observed.

**Table 10. Action Alternatives Queues (Action Alternatives Build-Out Year 2020)**

| Intersection<br>Approach / Movement         | AM Peak                   | PM Peak                   | SAT Peak                  |
|---|---------------------------|---------------------------|---------------------------|
|   | Queue (feet) <sup>1</sup> | Queue (feet) <sup>1</sup> | Queue (feet) <sup>1</sup> |
| 9th Street, NW at F Street, NW              |                           |                           |                           |
| Southbound                                  | 23                        | m50                       | m150                      |
| Eastbound                                   | 127                       | 221                       | 82                        |
| Westbound                                   | 109                       | 121                       | 116                       |
| 10th Street, NW at F Street, NW             |                           |                           |                           |
| Southbound                                  | m35                       | 143                       | 62                        |
| Eastbound                                   | 131                       | 200                       | 147                       |
| Westbound                                   | 131                       | 52                        | 126                       |
| 9th Street, NW at G Street, NW              |                           |                           |                           |
| Southbound                                  | 474                       | #681                      | #574                      |
| Eastbound                                   | m#204                     | m#506                     | 145                       |
| Westbound / Left                            | 98                        | 153                       | 49                        |
| Westbound / Through                         | 142                       | 170                       | 75                        |
| 10th Street, NW at G Street, NW             |                           |                           |                           |
| Southbound                                  | m222                      | m171                      | 71                        |
| Eastbound                                   | 481                       | 519                       | 162                       |
| Westbound                                   | 99                        | #602                      | 164                       |
| 9th Street, NW at H Street, NW              |                           |                           |                           |
| Southbound                                  | 172                       | 234                       | 117                       |
| Eastbound                                   | m73                       | m161                      | 153                       |
| Westbound                                   | 191                       | 101                       | 96                        |
| 10th Street, NW at H Street, NW             |                           |                           |                           |
| Southbound                                  | 411                       | #638                      | 307                       |
| Eastbound                                   | #512                      | #995                      | #436                      |
| Westbound                                   | #396                      | 203                       | 215                       |
| 8th Street, NW at H Street, NW <sup>2</sup> |                           |                           |                           |
| Northbound                                  | 290                       | -                         | 158                       |
| Southbound                                  | -                         | -                         | 115                       |
| Eastbound / Left                            | 10                        | 10                        | 3                         |
| Westbound / Left                            | 18                        | 33                        | 5                         |
| 8th Street, NW at G Street, NW <sup>2</sup> |                           |                           |                           |
| Southbound                                  | 33                        | 445                       | 88                        |
| Eastbound / Left                            | 8                         | 5                         | 8                         |
| 9th Street, NW at G Place, NW <sup>2</sup>  |                           |                           |                           |
| Eastbound                                   | 28                        | 140                       | 25                        |
| 10th Street, NW at G Place, NW <sup>3</sup> |                           |                           |                           |

<sup>1</sup> Synchro 9 - 95% Queue Length

<sup>2</sup> HCM 2010 - 95% Queue Length, assuming vehicle length of 25 feet

<sup>3</sup> Intersection configuration is not allowed in HCM analysis

m - Volume for 95th percentile queue is metered by upstream signal

# - 95th percentile volumes exceed capacity. Queue may be longer. Queue shown is maximum after two cycles.

Based on the analysis conducted, the rehabilitation and modernization of the MLK Jr. Library would not result in adverse traffic impacts to the surrounding roadway network. The study area intersections are anticipated to see increased traffic volumes, but these volumes can be accommodated without any roadway improvements or signal timing adjustments.

The DDOT threshold for mitigation, based on level of service and delay, calls for signal timing or roadway improvements development-related impacts result in a degradation of LOS to "E" or worse or an increase in delay greater than five (5) seconds is observed at any intersection operating at LOS "E" or "F". In addition, mitigation may be needed if there is an increase of 150 feet on the observed 95 percent queue length at any of the study intersections.

The results of the study show that queue lengths would not increase in excess of 150 feet at any of the intersections studied. The level of service and delays at the signalized study intersections do not meet the threshold requiring mitigation. However, the unsignalized intersections of 8<sup>th</sup> Street, NW / G Street, NW and 8<sup>th</sup> Street, NW / H Street, NW show a delay increase greater than five seconds along their southbound and eastbound approaches, respectively, with the implementation of the MLK Jr. Library rehabilitation and modernization project.

In order to determine if an existing intersection would require a signalization as a result of the rehabilitation and modernization of the MLK Jr. Library, a signal warrant analysis was conducted for the three unsignalized intersections within the study area for the Action Alternatives. The intersections do not meet the vehicular traffic signal warrants, even with the anticipated increase in pedestrian traffic volumes associated with the MLK Jr. Library expansion project (Stantec, 2016).

Additionally, the increase in pedestrian and bicycle trips would not necessitate additional accommodations, as existing bicycle stations are anticipated to meet the demand. Trips associated with transit would not necessitate improvements /enhancements to existing transit facilities and no additional buses or expansion of bus routes would be necessary as a result of the rehabilitation and modernization of the MLK Jr. Library. Additional motorist trips would be accommodated by existing parking garages in proximity to the MLK Jr. Library and no additional or alternate parking accommodations are needed for library staff.

It should be noted that the MLK Jr. Library rehabilitation and modernization includes slight modifications to the existing loading dock. The loading dock improvements result in the dock area maintaining its compliant status with city code. The curb approach radii to the loading dock will be reduced, providing a 90-degree entry/exit curb for the loading dock. This modification will result in a shorter pedestrian crossing distance that will enhance pedestrian

safety in the area of the loading dock. Based on discussions with DDOT, the improvements in the area of the loading dock are not substantive and will not trigger the “no backing” restriction for improved loading facilities.

No loading dock activities are anticipated during the AM or PM peak. As a result of the change in the curb radii at the loading dock ingress/egress, the elimination of one parking space on the north side of G Place, NW, directly across from the loading dock, is necessary. Additionally, due to the dimensions of the loading bays, SU-40 vehicles will only use the westernmost bay in the loading dock area.

The parking garage located at the MLK Jr. Library is for employees and limited vendors only. This will not change after the renovation and modernization of the MLK Jr Library is complete. No valet parking, motor coach or tour bus staging is anticipated due to the addition of the Fifth Floor event space at the MLK Jr. Library. Approximately, twelve additional events per year (on average one per month) are anticipated for the fifth floor event space. Additionally, any catering for these events would utilize a vehicle that falls within the size/dimension range for trucks accessing the loading dock area. The number of catering/café vehicles anticipated is variable, but could number two vehicles per week that are anticipated to arrive after 5pm. DCPL would be relocating the operations functions offsite once the rehabilitation and modernization is complete. This would significantly reduce the loading dock usage and thereby create even more flexibility in having event loading and unloading out of the public right of way.

Two options were considered for the ingress and egress of MLK Jr. Library parking garage. The following is a summary of potential impacts that would occur as a result of the implementation of each option:

Under Option 1, there would be no impacts to the traffic operations because no changes would be made. Figure 8 provides a diagram of Option 1.

Under Option 2, Under Option 2, the egress ramp for the MLK Jr. Library parking garage would be removed and the existing ingress (west) ramp would accommodate vehicles entering and exiting the garage (see Figure 9). Additionally, G Place, NW would accommodate vehicles entering and exiting the garage, two-way traffic flow from 10<sup>th</sup> Street, NW to the MLK Jr. Library garage entrance (adjacent to the alley). This would result in a change in traffic patterns as vehicles would exit the MLK Jr. Library garage and either travel west on G Place, NW to 10<sup>th</sup> Street or east on G Place, NW to 9<sup>th</sup> Street, NW. The modification to the traffic pattern (vehicles exiting MLK Jr. Library from the west ramp) will increase traffic volumes along G Place, NW, which includes the potential for increased queuing along G Place, NW. However, the installation

of a traffic signal system on the MLK Jr. Library property would control vehicles exiting the building. For vehicles to exit the MLK Jr. Library garage from the west ramp, a few parking spaces along G Place would need to be eliminated. There would also have to be directional changes associated with traffic operations within the MLK Jr. Library garage so that the west ramp could function for both ingress and egress.

To evaluate the potential transportation impacts associated with closing the east vehicle ramp under Option 2, DCPL collected traffic volume counts between May 2, 2016 and May 9, 2016 entering and exiting the MLK Jr. Library. To collect the data, tubes were installed along the ingress and egress ramps. The analysis also takes into account the location of the First Congregational Church garage and the U.S. Secret Service garage which are accessed from G Place and adjacent to the MLK Jr. Library.

Currently, there is space for approximately four vehicles to queue along westbound G Place, NW, between 10<sup>th</sup> Street, NW and First Congregational Church and U.S. Secret Service garages. The traffic analysis showed that providing a traffic signal system on MLK Jr. Library property enables vehicles exiting the Library garage to access G Place, NW and proceed west to 10<sup>th</sup> Street, NW or east to 9<sup>th</sup> Street, NW without having to find gaps in traffic flow. Additionally, motorists would have the option of selecting an eastbound or westbound destination, based on the queue length along westbound G Place, NW, enhancing traffic operations in that area. At the same time, traffic operations along 10<sup>th</sup> Street, NW and the availability of gaps in traffic for vehicles exiting from westbound G Place, NW onto 10<sup>th</sup> Street, NW, could affect operations along westbound G Place, NW. This would only occur if queues along westbound G Place, NW extend to and block the MLK Jr. Library garage entrance. However, the traffic analysis completed for this scenario showed an acceptable LOS, with minimal queuing along G Place, NW or in the MLK Jr. Library garage.

Overall, the rehabilitation and modernization of the MLK Jr. Library would have negligible to minor, long-term, adverse impact on the surrounding roadway and pedestrian network.

### **Cumulative Impacts**

Past, present, and future development in the area would place additional demands on the transportation network within the District. The rehabilitation and modernization of the MLK Jr. Library would contribute to these long-term, adverse cumulative impacts by creating a new event space.

## **Mitigation Measures**

In order to allow for the closing of the east ramp of the parking garage, the direction of traffic along G Place, NW would be changed from one-way to two-way traffic from 10th Street, NW to the Alley. From the Alley to 9th Street, NW, the traffic would remain one-way, eastbound. A limited signal would be installed on DCPL property to control vehicles exiting the MLK Jr. Library. Approximately two parking spaces would be removed to accommodate the traffic operational change. In addition, an Operational Management Plan would be completed by DCPL prior to the completion of the rehabilitation and modernization of the MLK Library. The O&M Plan would discourage contraflow traffic on the west ramp and would also include how special events would be handled by the DCPL.

### **3.11 ENVIRONMENTAL CONTAMINATION AND HAZARDOUS MATERIALS**

A hazardous materials inspection of the MLK Jr. Library was conducted by ABE Environmental in December 2013 in an effort to identify asbestos-containing materials (ACMs), lead-based paint (LBP), polychlorinated biphenyls (PCBs), and elevated fungal spore levels. The findings were summarized in a Hazardous Materials Survey report (ABE, 2013), which is incorporated herein by reference.

Additionally, in December 2013, a Phase I Environmental Site Assessment (Phase I ESA) was conducted by ABE Environmental, Inc. and TTL Associates, Inc. (ABE/TTL, 2013), incorporated herein by reference. The Phase I ESA was performed in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," E 1527-05. The purpose of this Phase I ESA was to identify Recognized Environmental Conditions (RECs) in connection with the site through site reconnaissance, interviews, and a review of reasonably ascertainable regulatory and historical documentation.

#### **Asbestos Containing Materials (ACMs)**

Federal regulations (40 CFR 61) require that an appropriate asbestos inspection be conducted prior to construction or demolition activities that could potentially disturb ACMs. An ACM is defined by the EPA as any material containing greater than one percent asbestos by weight upon Polarized Light Microscopy (PLM) analysis. Friable ACM is defined by the EPA as any material which, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. Non-friable ACM is not considered toxic unless the material is disturbed or damaged in a way that releases asbestos fibers into the air (EPA, 2015a). The asbestos survey at the MLK Jr. Library was completed in general accordance with EPA Standards 40 CFR 763, Subpart E, Asbestos Hazard Emergency Response Act (AHERA) and 40 CFR 61, Subpart M, National

Emission Standards for Hazardous Air Pollutants (NESHAP), and OSHA Standard 29 1926.1101 sampling protocol by a District licensed asbestos building inspector. The survey was limited to an inspection of readily-accessible areas with potential asbestos-containing insulation, roofing materials, plaster ceilings, plaster walls, vinyl floor tiles, and sprayed or trowelled-on structural coverings.

A total of 243 suspected building material bulk samples were collected and sent to an independent laboratory for asbestos testing using the PLM method.

Laboratory analysis confirmed the presence of ACMs in the facility, including insulation, insulation sealants, sink insulation, floor tiles, caulking, drywall, plasters, and spray-applied fireproofing. Fireproofing in particular was found to be in very poor condition throughout, and in some areas it was found hanging from ceiling tiles exposed to the public. In the northwest, northeast, southeast, and southwest staff elevator lobby mechanical closets, exposed fireproofing was identified in areas with enormous amounts of air movement, which may cause fiber releases. Broken or chipped floor tiles containing asbestos were identified on nearly all internal floors of the building.

### **Lead-based Paint**

Lead-based paint (LBP) is defined as paint containing more than 1.0 milligrams per square centimeter (mg/cm<sup>2</sup>) lead by District Code 6-997 and U.S. Department of Housing and Urban Development (HUD). Painted and glazed surfaces that contain detectable concentrations of lead, including concentrations less than the definition of LBP, must be handled in accordance with the OSHA Lead in Construction Standard (29 CFR 1926.62).

The inspection team conducted an onsite inspection of painted surfaces for the presence of LBP using an X-Ray Fluorescence (XRF) Spectrum Analyzer. The work performed was limited in scope and did not include verification sampling of paint chip samples due to its destructive nature.

A total of 329 XRF readings were collected from various types and colors of paint. Additionally, a total of 18 dust wipe samples were collected from areas where XRF testing proved positive for LBP to determine the levels of lead-containing dust on the interior window sills, floors and the exterior of the property. Dust wipe samples were collected in accordance with the requirements of ASTM Standard E-1728, Standard Practice for Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques.

XRF readings and dust wipe samples confirmed the presence of LBP and lead-containing dust in the facility. The XRF readings of painted building components revealed that 147 of the 329

readings gave a positive result for LBP in the following areas: red structural beams, exterior and interior walls, columns, parking lanes, parking poles, window cases, storefront, door frames, handrails, duct systems, and bulletin boards. Lead-in-dust was identified near bulletin boards that were shown to contain LBP in the XRF readings and in the steam room on the Mechanical/Level C of the MLK Jr. Library.

### **Polychlorinated Biphenyls (PCBs)**

PCBs are a class of 209 man-made chemicals with varying toxicity, often used as insulating and cooling fluids in electrical equipment, including transformers, ballasts and capacitors as well as in hydraulic fluids such as elevator equipment. Removal, handling, and disposal of PCB containing equipment and ballasts are regulated under the EPA Toxic Substance Control Act (TSCA) regulations (40 CFR 261) program as well as EPA regulation 40 CFR 761, and are subject to District solid waste regulations when sent to a solid waste landfill.

The environmental inspectors conducted an onsite visual inspection for PCBs. This inspection was performed by looking for suspect building equipment, light fixtures that may contain PCB oil, and bulk materials (caulking). Small portions of potentially contaminated or suspected material were directly removed from the suspected area or material for analytical testing. Surface wipe samples, as specified in 40 CFR 761.123, were collected from suspect surfaces that were smooth and impervious (e.g., unpainted metal surfaces). For porous surfaces (e.g., brick, masonry, concrete or wood), core samples of the top 0.5 to 2 cm were collected instead of surface wipe samples.

The environmental inspectors visually inspected approximately 20 percent of the light ballasts in the building. An estimated 100 percent of the light ballasts observed contained a label stating "no PCBs." No leaking light ballasts were observed. The inspectors also noted the following equipment may contain PCBs and were not sampled: electrical transformers, light fixtures, generators, and pumps.

In addition to the visual assessment of suspect equipment that was observed during the inspection, oily stains at or near equipment that may have contained a PCB oil was sampled for laboratory analysis. A total of 13 suspect samples were collected from the Mechanical/C level, A level, B level, 1st floor and 2nd floor.

No PCBs were detected in 12 of the 13 samples. One surface wipe sample yielded positive results in the area of the freight elevators on the A level of the MLK Jr. Library.

## **Mold and Fungal Spores**

Exposure to mold or airborne mold spores can result in allergic reactions, asthma, and other respiratory complaints. Additionally, mold would eventually destroy the material it colonizes, which leads to costly repairs. There are currently no EPA regulations related to mold or airborne mold spores (EPA, 2015b). DOEE, as required by the Air Quality Amendment Act of 2014, has issued draft regulations requiring professional remediation for indoor mold growth that exceeds 25 contiguous square feet.

During the inspection for fungal spores, a total of 12 air samples were collected with an additional five bulk vacuum or swab samples were collected. The laboratory results revealed that one air sample and three 2009-2 swab samples had elevated mold spore levels greater than the comparable outdoor levels.

## **Phase I ESA**

Recognized Environmental Conditions (RECs) are defined in ASTM E 1527-05 as:

“The presence or likely presence of any hazardous substances or petroleum products on the property (site) under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property (site) or into the ground, groundwater, or surface water of the property (site). The term includes hazardous substances or petroleum products even under conditions in compliance with laws.”

Four RECs were identified in connection with the MLK Jr. Library, including:

- Historic use of the site for gasoline station/auto repair activities and five former USTs;
- Historic use of the site for dry cleaning activities;
- Former dry cleaners and machine shops at an easterly adjoining property (709 9th Street NW);
- Records of a heating oil release in 1999 at an easterly adjoining property (New Pepco Building, 701/777 9th Street NW).

The central and western portions of the MLK Jr. Library site were occupied by residential, row-type, housing and several storefronts from at least 1888 to the late 1960s. The eastern portion was commercially developed from at least 1888 to the late 1960s. During this time, the site was occupied by various storefronts, including several cleaners (from at least 1922 to 1954), and an automobile parking lot/filling station/automotive repair facility with several associated gasoline underground storage tanks from at least 1928 to 1954. Due to potential leaks of drycleaning

chemicals or petroleum products from these facilities, the historic use of the site is considered a REC.

The property at 709 9<sup>th</sup> Street also housed machine shops and drycleaning facilities from 1904 to 1931, at total of 27 years. Due to the distance from the MLK Jr. Library site and the duration of the operations, these former machine shops and drycleaners are also considered a REC.

A report from Environmental Data Resources, Inc. (EDR) indicated that the New Pepco Building at 701-777 9<sup>th</sup> Street is listed on the DC Leaking Underground Storage Tank (LUST) database. The listing indicated that there was a confirmed release of heating oil into the soil at the site that was discovered in 1999. The release was listed as “closed” in the LUST database. Due to the distance from the site and the reported release, the New Pepco Building is considered a REC.

Some hazardous substances related to operations and maintenance activities were observed, including 5- to 55-gallon drums of paint, chemical compounds, petroleum products, and water treatment chemicals. Some minor stains and evidence of releases of janitorial supplies were observed in storage and maintenance areas throughout the building; however, because the stains were surficial and were not located near any drains, the staining is not considered a REC.

Three pad-mounted electrical transformers were observed in the transformer room in the basement that appeared to be leaking. A sign indicating the presence of PCBs was observed on the transformer room door. Surface wipe samples obtained during the hazardous materials inspection did not detect PCBs in the basement transformer room.

The MLK Jr. Library site was identified on the US Aerometric Information Retrieval System (AIRS) and Facility Index System (FINDS) databases. According to the US AIRS database, the site produces less than 100 tons of air emissions per year and is in compliance. Information in the FINDS database indicates the facility is on the AIRS database. Based on the absence of reported violations and no reported spills or releases, the US AIRS and FINDS database listings are not considered to be RECs in connection with the site.

### ***Impacts to Environmental Contamination***

#### **No-Action Alternative**

The No-Action Alternative represents a continuation of the existing conditions, operations and maintenance of the MLK Jr. Library. No subsurface excavation or ground disturbance would occur; therefore, the likelihood of encountering contaminated soil or groundwater is negligible. Hazardous building materials including lead, asbestos, and PCBs, along with mold would be removed from the building to the standards set by DC and federal regulations to safeguard the

health of building occupants. No other improvements would be made to the interior or exterior of the building. Therefore, the No-Action Alternative would result in a minor, long-term, beneficial impact related to environmental contamination.

### **Alternatives A-C: Action Alternatives**

All Action Alternatives involve the rehabilitation and modernization and/or replacement of building systems, including elevators, lighting, mechanical, electrical, plumbing, circulation, and security, and remediation of exterior glazing and steel cladding. Hazardous materials remediation would be performed as part of the overall rehabilitation and modernization of the MLK Jr. Library, which would result in a long-term beneficial impact. No subsurface excavation or ground disturbance would occur. Therefore, it is highly unlikely that soil contaminated by petroleum or other hazardous substances as a result of the four RECs would be encountered during construction.

Construction and demolition activities would result in the temporary disturbance of hazardous materials, which may cause them to become airborne. This would result in increased health risks to construction workers. The remediation practices would be used to avoid and minimize the exposure of air toxics. Because of the disturbance to hazardous building materials during demolition, all Action Alternatives would have a negligible, short-term, direct, adverse impact during construction. However, the removal of hazardous building materials from the MLK Jr. Library would overall result in a moderate, long-term, direct, and beneficial impact related to environmental contamination.

### **Cumulative Impacts**

Past, present and future development in the District has resulted in the disturbance of hazardous building materials. However, the removal of hazardous building materials would create long-term, beneficial cumulative impacts from the utilization of proper remediation practices. Remediation and cleanup required as a result of the rehabilitation and modernization of the MLK Jr. Library would result in long-term, beneficial cumulative impacts. Overall, the rehabilitation and modernization of the MLK Jr. Library would not contribute to adverse cumulative impacts on hazardous materials.

### **Mitigation Measures**

The following remediation practices would be employed:

#### ***ACMs***

Demolition or construction at an institutional, commercial or industrial building is regulated by the Asbestos NESHAP, which requires specific work practices to prevent and control airborne

asbestos fibers (EPA, 2015c). The asbestos abatement activities would be conducted by a DC licensed asbestos abatement contractor using properly trained and licensed workers in accordance with District, EPA and OSHA regulations. All areas where fireproofing spray is assumed or indentified would be HEPA vacuumed and cleaned above ceiling tiles by certified individual(s) with proper training. Air samples would be taken throughout the building initially and every three months, six months and 12 months by an Industrial Hygienist. In areas where there are broken or chipped floor tiles, the flooring would be properly removed and replaced by individuals with proper training. Environmental monitoring would be performed by an EPA accredited inspector both during and after asbestos removal.

If any friable materials are found prior to or during demolition, such materials would be removed and disposed of in accordance with state, EPA, and DOT regulations, including the Asbestos NESHAP. The District and the EPA Region 3 Office would be notified.

#### ***Lead***

Demolition of lead-based paint components would be completed in accordance with the requirements of the OSHA Lead in Construction standard. Items treated with lead-based paint would be segregated from other wastes to be tested separately. Disposal of lead wastes determined to be hazardous would be disposed of according to EPA regulations (40 CFR 261(c)).

#### ***PCBs***

The Phase I ESA identified three leaking pad-mounted electrical transformers in the basement of the MLK Jr. Library, which potentially contain PCBs. However, only minor levels of PCBs were identified in the hazardous materials inspection. The leaking equipment would be separated and placed into DOT-approved 55-gallon metal drums. They would be recycled or incinerated at an approved facility in accordance with EPA regulations (40 CFR 761) rather than disposed at a municipal solid waste landfill.

#### ***Mold and Fungal Spores***

Mold remediation would be conducted by an indoor mold remediation professional certified and licensed by the District, in accordance with the Air Quality Amendment Act. All duct systems would be cleaned and treated. Moldy ceiling tiles would be removed and replaced.

### 3.12 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Table 11 presents, for comparison purposes, a concise summary of each alternative's potential impacts by resource topic, including the No-Action Alternative.

**Table 11. Summary of Impacts Associated with Each Alternative**

| Resource              | No-Action Alternative  | Action Alternatives  |  |  |
|-----------------------|--|--|--|--|
|                       |  | Alternative A  | Alternative B  | Alternative C  |
| Stormwater Management | Under the No-Action Alternative, the rehabilitation and modernization of the MLK Jr. Library would not occur. Impervious surfaces on the site would not be increased or decreased. The existing stormwater runoff volume would be unchanged and would continue to be discharged into existing stormwater drainage systems. | Because Alternative A would decrease the amount of impervious from the creation of a roof-top garden, a beneficial, long-term, impact would result. Alternative A would be in compliance with the DOEE 2013 stormwater rule. | A green roof and garden roof-top terrace would be provided to reduce heat gain, absorb rainwater and reduce runoff. These features would result in an overall net reduction in impervious surface for the site. Overall, under Alternative B there would be a decrease in stormwater discharge to the combined sewer system resulting in a long-term, beneficial impact to stormwater management and water quality. Alternative B would be in compliance with the DOEE 2013 stormwater rule. | Although, Alternative C would not change the existing impervious area of the building and would not contribute additional stormwater to the existing combined sewer system, no stormwater management features would be added to the property. The project would not be in compliance with the DOEE 2013 stormwater rule. Overall, Alternative C would result in a minimal, long-term, adverse impact to stormwater management and water quality. |

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| Resource                               | No-Action Alternative   | Action Alternatives  |               |               |
|--|---|--|---------------|---------------|
|  |   | Alternative A  | Alternative B | Alternative C |
| <b>Air Quality</b>                     | Hazardous building materials along with mold would be removed from the building to the standards set by District and federal regulations to safeguard the health of building occupants. This would result in a minor, long-term, direct, beneficial impact to interior air quality. | Hazardous building materials along with mold would be removed from the building to the standards set by District and federal regulations to safeguard the health of building occupants. This would result in a minor, long-term, direct, beneficial impact to interior air quality. No increase in diesel vehicles coming to the MLK Jr. Library. No increase in traffic is expected under any of the Action Alternatives. Construction and demolition activities would result in increased health risks to construction workers if safety measures are not implemented. By employing safety measures, all Action Alternatives would have a temporary, minor, direct, adverse impact related to interior air quality. The rehabilitation and modernization of the MLK Jr. Library would not contribute to cumulative impacts on air quality. |               |               |
| <b>Land Use Planning and Zoning</b>    | No changes to land use and no zoning amendment would be required. Therefore, there would be no impact to land use or zoning.  | The changes proposed under all Action Alternatives are consistent with the Federal and DC Elements of the Comprehensive Plan. NCPC would not need to consider a deviation from the ZR. All of the Action Alternatives are consistent with existing land use and zoning designations. Because there would be no impact on land use and zoning, the Action Alternatives would not result in cumulative impacts to this resource.   |               |               |
| <b>Economy, Employment, and Income</b> | No new employment opportunities would be created and no rehabilitation and modernization of the MLK Jr. Library would occur. Therefore, there would be no impacts to economy, employment, and income as a result of the No-Action Alternative.                                      | No additional library staff would be hired as a result of the rehabilitation and modernization of the MLK Jr. Library. The café would create a small number of permanent jobs. Sales taxes would also be generated as a result of café sales. The rehabilitation and modernization of the MLK Jr. Library would result in a short-term need for construction workers. Overall, the proposed project is expected to have minor, short- and long-term, beneficial impacts to economy, employment, and income in the surrounding area. Past, present and future development in the District has created revenue for the DC government and additional jobs for District residents, which has created long-term, beneficial, cumulative impacts on economy, employment, and income from the introduction of a café.                               |               |               |

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| Resource                          | No-Action Alternative   | Action Alternatives   |               |               |
|-----------------------------------|---|---|---------------|---------------|
|                                   |   | Alternative A   | Alternative B | Alternative C |
| Community Facilities and Services | The No-Action Alternative would have an overall minor, long-term, adverse impact from the lack of library improvements; while the remediation of hazardous building materials would create beneficial impacts to the MLK Jr. Library staff and its patrons. The No-Action Alternative would not result in any changes in library usage; therefore, no increase in emergency services would be required and no increase in police or fire and rescue response times is anticipated. Therefore, no long-term adverse impacts to surrounding community facilities or services are anticipated. | The Action Alternatives would create a safer, more comfortable, and more environmentally sustainable facility. The existing services provided by the MLK Jr. Library would continue to be provided. Overall, the Action Alternatives would result in moderate, long-term, direct, beneficial impacts to the MLK Jr. Library. No impacts to police or fire and rescue response times are anticipated. The proposed project would not result in the removal or alteration of any adjacent properties or facilities. Construction activities for the proposed project would require the temporary closure of the MLK Jr. Library. Alternate locations for library services at the MLK Jr. Library would be offered in a number of locations that include a new "Library Express" location that will house the Library's Center for Accessibility and Adult Literacy Department. DCPL would offer expanded hours at all of its branches to encourage MLK Jr. Library users to visit neighborhood branches. Therefore, the Action Alternatives would result in minor, short-term, direct, adverse impacts to community facilities and services. The rehabilitation and modernization of the MLK Jr. Library would beneficially contribute to the long-term cumulative impacts to the community facilities and services from the creation of opportunities for cultural events, education, and entertainment and a café that would entice visitors to stay in the library for longer periods of time. |               |               |
| Historic Resources                | The building would continue to deteriorate if the building is not renovated. This would create an adverse effect. Based on these factors, the No-Action Alternative would result in minor, long-term, adverse impacts to any historic resources.  | Under all of the action alternatives, there would be direct, long term adverse impacts to the MLK Jr. Library as character-defining features of the building would be altered or removed which would reduce the integrity of the property. The construction of new elements such as an addition would also alter the character of the building and cause adverse impacts. For purposes of Section 106 of the NHPA, there would be an adverse effect on MLK Jr. Library. As part of the Section 106 process, NCPC, DCPL, and DCSHPO are working with consulting parties to develop a Memorandum of Agreement that will seek to avoid, minimize, and mitigate the adverse impacts.  |               |               |
| Utilities                         | No utilities would be upgraded and/or replaced under the No-Action Alternative. Therefore, there would be no impacts to existing utilities.   | Under the Action Alternatives, new energy efficient equipment would replace existing less efficient system, reducing the MLK Jr. Library's energy and gas demand. Water conservation measures would result in a decrease of the total water consumption. Overall, the rehabilitation and modernization would result in minor, long-term beneficial impacts. The rehabilitation and modernization would not contribute to the adverse cumulative impacts because modernizing the MLK Jr. Library would include measures to increase energy efficiency while decreasing the total water consumption   |               |               |

| Resource                    | No-Action Alternative  | Action Alternatives  |               |               |
|-----------------------------|--|--|---------------|---------------|
|                             |  | Alternative A  | Alternative B | Alternative C |
| Transportation              | The No-Action Alternative would have an overall negligible, long-term, adverse impact to the roadway and pedestrian network.   | Overall, the rehabilitation and modernization of the MLK Jr. Library would have a negligible to minor adverse impact on the surrounding roadway and pedestrian network. The proposed project would contribute slightly to the overall cumulative impacts.  |               |               |
| Environmental Contamination | Hazardous building materials including lead, asbestos, and PCBs, along with mold would be removed from the building to the standards set by DC and federal regulations to safeguard the health of building occupants. Therefore, the No-Action Alternative would result in a minor, long-term, beneficial impact related to environmental contamination. | Hazardous building materials including lead, asbestos, and PCBs, along with mold would be removed from the building to the standards set by DC and federal regulations to safeguard the health of building occupants. Because of the disturbance to hazardous building materials during demolition, all Action Alternatives would have a negligible, short-term, direct, adverse impact during construction. However, the removal of hazardous building materials from the MLK Jr. Library would overall result in a moderate, long-term, direct, and beneficial impact related to environmental contamination. Remediation and cleanup required as a result of the rehabilitation and modernization of the MLK Jr. Library would result in beneficial cumulative impacts. |               |               |

**3.14 SUMMARY OF MITIGATION MEASURES**

To help ensure the protection of natural and historic resources and the quality of the human environment, the following protective measures shown in Table 12 would be implemented by the DC Public Library depending on the alternative selected. The DCPL, through coordination with NCPC, would implement an appropriate level of monitoring throughout the construction process to help ensure that protective measures are being properly implemented and are achieving their intended results.

**Table 12. Summary of Protective Measures for Each Alternative**

| Resource              | Mitigation Measures  |
|-----------------------|--|
| Stormwater Management | Construction impacts would be avoided and minimized as much as possible by implementing BMPs during construction including the development of a sediment and erosion control plan with DOEE.   |
| Air Quality           | See mitigation proposed under, Environmental Contamination for mitigation measures that would address air quality impacts. Reasonable precautions would be taken to minimize emissions from construction vehicles in accordance with DCMR 20-600 through 606. Construction vehicles would not be permitted to idle for longer than three minutes at a time (or five minutes during below-freezing temperatures) unless engine idling is necessary for power takeoff equipment, in accordance with the DC Engine Anti-Idling Law. |

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| Resource                          | Mitigation Measures  |
|-----------------------------------|--|
| Land Use Planning and Zoning      | No mitigation measures are proposed.   |
| Economy, Employment, and Income   | No mitigation measures are proposed  |
| Community Facilities and Services | <p>During the rehabilitation and modernization, library services at the MLK Jr. Library would be offered in a number of locations that include a new "Library Express" location that will house the Library's Center for Accessibility and Adult Literacy Department. DCPL would offer expanded hours at all of its branches to encourage MLK Jr. Library users to visit neighborhood branches. DCPL is still determining how much of the MLK Jr. Library collections would be available during the rehabilitation and modernization. In addition to the normal holds process, DCPL would rely on other services including Inter-library loan (ILL) and the reciprocal borrowing agreements that are currently in place with neighboring public library systems in Virginia and Maryland. Other services, including the Library's Special Collections and its Labs, would be accessible with the help of partner organizations with whom DCPL is currently in discussion. The rehabilitation and modernization of the MLK Jr. Library would occur during normal construction hours set by DCRA – Monday through Friday, 7 am – 7 pm.</p> |
| Historic Resources                | <p>The Section 106 consultation process is ongoing. NCP, the DCPL, DCSHPO, and the consulting parties are continuing to identify ways to avoid, minimize, and mitigate adverse effects to historic resources. These parties would agree upon mitigation measures that would be implemented in accordance with the Memorandum of Agreement document developed to resolve the Section 106 process.</p>   |
| Utilities                         | No mitigation measures are proposed.   |
| Transportation                    | <p>In order to allow for the closing of the east ramp of the parking garage, the direction of traffic along G Place, NW would be changed from one-way to two-way traffic from 10th Street, NW to the Alley. From the Alley to 9th Street, NW, the traffic would remain one-way, eastbound. A limited signal would be installed on DCPL property to control vehicles exiting the three garages at the U.S. Secret Service, the First Congressional Church, and the MLK Jr. Library. Approximately two parking spaces would be removed to accommodate the traffic operational change. In addition, an Operational Management Plan would be completed by DCPL prior to the completion of the rehabilitation and modernization of the MLK Library. The O&amp;M Plan would discourage contraflow traffic on the west ramp and would also include how special events would be handled by the DCPL.</p>   |

| Resource                           | Mitigation Measures  |
|------------------------------------|--|
| <p>Environmental Contamination</p> | <p><b>ACMs</b></p> <p>Demolition or construction at an institutional, commercial or industrial building is regulated by the Asbestos NESHAP, which requires specific work practices to prevent and control airborne asbestos fibers (EPA, 2015c). The asbestos abatement activities would be conducted by a DC licensed asbestos abatement contractor using properly trained and licensed workers in accordance with District, EPA and OSHA regulations. All areas where fireproofing spray is assumed or indentified would be HEPA vacuumed and cleaned above ceiling tiles by certified individual(s) with proper training. Air samples would be taken throughout the building initially and every three months, six months and 12 months by an Industrial Hygienist. In areas where there are broken or chipped floor tiles, the flooring would be properly removed and replaced by individuals with proper training. Environmental monitoring would be performed by an EPA accredited inspector both during and after asbestos removal.</p> <p>If any friable materials are found prior to or during demolition, such materials would be removed and disposed of in accordance with state, EPA, and DOT regulations, including the Asbestos NESHAP. The District and the EPA Region 3 Office would be notified.</p> <p><b>Lead</b></p> <p>Demolition of lead-based paint components would be completed in accordance with the requirements of the OSHA Lead in Construction standard. Items treated with lead-based paint would be segregated from other wastes to be tested separately. Disposal of lead wastes determined to be hazardous would be disposed of according to EPA regulations (40 CFR 261(c)).</p> <p><b>PCBs</b></p> <p>The Phase I ESA identified three leaking pad-mounted electrical transformers in the basement of the MLK Jr. Library, which potentially contain PCBs. However, only minor levels of PCBs were identified in the hazardous materials inspection. The leaking equipment would be separated and placed into DOT-approved 55-gallon metal drums. They would be recycled or incinerated at an approved facility in accordance with EPA regulations (40 CFR 761) rather than disposed at a municipal solid waste landfill.</p> <p><b>Mold and Fungal Spores</b></p> <p>Mold remediation would be conducted by an indoor mold remediation professional certified and licensed by the District, in accordance with the Air Quality Amendment Act. All duct systems would be cleaned and treated. Moldy ceiling tiles would be removed and replaced</p> |

#### **4. CONSULTATION AND COORDINATION**

The DCPL and NCPC place a high priority on public involvement in the NEPA process and on giving the public an opportunity to comment on proposed actions. As part of the NEPA process, issues associated with the proposed action were identified during the internal scoping meeting with DCPL and NCPC and have been communicated to other affected agencies and stakeholders. Agency consultation and coordination letters received to date are provided in Appendix B.

##### **AGENCY COORDINATION**

In addition to NCPC review, the proposed project is subject to the review of the U.S. Commission of Fine Arts (CFA) as a public, District of Columbia-owned building. The project was presented in an informational capacity to the CFA on January 22, 2015 and received concept approval at its meeting on July 16, 2015. DCPL will submit final plans to CFA for their review and approval.

The project is also subject to the DC Historic Preservation Review Board (HPRB) as an individual landmark in the DC Inventory of Historic Sites. The project was presented in an informational capacity to HPRB on January 22, 2015 and received concept approval, with further review delegated to staff at its meeting on July 23, 2015.

##### **SECTION 106 CONSULTATION**

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. NCPC initiated Section 106 consultation with the District of Columbia State Historic Preservation Office on September 17, 2014. A joint NEPA/Section 106 scoping meeting was held on October 7, 2014, during which the consulting parties were introduced to the alternatives, presented with a draft APE, and invited to provide comments. A public comment period was open from September 17 to October 31, 2014. Additional consulting party meetings were held on November 19, 2014; July 14, 2015; and December 16, 2015 to discuss the alternatives, the potential for adverse effects on historic properties, possible ways to avoid, minimize, and mitigate adverse effects, and request comments. On December 2, 2015, NCPC notified the DCSHPO and the Advisory Council on Historic Preservation of its determination that the rehabilitation and modernization of the MLK Jr. Library would cause adverse effects on the library building and site. As a result, NCPC, DCPL, and DCSHPO are developing a MOA to identify mitigation and resolve adverse effects. The draft MOA has been included as Appendix C.

**DISTRICT DEPARTMENT OF TRANSPORTATION CONSULTATION**

On October 17, 2014, DCPL met with representatives from DDOT to initiate DDOT's Comprehensive Transportation Review (CTR) process. During this meeting there was a general discussion of the need for a traffic impact study and CTR. Additional meetings were held with representatives from DDOT to finalize the CTR Scoping form for the traffic impact study and to review loading dock options for the library. These meetings were held on the following dates:

- March 23, 2015 – Review and submittal of CTR Scoping form
- May 7, 2015 – Review of revised CTR Scoping form and discussions/clarifications on the use of the expanded event space
- July 9, 2015 – Introduction and discussion with DDOT of four loading dock concepts
- October 6, 2015 – Review of DDOT CTR scoping process and review of updated loading dock concepts
- October 19, 2015 – Discussion of loading dock concepts, including possible use of alley between the MLK Jr. Library and adjacent church and the possibility of switching the direction of traffic on G Place, NW.
- Additional meetings were held with NCPC, DCPL, and DDOT regarding the existing parking garage and vehicle ramps. These meetings were held on February 26 and March 29, 2016.

The CTR Scoping form was approved by DDOT following the July 9, 2015 meeting. The draft Traffic Impact Study (Appendix D) includes the results of the traffic analysis and the CTR process.

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## 6. LIST OF PREPARERS

### **DISTRIC OF COLUMBIA PUBLIC LIBRARY**

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