

4.1.12 Infrastructure and Utilities

The following sections describe the affected environment for infrastructure and utilities relevant to the JEH parcel.

4.1.12.1 Water Supply

The District of Columbia Water and Sewer Authority (DC Water), formerly known as DC WASA, was created in the mid-1990s as a quasi-independent authority of Washington, D.C. (DC Water 2015a). DC Water provides water and wastewater services to more than 640,000 residents, 700,000 employees, and 17.8 million visitors per year within its approximately 725 square mile service area. DC Water also provides wastewater treatment for flows from an additional 1.6 million people across parts of Montgomery, Prince George's, Fairfax, and Loudoun Counties in Maryland and Virginia (DC Water 2015b).

The U.S. Army Corps of Engineers (USACE) treats and supplies water to DC Water for distribution via the Washington Aqueduct. Raw water is acquired from the Great Falls and Little Falls intakes on the Potomac River and is treated at the Dalecarlia and McMillan Water Treatment Plants (WTPs). The WTPs treat the raw water using screening; flocculation and sedimentation; rapid sand filtration; and chemical additions for chlorination, fluoridation and pH control. The capacity of the Dalecarlia WTP is 164 million gallons per day (MGD) based on filtration rates of two gallons per minute per square foot (gpm/sf), and a maximum of 264 MGD. The McMillan WTP has an average design capacity of 120 MGD based on a filter design rate of 4 gpm/sf and a maximum capacity of 180 MGD (DC Water 2015c).

DC Water pumps an average of 100 MGD and has the capacity to store 95 million gallons of water at its five reservoirs and three water towers, not including the 41 million gallons within the aqueduct. The design capacity of these WTPs is reportedly greater than the day-to-day demands and peak requirements of the customers (DC Water 2015b).

The JEH building is provided with potable and fire protection water by DC Water and is within the low service area. The low service area is served by the Dalecarlia and Bryant Street pumping stations, and the system pressure within the area is maintained by the Brentwood Reservoir (DC Water 2015d). According to maps provided by DC Water Permit Operations, there are 12-inch water mains along 10th Street, E Street, and the north side of Pennsylvania Avenue. There is also a 20-inch water main along the south side of Pennsylvania Avenue and a 16-inch water main along 9th Street. Based on utility maps provided by DC Water, the building is provided with two, 12-inch service connections along 10th Street. At least two active hydrants are located on each side, all of which are in good working order. System operating pressure in the area is approximately 60 pounds per square inch (psi).

Table 4-30: JEH Parcel Maximum Noise Levels

Zone	Maximum Noise Level (dBA)	
	Daytime	Nighttime
Commercial or light manufacturing zone	65	60
Industrial Zone	70	65
Residential, special purpose, or waterfront zone	60	55

Source: 27 DCR 2701

JEH INFRASTRUCTURE AND UTILITIES AFFECTED ENVIRONMENT OVERVIEW

- The JEH parcel is provided with potable and fire protection water by DC Water and is within the low service area. DC Water also owns the Blue Plains Advanced Wastewater Treatment Plan (AWTP). The DC Water collection and conveyance system consists of 1,800 miles of sanitary and combined sewers and nine wastewater pump stations
- The JEH parcel is within a highly developed urban environment served with wastewater collection and treatment services by DC Water and has wastewater collection adjacent on all sides. Based on available GIS information dated 2006, the JEH building appears to be within DC Water's B Street/New Jersey Avenue (B St/NJ Ave) sewer subshed along the border of the Easby Point sewer subshed.
- The JEH building is provided with electric service by PEPCO. The site is within a highly developed urban environment and currently receives high voltage supply from four 13.2-kilovolt (kV) feeders.
- The JEH building receives natural gas from Washington Gas and cable and high speed internet service from Comcast Cable.
- The JEH building is within the Comcast cable and high-speed internet service area. Secure fiber exists at the site.
- GIS information from 2006 shows that the JEH building borders DC Water's B St/NJ Ave and Easby Point drainage areas, which have combined sewer systems collecting both stormwater and sanitary wastewater.

DUCT BANK

An assembly of conduits designed to protect and consolidate cabling to and from buildings.

4.1.12.2 Wastewater Collection

DC Water owns the Blue Plains Advanced Wastewater Treatment Plant (AWTP), which is the largest advanced treatment facility of its kind with an annual average daily capacity of 370 MGD and a peak wet weather capacity in excess of 1,000 MGD (one billion gallons per day) (DC Water 2015b). As of September 2014, the monthly average influent flow at the Blue Plains AWTP was well below capacity at 263 MGD.

The DC Water collection and conveyance system consists of 1,800 miles of sanitary and combined sewers and nine wastewater pump stations (DC Water 2015e). Approximately one-third of the collection system is combined sewers that predate 1900 that are designed to collect both stormwater and sanitary flows (DC Water 2015f). During significant rain events, the capacity of these combined sewers is exceeded, which results in the discharge of the combined flow directly to the Anacostia River, Rock Creek, the Potomac River, or tributary waters via combined sewer outfalls (CSO). DC Water has 53 CSO outfalls included in the existing National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC0021199) from USEPA. This permit was last modified on May 27, 2014, and expires September 30, 2015 (DC Water 2015e).

The Blue Plains Intermunicipal Agreement, revised in 2012, is an arrangement between Washington, D.C., Montgomery and Prince George's Counties in Maryland, and Fairfax County in Virginia defining the rights, responsibilities, and obligations of the various parties regarding capacity allocation, management of wastewater facilities, and biosolids management (DC Water 2015g).

The JEH parcel is within a highly developed urban environment served with wastewater collection and treatment services by DC Water and has wastewater collection adjacent on all sides. Based on available GIS information dated 2006, the JEH building appears to be within DC Water's B Street/New Jersey Avenue (B St/NJ Ave) sewer subshed along the border of the Easby Point sewer subshed (DC.Gov 2014b). Both are areas of the DC Water collection system with combined sewers (stormwater and sanitary); however, DC Water reports that the area of the JEH building has a localized, separated wastewater system (Bilvardi 2015).

The Low Area Trunk Sewer is a 42-inch diameter brick and concrete pipe along Pennsylvania Avenue adjacent to the building, which is currently in the process of being rehabilitated (DC Water n.d.). Maps provided by DC Water Permit Operations show a 24-inch reinforced concrete pipe sewer along 9th Street that discharges into a 42-inch sewer at the intersection of D Street. The JEH building is provided with wastewater service via a connection to the Low Area Trunk Sewer, which conveys wastewater to the Main and O Street pump stations on its path to the Blue Plains AWTP for treatment. Recent upgrades at the Main and O Street pump stations included replacement of stormwater pumps, various sluice gates, and gate valves; rebuilding and upgrading sanitary pumps; upgrading electrical and ventilation systems; replacing screens and installing a screening handling system; and installing odor control systems (DC Water 2015h).

4.1.12.3 Electric Power

The Potomac Electric Power Company, Inc. (PEPCO), a subsidiary of Pepco Holdings, Inc., serves more than 800,000 residences and businesses in the Washington, D.C., metropolitan area (PEPCO 2015a). PEPCO has a service area of approximately 640 square miles of which 566 square miles is located in Montgomery and Prince George's Counties in Maryland (PEPCO 2015b). PEPCO's bulk transmission system consists of transmission lines operating at 115 kilovolt (kV), 138kV, 230kV, and 500kV. PEPCO has transmission interconnections with Potomac Edison, Baltimore Gas and Electric, and Dominion Virginia Power.

A merger between PHI and the Exelon Corporation is likely in the near future (PHI 2015b). Exelon, which is headquartered in Chicago, currently has subsidiaries in 48 states, the District of Columbia, and Canada (Exelon 2015). According to information available on the PHI website, the merger has been approved by the Federal Energy Regulatory Commission, the Virginia State Corporation Commission, the Delaware Public Service Commission, New Jersey Board of Public Utilities, and Maryland Public Service Commission (PHI 2015b), and PHI stockholders. The Public Service Commission of the District of Columbia rejected the merger in August 2015, which PEPCO and Exelon are currently in the process of appealing (Washington Post 2015). A date for the finalization of the merger is not publicly known at this time.

The JEH parcel is provided with electric service by PEPCO. The site is within a highly developed urban environment and currently receives high voltage supply from four 13.2kV feeders. These high-tension feeders enter the building in a common duct bank fed from a PEPCO subsurface structure located on 9th Street. The current demand for electricity at the JEH building is relatively high, as result of the high energy intensity of information technology equipment associated with FBI HQ operations.

4.1.12.4 Natural Gas

Washington Gas Light Company was founded in 1848 and was the first gas company in the United States chartered by Congress. Since then, Washington Gas has grown to provide natural gas service to more than one million residential, commercial, and industrial customers throughout Washington, D.C., as well as in areas of Maryland and Virginia (Washington Gas 2015a). Washington Gas doesn't not currently provide natural gas to the JEH building.

Maps provided by Washington Gas show that there is a 2-inch service line supplied by a 2-inch gas main along 10th Street, which has an operating pressure of 20 psi based on information obtained from Washington Gas. The information provided also indicates other gas lines adjacent to the building include 12-inch mains along Pennsylvania Avenue and 9th Street, and a 4-inch main along E Street. All of these main are listed as having an operating pressure of 20 psi.

4.1.12.5 Telecommunications

Verizon, RCN, Cox, and Comcast are the major telecommunications service providers in the Washington, D.C., Metropolitan region.

The JEH building is within the Comcast cable and high-speed internet service area. Secure fiber exists at the site.

4.1.12.6 Stormwater Management

GIS information from 2006 shows that the JEH building borders DC Water's B St/NJ Ave and Easby Point drainage areas (DC.Gov 2014b), which have combined sewer systems collecting both stormwater and sanitary wastewater. Stormwater from the JEH parcel is conveyed to DC Water's Blue Plains AWTP. During heavy storms, the combined sewers can overflow, and the overflow capacity is discharged to the Potomac River. The Clean Rivers Project, estimated for completion in 2030, is an ongoing long-term DC Water program to reduce combined sewer overflows.

Maps provided by DC Water Permit Operations show that the JEH building has a 12-inch stormwater lateral that exits the building to the south then turns west along Pennsylvania Avenue before connecting to the 66-inch sewer on 10th Street just south of the intersection. The 66-inch line also receives flow from 60-inch and 48-inch reinforced concrete pipe sewers along 10th Street and E Street, respectively, and discharges into the B St/NJ Ave trunk sewer. The B St/NJ Ave outfall (CSO 010) discharges into the Anacostia River adjacent to the Main and O Street Pump Stations just upstream of the Frederick Douglass Memorial Bridge (DC Water 2015f).

JEH GEOLOGY & TOPOGRAPHY ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: No measurable impacts.

RFDS 2: No measurable impacts.

JEH SOILS ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: No measurable impacts.

RFDS 2: Indirect, short-term, adverse impacts.

4.2 Environmental Consequences

The following sections describe the environmental consequences of the exchange and future redevelopment of the JEH parcel. The real estate transaction (exchange) transferring the JEH parcel from public into private ownership would not have any direct impacts at the same time and place as the Proposed Action. However, indirect impacts would occur later in time (40 CFR 1508.8) as a result of the redevelopment of the JEH parcel. Therefore, indirect impacts are evaluated for the No-action Alternative as well as for RFDS 1 and RFDS 2 for each resource topic. Descriptions of the No-action Alternative as well as the RFDS 1 and 2 under all of the action alternatives are found in section 2.4.4.

The results of the transportation analysis (section 4.2.9) indicate that there are no mitigation measures outside of changes to signal timing. Therefore, the evaluations in the following sections do not consider further indirect impacts from the implementation of these mitigation measures to the other resources.

4.2.1 Earth Resources

The following sections describe the environmental consequences relevant to the future redevelopment of the JEH parcel and associated study areas for earth resources.

EARTH RESOURCES ASSESSMENT OF SIGNIFICANCE

Impacts to earth resources would not result in significant impacts, as defined in section 3.2.3.

4.2.1.1 Geology and Topography

Impacts to geology and topography are evaluated for the No-action Alternative at JEH as well as RFDS 1 and RFDS 2, which are common to all action alternatives evaluated in the EIS.

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts to existing geology or topography because there would be no disturbance to the JEH building and parcel.

RFDS 1

Under RFDS 1, there would be no measurable impacts to geology or topography. Although the interior of the JEH building would be renovated, no changes to the topography or geologic substrate would occur from redevelopment.

RFDS 2

Under RFDS 2, there would be no measurable impacts to topography. Although demolition of the JEH building would occur during construction, it is anticipated that little regrading would be necessary to redevelopment the site. The parcel would remain relatively flat once construction is complete.

Demolition of the current structure and the redevelopment of the parcel, according to the land use controls described in section 4.1.4, would result in indirect impacts to geology. The existing geologic substrate at the parcel would be affected by the demolition of the JEH building and subsequent clearing of the parcel, as well as construction activities associated with its redevelopment. The JEH parcel currently includes underground parking, so there has already been extensive excavation within the parcel. Demolition and construction activities would impact geology primarily through excavation, grading, leveling, filling, compaction, and the drilling of footers. The geologic features at the parcel have been previously disturbed and their natural composition altered by the introduction of artificial fill and the construction of the JEH building, and as such, the redevelopment of the parcel would not affect any features that have not been previously impacted. Given the relatively small land area containing the parcel, and the fact that there would not be a substantial change in site characteristics with the proposed redevelopment, there would be no measurable impacts to geology.

4.2.1.2 Soils

Impacts to soils are evaluated for the No-action Alternative at JEH as well as RFDS 1 and RFDS 2, which are common to all action alternatives evaluated in this EIS.

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts to soils because no ground-altering activities would occur, and therefore no soils would be disturbed.

RFDS 1

Under RFDS 1, there would be no measurable impacts to soils. No soils would be disturbed during the interior renovation of the JEH building.

RFDS 2

Under RFDS 2 there would be indirect, short-term, adverse impacts to soils associated with construction activities. The existing soils at the parcel would be affected by the demolition and subsequent clearing of the parcel, as well as construction activities associated with the redevelopment. Demolition and construction at the parcel would result in the temporary impacts associated with soil disturbance. Construction activities would temporarily compact, expose, disturb, and modify the structure of soils during earth-moving activities, including excavation, grading, leveling, filling, and compaction. These impacts would be limited in geographic extent, and associated with the construction phase only. Soils at the parcel have been previously disturbed, their natural composition altered, and all productivity removed by historic construction activities associated with the JEH building and parcel, and as such, the redevelopment of the parcel would not impact any soils that have not been previously impacted.

The disturbance to the parcel during construction would temporarily expose soils and potentially lead to increased erosion from stormwater runoff; however, all applicable regulations and best management practices would be followed to minimize the potential for adverse impacts stemming from erosion. Stormwater runoff carrying sediment could enter the combined sewer system during overflow events and discharge directly to the Anacostia River, leading to impacts to water quality within that waterway. The exchange partner would be responsible for obtaining required permits in compliance with the Clean Water Act (CWA) and District of Columbia regulations, and for developing any required sediment and erosion control and stormwater pollution prevention plans. The construction activities at the parcel would be required to comply with the District of Columbia stormwater rule under the existing large municipal separate storm sewer system (MS4) National Pollutant Discharge Elimination System (NPDES) permit for stormwater management. Sediment targets are met through a focus on the implementation of urban stormwater management projects outlined in various Watershed Implementation Plans. Implementing best management practices (BMPs), such as the use of silt fencing and erosion matting to minimize erosion of sediment due to stormwater runoff during and following construction.

Over the long term, there would be no measurable impacts because there would be a minimal change in the parcel's soil characteristics. There is the potential for long-term, beneficial impacts to soils as a result of landscaping and low-impact development techniques that could reduce the overall amount of impervious surface and erosion potential at the parcel. The introduction of these landscape elements could also result in soil productivity improvements. The range of beneficial impacts would vary greatly depending on the amount of landscaping and the extent of damage to the soils from previous disturbances and alterations, including construction impacts, all of which are unknown at this time.

4.2.2 Water Resources

Impacts to water resources are evaluated for the No-action Alternative at JEH as well as RFDS 1 and RFDS 2, which are common to all action alternatives evaluated in this EIS.

WATER RESOURCES ASSESSMENT OF SIGNIFICANCE

Impacts to water resources would not result in significant impacts, as defined in section 3.3.3.

4.2.2.1 Surface Water

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts to surface water resources because there would continue to be no surface water features on the parcel.

RFDS 1

Under RFDS 1, there would be no measurable impacts to surface waters because there would continue to be no surface water features on the parcel.

RFDS 2

Under RFDS 2, there would be no measurable impacts to surface water. However, there could be indirect, short-term, adverse impacts to surface water during construction activities. Under RFDS 2, the existing JEH building would be demolished and the parcel would be redeveloped according to land use controls as described in section 4.1.4. The disturbance to the parcel would temporarily expose soils and potentially lead to increased erosion and water quality issues, as described in section 4.2.1.2. Operation of construction equipment increases the likelihood of accidental leaks or spills of fuel, lubricants, or other materials. The exchange partner would be responsible for obtaining required permits, implementing BMPs as described in section 4.2.1.2, and complying with the CWA and District of Columbia regulations. Construction activities at the parcel would be required to comply with the District of Columbia stormwater rule under the existing MS4 NPDES permit for stormwater management to ensure compliance with water quality standards and protect receiving waters from impacts. Through the Chesapeake Bay Total Maximum Daily Load (TMDL), Washington, D.C., has specific sediment and nutrient limits allocated for the urban sector that must be met for water quality standards to be attained within the Chesapeake Bay watershed. Sediment targets are met through a focus on the implementation of urban stormwater management projects that are generally documented in Watershed Implementation Plans. In addition to following a Watershed Implementation Plan, redevelopment of the parcel would also require the implementation of BMPs, such as the use of silt fencing and erosion matting to minimize erosion of sediment due to stormwater runoff during and following construction.

JEH SURFACE WATER ENVIRONMENTAL CONSEQUENCES SUMMARY

- No-action Alternative:** No measurable impacts.
- RFDS 1:** No measurable impacts.
- RFDS 2:** No measurable impacts.

JEH HYDROLOGY ENVIRONMENTAL CONSEQUENCES SUMMARY

-  **No-action Alternative:** No measurable impacts.
-  **RFDS 1:** No measurable impacts.
-  **RFDS 2:** Indirect, short-term, adverse impacts and indirect, long-term, beneficial impacts.

JEH GROUNDWATER ENVIRONMENTAL CONSEQUENCES SUMMARY

-  **No-action Alternative:** No measurable impacts.
-  **RFDS 1:** No measurable impacts.
-  **RFDS 2:** No measurable impacts.

4.2.2.2 Hydrology

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts because there would be no change to hydrology at the JEH parcel.

RFDS 1

Under RFDS 1, there would be no measurable impacts to hydrology. Although the interior of the JEH building would be renovated, no changes to the parcel hydrology would occur.

RFDS 2

Under RFDS 2, the hydrology of the parcel would continue to be composed of stormwater runoff rather than natural surface waters. The exchange partner would be responsible for obtaining required permits in compliance with local stormwater regulations and for developing any required stormwater management plans, as described in sections 4.2.1.2 and 4.2.2.1. Before the enactment of the current stormwater regulations, projects were not required to retain specific volumes of stormwater. Implementation of sediment and erosion control measures, stormwater control and mitigation BMPs such as infiltration basins, as well as low-impact development techniques such as pervious pavement, as required by District of Columbia regulations, would reduce the quantity of stormwater runoff during and after construction. BMPs would minimize indirect, adverse impacts from the future redevelopment of the parcel.

As part of the District of Columbia stormwater management rule (21 DCMR §5 [2013]), actions under RFDS 2 would be considered major land-disturbing and/or major substantial improvement activities. These activities must meet stormwater management performance requirements regulating volumes of stormwater runoff and peak discharge rates that must be maintained during and after construction. A stormwater management plan that outlines the BMPs, land cover, and actions that would be implemented to meet these requirements must be submitted. More information regarding BMPs specific to Washington, D.C., can be found in section 3.3.3.4. Furthermore, low-impact development techniques supported by stormwater management programs and initiatives throughout Washington, D.C., would also reduce the volume of stormwater, particularly stormwater that enters the combined sewer system. There would be no increase in impervious surfaces, and there could be a potential effective decrease in impervious surfaces, given the development requirements in the zoning and stormwater regulations.

In accordance with Federal and District of Columbia regulations, the exchange partner would be required to comply with the District of Columbia stormwater rule under the existing MS4 NPDES permit, and implement BMPs to control stormwater runoff into the Potomac River through the development of appropriate management plans and the use of sediment and erosion control measures. Plans include a stormwater management and pollution prevention plan and a sediment and erosion control plan. Further guidance and strategies for managing stormwater and associated sediment erosion can be found in the various Watershed Implementation Plans associated with the Chesapeake Bay TMDL.

Under RFDS 2, there would be indirect, short-term, adverse impacts to hydrology as a result of temporary alterations in stormwater drainage, and the increased risk of reductions in water quality as a result of construction activities. These impacts would be minimized by compliance with the CWA and District of Columbia stormwater management rule which would require the implementation of BMPs.

After construction is completed, there would be indirect, long-term beneficial impacts to hydrology resulting from implementation of BMPs and low-impact development techniques that were not required when the JEH building was initially constructed, but are currently required for any major land-disturbing projects within Washington, D.C., as described earlier in this section.

4.2.2.3 Groundwater

No-action Alternative

Under the No-action Alternative at JEH, no measurable impacts to groundwater would occur because there would be no construction or other activities that would disturb groundwater within the parcel.

RFDS 1

Under RFDS 1, there would be no measurable impacts to groundwater. Although interior of the JEH building would be renovated, no ground-disturbing activities would occur.

RFDS 2

There is some chance that shallow groundwater resources would be disturbed by the redevelopment of the parcel, and the potential to build additional subterranean levels for parking. The presence of shallow groundwater within the parcel may require dewatering operations to facilitate excavation and grading during construction. Potential impacts to local groundwater resources include modification of groundwater levels through drawdown or diversion of flow; dewatering would result in short-term minor adverse impacts in the vicinity of construction only. Any shallow groundwater resources at the parcel have already been disturbed by the existing development. The exchange partner would implement appropriate measures to prevent any groundwater contamination, including the handling of any hazardous materials used during construction. As described in section 4.1.2.3, groundwater is typically not used as a source of potable water in the District. Should groundwater be needed in support of the new development, the exchange partner would be required to comply with all applicable regulations, including those enforced by the District Department of the Environment and the DC Municipal Regulations Parts 1150–1158 for any groundwater uses.

Permitting requirements that would mitigate impacts to groundwater include an NPDES General Construction Permit for discharges of dewatered groundwater, if necessary. The exchange partner may be required to implement BMPs to prevent contamination of groundwater during construction, including not allowing fuels or other materials to leach into the ground. The stormwater and erosion and sediment control BMPs and low-impact development techniques described in sections also could reduce potential contamination of groundwater.

4.2.2.4 Wetlands

Because there are no wetlands on the JEH parcel, there would be no measurable impacts to wetlands under the No-action Alternative, RFDS 1, or RFDS 2.

4.2.2.5 Floodplains

No-action Alternative

Under the No-action Alternative at JEH, no measurable impacts would occur because there would be no change to the infrastructure or activities occurring within the floodplain at the JEH parcel.

RFDS 1

Under RFDS1, no measurable impacts would occur. Although the interior of the JEH building would be renovated, there would be no changes to the configuration of the structures on the parcel or to parcel topography.

RFDS 2

Under RFDS 2, there would be no measurable impacts to floodplains because the JEH parcel is already currently developed and the floodplain and its associated values have been disturbed. Much of the parcel is located within the 500-year floodplain with a small area of the southern portion of the JEH parcel located within a 100-year floodplain. As described in section 4.1.2.5, the recent completion of the 17th Street levy may result in future floodplain delineations excluding the JEH parcel. Notwithstanding, floodplains and associated functions and values at the parcel have already been disturbed by the existing urban environment of downtown Washington, D.C. GSA

has evaluated the exchange in accordance with GSA's Floodplain Management Desk Guide, which outlines an eight-step process required for actions that stimulate development in a floodplain. GSA would inform the exchange partner that the parcel contains land within the 100-year floodplain. Because the JEH parcel is already developed, there would be no net loss of the beneficial natural values of the floodplain from future redevelopment. The exchange partner would be required to adhere to appropriate building practices for construction in a floodplain, such as not changing the natural flood channel, developing a flood management plan, or adhering to building codes for construction in a floodplain. Therefore, there would be no measurable impacts to floodplains. Public notification regarding the Proposed Action in the 100-year floodplain at the JEH parcel would be provided in the Record of Decision (ROD), and the public would have an additional opportunity to comment on the Final EIS and ROD.

4.2.3 Biological Resources

Impacts to biological resources are evaluated for the No-action Alternative at JEH as well as RFDS 1 and RFDS 2, which are common to all action alternatives evaluated in this EIS.

BIOLOGICAL RESOURCES ASSESSMENT OF SIGNIFICANCE

Impacts to biological resources would not result in significant impacts, as defined in section 3.4.3.

4.2.3.1 Vegetation

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts to vegetation because there would be no disturbance or change to the existing vegetation.

RFDS 1

Under RFDS 1, no measurable impacts would occur to vegetation. Although the interior of the building would be renovated, there would be no disturbance or change to the existing vegetation on the parcel.

RFDS 2

Under RFDS 2, there would be indirect, short-term, adverse impacts to vegetation associated with the removal of vegetation during the construction period. The existing vegetation on the parcel would be removed during construction, and the parcel would be re-landscaped once construction is complete. There is the potential for long-term, beneficial impacts to vegetation as a result of landscaping and low-impact development techniques that could reduce the overall amount of impervious surface and increase the amount of vegetation within the parcel. The range of beneficial impacts would vary greatly depending on the amount of landscaping and the types of vegetation introduced, both of which are unknown at this time. Notwithstanding, it is possible that one or more of the existing rows of street trees could be permanently removed. Therefore, there could be beneficial or adverse impacts under RFDS 2, but there is insufficient information available to make an impact determination at this time.

JEH WETLANDS ENVIRONMENTAL CONSEQUENCES SUMMARY

-  No-action Alternative: No measurable impacts.
-  RFDS 1: No measurable impacts.
-  RFDS 2: No measurable impacts.

JEH FLOODPLAIN ENVIRONMENTAL CONSEQUENCES SUMMARY

-  No-action Alternative: No measurable impacts.
-  RFDS 1: No measurable impacts.
-  RFDS 2: No measurable impacts.

JEH VEGETATION ENVIRONMENTAL CONSEQUENCES SUMMARY

-  No-action Alternative: No measurable impacts.
-  RFDS 1: No measurable impacts.
-  RFDS 2, Indirect, short-term, adverse impacts.

JEH AQUATIC SPECIES ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: No measurable impacts.

RFDS 2: No measurable impacts.

JEH TERRESTRIAL SPECIES ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: No measurable impacts.

RFDS 2: Indirect, short-term, adverse impacts.

JEH SPECIAL STATUS SPECIES ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: No measurable impacts.

RFDS 2: No measurable impacts.

4.2.3.2 Aquatic Species

Because there are no aquatic species on the parcel, and no water resources in the immediate vicinity that could be affected by development activities, there would be no measurable impacts to aquatic species under the No-action Alternative, RFDS 1, or RFDS 2 at the JEH parcel.

4.2.3.3 Terrestrial Species

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts to terrestrial wildlife because there would be no construction activities, nor would there be any change to the amount of habitat on the parcel.

RFDS 1

Under RFDS 1, no measurable impacts would occur to terrestrial wildlife. Although the interior of the JEH building would be renovated, there would be no exterior construction activities and no change to the amount of habitat on parcel.

RFDS 2

Under RFDS 2, there would be indirect, short-term, adverse impacts to terrestrial species. There are currently few terrestrial species present on the JEH parcel due to a lack of suitable habitat. The little habitat for small urban animal species that currently exists on the parcel would be removed during construction. Additionally, the noise produced from construction activities may disturb terrestrial species on adjacent land, causing them to temporarily relocate. Once construction is complete, populations of urban terrestrial species would likely return to the parcel and its environs. There is the potential for long-term, beneficial impacts to terrestrial species as a result of landscaping and low-impact development techniques that could increase the amount and quality of suitable habitat within the parcel. The range of beneficial impacts would vary greatly depending on the amount of landscaping and the types of vegetation introduced, both of which are unknown at this time.

4.2.3.4 Special Status Species

No special status species occur at the parcel, therefore there would be no measurable impacts to special status species under the No-action Alternative, RFDS 1, or RFDS 2 at the JEH parcel.

4.2.4 Land Use, Planning Studies, and Zoning

LAND USE, PLANNING STUDIES, AND ZONING ASSESSMENT OF SIGNIFICANCE

Impacts to land use and zoning would not result in significant impacts, as defined in section 3.5.3.

4.2.4.1 No-action Alternative

Under the No-action Alternative at JEH, no new measurable impacts are expected because there would be no change to the JEH parcel that would alter existing land use or zoning. The development on the parcel would continue to disagree with certain objectives of the PAP.

4.2.4.2 RFDS 1

Under RFDS 1, there would be indirect, long-term, adverse impacts to land use. Although the interior of the JEH building would be renovated, minimal exterior alterations would be made, and the parcel would be rezoned to D-7. The continued existence of the JEH building in its current configuration would continue to disagree with some planning principals for this portion of Pennsylvania Avenue, namely the stimulation of street life, diversity of uses, and the lack of pedestrian access through the parcel, especially with regards to the closed D-Street right-of-way (ROW), which is part of the original L'Enfant Plan.

4.2.4.3 RFDS 2

Under RFDS 2, there would be indirect, long-term, beneficial impacts to land use. The existing JEH building would be demolished and the parcel would be redeveloped according to land use controls as described in section 4.1.4. The parcel would contain multiple buildings with pathways between them for improved pedestrian access. There would be a mix of commercial and residential uses with ground floor retail space. A mixed-use development would align with the goals of land use plans in the area, including the District and Federal Elements of the Comprehensive, the Pennsylvania Avenue Plan, the Pennsylvania Avenue Initiative, and Extending the Legacy: Planning America's Capital for the 21st Century. Additionally, the redevelopment of the JEH building would align with the streetcar Land Use Study by providing increased programming that would contribute to the increased use of the potential streetcar development in downtown Washington, D.C. The addition of residential properties would increase programming in the neighborhood, enhance the economic vitality of the surrounding commercial uses, and contribute to a pedestrian friendly streetscape.

RFDS 2 would be consistent with limits on building heights, setbacks, density, and use found in the proposed DCOP D-7 zoning, and the Height of Buildings Act. Additionally, an Amendment to the PAP and subsequent development of Square Guidelines, currently underway, would ensure that future development of the parcel is consistent with the land use, historic preservation and design goals of the Avenue.

4.2.5 Visual Resources

VISUAL RESOURCES ASSESSMENT OF SIGNIFICANCE

Impacts to land use and zoning would not result in significant impacts, as defined in section 3.6.3.

4.2.5.1 No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impact to visual resources because the defining visual characteristics and aesthetics of the JEH building would not be altered. The D Street ROW would continue to be hindered, and Pennsylvania Avenue would continue to undulate.

4.2.5.2 RFDS 1

Under RFDS 1, there would be no measurable impact to visual resources. Although the interior of the JEH building would be renovated, no exterior alterations that would alter its visual character would occur. The D Street ROW would continue to be hindered, and Pennsylvania Avenue would continue to undulate.

4.2.5.3 RFDS 2

Under RFDS 2, the existing JEH building would be demolished and the parcel would be redeveloped according to the following land use controls:

- the PAP General Guidelines and Square Guidelines, currently in the process of being updated;
- the Height of Buildings Act; and
- proposed D-7 zoning regulations, which would permit the highest density commercial development achievable under the Height of Buildings Act. This change in zoning would reinforce Pennsylvania Avenue's role as a physical and symbolic link between the White House and the U.S. Capitol while also promoting concentrations of retail to reinforce the area's historic role as a center for retail commerce.

Currently, the JEH building has a fortress-like façade that is not consistent with the historical and cultural character of the area. As a result of the historic preservation, planning, and design principles that would be included in future Square Guidelines, the redevelopment of this parcel under RFDS 2 would ensure future development is more consistent with the unique historical and cultural character of the area than the existing structure. Notably, the reintroduction of D Street as a pedestrian ROW would better align the parcel's development with the L'Enfant Plan.

Views of the JEH parcel along Pennsylvania Avenue from the U.S. Navy Memorial Plaza, Market Square, National Archives, the Department of Justice, Old Post Office building, Evening Star building, and the William Jefferson Clinton Federal building would remain largely consistent with current views. This was determined by comparing the RFDS parameters to the characteristics of the existing building, and qualitatively identifying any changes that would result in impacts. Depending on the setback requirements elucidated in the Square Guidelines, the building setback along Pennsylvania Avenue NW, 9th Street NW, 10th Street NW, and E Street NW may decrease, however it is anticipated that the changes would be consistent with the overall visual character of the area, and that these changes would not cause the buildings to encroach into existing ROWs such that views are adversely impacted. Views from adjacent buildings into the parcel along the surrounding streets, including views from Ford's Theatre would also remain consistent with current views. Other prominent locations with currently limited views of the JEH parcel along 9th, 10th, and E Streets NW include the Smithsonian National Museum of Natural History and the National Mall. Views of the JEH parcel from these locations could be more prominent as taller buildings would potentially be allowed closer to the Avenue.

Under RFDS 2, there would be indirect, long-term, beneficial impacts to visual resources due to the anticipated improvements in aesthetic and visual quality of the redevelopment. There could be indirect, long-term, adverse impacts due to increased height and reduced setbacks of the redevelopment, however the development of a Plan Amendment and Square Guidelines would mitigate or avoid these adverse impacts.

JEH LAND USE AND ZONING ENVIRONMENTAL CONSEQUENCES SUMMARY

-  **No-action Alternative:** No measurable impacts.
-  **RFDS 1:** Indirect, long-term, adverse impacts.
-  **RFDS 2:** Indirect, long-term, and beneficial.

JEH VISUAL RESOURCES ENVIRONMENTAL CONSEQUENCES SUMMARY

-  **No-action Alternative:** No measurable impacts.
-  **RFDS 1:** No measurable impacts.
-  **RFDS 2:** Indirect, long-term, beneficial impacts.

JEH ARCHAEOLOGICAL RESOURCES ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: No measurable impacts.

RFDS 2: No measurable impacts.

JEH HISTORIC RESOURCES ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: No measurable impacts.

RFDS 2: No measurable impacts.

4.2.6 Cultural Resources

CULTURAL RESOURCES ASSESSMENT OF SIGNIFICANCE

Impacts to cultural resources would not result in significant impacts, as defined in section 3.7.3.

4.2.6.1 Archaeological Resources

No-action Alternative

Under the No-action Alternative at JEH, no measurable impacts to archaeology would occur because there would be no excavation or other ground-disturbing activities at the JEH parcel.

RFDS 1

Under RFDS 1, there would be no measurable impacts to archaeology. Although the interior of the JEH building would be renovated, no excavation or other ground-disturbing activities would occur.

RFDS 2

Under RFD2, there would be no measurable impacts. Although there would be subsurface excavation, the parcel has previously been excavated and the potential for extant archaeological resources on the parcel is extremely low.

Should there be an unanticipated discovery of archaeological resources during construction, a stipulation of the Section 106 PA would require additional consultation with the DC SHPO and other parties through the standard review process under 36 CFR §800. Through this ongoing process, it is assumed that any impacts to archaeological resources would be avoided or mitigated to the extent that they would be negligible.

4.2.6.2 Historic Resources

No-action Alternative

Under the No-action Alternative, no measurable impacts to historic resources would occur because the JEH parcel would remain in government ownership and the site would not be redeveloped.

RFDS 1

Under RFDS 1, there would be no direct impacts as a result of the exchange of the JEH parcel because the JEH building is not historic. Additionally, there would be no measurable indirect impacts to historic resources. Although the interior of the building would be renovated, there would be no alteration to the existing form and massing of the JEH building, and a regulatory and review processes exists to ensure consistency with the historic context of the Pennsylvania Avenue NHS and other historic resources.

RFDS 2

Similar to RFDS 1, under RFDS 2 there would be no direct impacts from the exchange of the JEH parcel as the JEH building is not historic. Under RFDS 2, there would be the potential for indirect impacts to historic properties within the area of potential effect as the exchange could ultimately result in the redevelopment of Squares 378 and 379 which sits within the Pennsylvania Avenue NHS and adjacent to numerous national historic districts. To address potential indirect impacts that could result a procedural Section 106 Programmatic Agreement (PA) will be developed. The procedural PA will outline regulations and other legally enforceable processes already in place to ensure redevelopment avoids, minimizes, and mitigates potential impacts; should these conditions not be met, the PA will outline a process for reinitiating Section 106 consultation. The PA among GSA, NCPC, NPS, the U.S. Commission of Fine Arts (CFA), the DC SHPO and other signatory consulting parties, would require the development of a Plan Amendment to the PAP and Square Guidelines for Squares 378 and 379 prior to the exchange of the parcel. Due to its location within the Pennsylvania Avenue NHS and the jurisdictional boundaries of the Shipstead-Luce Act, the redevelopment of the parcel under this scenario would require review and permitting approval by the D.C. Historic Preservation Review Board and CFA. All modifications made to the property by the exchange partner after exchange would be reviewed for their conformity to the PA, Plan Amendment, Square Guidelines, and the PAP by GSA and NCPC under Section II of the 1996 PADC MOA. Renovation of the existing building would be subject to other local regulatory processes that would require alterations conform to local design, historic preservation, zoning and other regulations.

Under RFDS 2, there could be indirect, long-term, adverse impacts to historic properties because the existing character of the area would be altered. However, these potential impacts would be avoided by the enforcement of the Section 106 PA, which outlines the regulatory and review processes described in this section, including the enforced conformity to Square Guidelines, PAP, and other regulations.

4.2.7 Socioeconomic and Environmental Justice

SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE ASSESSMENT OF SIGNIFICANCE

Impacts to socioeconomic and environmental justice would not result in significant impacts, as defined in section 3.8.3.

Impacts related to changes in population and demographics as a result of the proposed JEH alternatives (RFDS 1 and RFDS 2) are considered in the context of the local economy of Washington, D.C., and the Washington, D.C., MSA. Impacts to businesses that provide services to residents and commuters, such as retail establishments, food facilities, and others are evaluated qualitatively. Impacts to tax revenues, population, housing, schools, and community facilities and services of Washington, D.C., and the Washington, D.C., MSA are all described qualitatively. Benchmarks for some impacts, such as impacts to construction employment, have been created by identifying the greatest annual change over a recent historical period to create a quantitative threshold for the magnitude of impacts on each resource. For this analysis, it is assumed that the employees who would work in commercial space in the JEH building under alternatives RFDS 1 and 2 already work in Washington, D.C., live in the MSA, and would not relocate their permanent residences when their workplace relocates to the JEH parcel.

4.2.7.1 Population and Housing

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts to population or housing in the Washington, D.C., MSA because there would be no change in the location of FBI HQ facilities or employees, and no major construction would take place on the JEH parcel.

RFDS 1

Under RFDS 1, there would be no measurable impact to population or housing in Washington, D.C., or the Washington, D.C., MSA. The FBI would vacate the JEH parcel and the parcel would remain empty of operational employees during the renovation period. During the future operational period of the building, the total workforce would be similar to the current building's employed workforce. Therefore, the approximate net change in workforce as a result of the renovation of the building would be zero. Because the employed workforce of the building would not change from the Existing Condition and because all new employees are expected to currently reside in the Washington, D.C., MSA and not relocate their permanent residence as a result of this redevelopment scenario, there would be no measurable impact to population or housing in Washington, D.C., or the Washington, D.C., MSA.

RFDS 2

Construction of the new 1,066 residential units under this scenario would lead to a direct increase in the population and housing of Washington, D.C., and the Washington, D.C., MSA. Each new residential unit is expected to be 750 SF. This analysis assumes two occupants would inhabit each unit. Thus, if each unit was occupied, this would increase the population in Washington, D.C., and the Washington, D.C., MSA by 0.34 percent and 0.04 percent, respectively, from their 2013 populations. This population increase is less than the greatest year-over-year population change in recent history, between 2009 and 2010 in Washington, D.C., at 2.6 percent and between 2005 and 2006 in the Washington, D.C., MSA at 3.3 percent. This change in population would result in an indirect and long-term impact to the local population. The level of impact and the adverse or beneficial nature of the impact resulting from a change in population are discussed in the following section because a change in population impacts housing, employment, income, recreation, and community services in different ways.

Under this scenario, available housing would increase in Washington, D.C., and the Washington, D.C., MSA by 0.4 percent and 0.05 percent, respectively. In recent history, the greatest year-over-year increase in housing vacancy occurred between 2009 and 2010 in Washington, D.C. (23.9 percent) and between 2005 and 2006 in the Washington, D.C., MSA (1.8 percent). The latest total housing vacancy statistics for these two areas are shown in section 4.1.7.1. The increase associated with the addition of 1,066 housing units under this scenario would be less than both of these historical extreme changes and would make up less than one percent of all vacant housing in both Washington D.C. and the Washington, D.C. MSA.

JEH POPULATION & HOUSING ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: No measurable impacts.

RFDS 2: Indirect and long-term impacts to population; insufficient information available to determine the impacts to the homeownership and rental markets.

JEH EMPLOYMENT & INCOME ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: indirect, short-term, beneficial impacts.

RFDS 2: Indirect, short- and long-term, beneficial impacts to employment and income; indirect, short-term, adverse impacts to sales, income, and employment.

As this housing unit increase would provide more housing for local residents, this could lead to a slight decrease in housing prices by increasing housing supply. Therefore, this alternative could result in indirect, short-term, beneficial impacts to homebuyers, and, conversely, result in adverse impacts to home sellers due to increased housing supply in the local market. Should the units be marketed as rental units, similar beneficial and adverse impacts could occur to renters and landlords, respectively. Since the number of residential units that would be owner- or renter-occupied is unknown at this time, there is insufficient information available to determine the impacts to the homeownership and rental markets under this alternative.

In addition to new housing, new ground-floor retail establishments would be added to the site. These new retail establishments would likely be staffed predominantly by individuals who already reside in Washington, D.C., or the Washington, D.C., MSA. However, some staff members at these businesses, such as owners and managers, would likely relocate to Washington, D.C., or the Washington, D.C., MSA to operate these retail stores.

Under RFDS 2, there would be indirect and long-term impacts to population, as population would increase in Washington, D.C., and the Washington, D.C., MSA. There would be both beneficial and adverse impacts to housing. There would be indirect, short-term, beneficial impacts to homebuyers because housing prices would be reduced, and indirect, short-term, adverse impacts to home sellers because their home prices, independent of other factors affecting home prices, would be reduced.

4.2.7.2 Employment and Income

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts to employment or income in Washington, D.C., or the Washington, D.C., MSA because the number of employees at the parcel would not change, and economic development, employment, and income changes associated with construction activities and redevelopment would not occur under this scenario.

RFDS 1

Because the JEH building would undergo interior renovations, there would be impacts resulting from localized construction worker spending and construction employment under RFDS 1.

Renovation and Operations-related Spending

For the purpose of this analysis, it is assumed that a majority of renovation-related spending associated with the interior renovation of the JEH building would occur within the Washington, D.C., MSA. All renovation spending is assumed to be new dollars spent in the Washington, D.C., MSA. Impacts to business sales, employment, and income would have indirect impacts to the local economy. These new dollars spent on renovation at the parcel would result in indirect impacts on business sales, employment and employee income. This spending and the impacts from this spending would be primarily concentrated within the construction industry. Indirect impacts would occur from purchases of goods and services and salary payments by businesses that have been contracted to support or provide materials for the renovation under this scenario. Induced impacts would occur throughout Washington, D.C., and the Washington, D.C., MSA as a result of spending by employees receiving incomes as result of this project.

Once renovation is complete and operation of the JEH building recommences, daily expenditures by employees and office-related spending on maintenance and office supplies and services would be similar to current levels. Because the parcel would continue to support approximately the same number of employees during a regular work week relative to existing conditions, operations-related spending would have no measurable impact to employment or income in Washington, D.C., or the Washington, D.C., MSA.

Overall, there would be indirect, short-term, beneficial impacts to employment and income within Washington, D.C., and the Washington, D.C., MSA as a result of construction-related spending, and no measurable impacts to employment and income within Washington, D.C., and the Washington, D.C., MSA as a result of operations-related spending.

Renovation Employment

The construction sector, which includes employment in renovation, is considerable in the Washington, D.C., MSA; it comprised 4.6 percent (181,745 jobs) of all of jobs in the Washington, D.C., MSA in 2011, the latest year in which jobs in this industry were disclosed (BEA 2013). In Washington, D.C., the number of construction industry jobs comprised approximately 3 percent of all jobs in 2013. The total number of jobs in the construction industry in the Washington, D.C., MSA was approximately 11 times larger than the number of jobs in the construction industry in Washington, D.C.

The largest year-over-year increase (10 percent) in construction jobs in the Washington, D.C., MSA occurred between 2005 and 2006 (BEA 2013). The greatest year-over-year negative change in construction employment in the Washington, D.C., MSA occurred between 2007 and 2008 with an approximate 15 percent decrease in construction full-time and part-time jobs (BEA 2013). This represents a loss of 38,044 jobs in the Washington, D.C., MSA.¹

¹ BEA data on construction jobs in the Washington, D.C., MSA for 2012 and 2013 was not available so the historic year-to-year change was identified only for 2001 to 2011.

RFDS 1 is expected to require approximately 2.4 million gross square feet (GSF) of renovation. According to the St. Elizabeths EIS, this level of renovation would require 6,720 full-time equivalent construction workers for a one-year period. These workers would earn an average salary of approximately \$46,900, resulting in approximately \$315 million in construction wages that would result directly from project spending. However, it is not likely that all 6,720 construction workers would be employed for only one year and, instead, the project would occur over multiple years which would reduce the impact to the local construction workforce.

MWCOG expects employment in the construction industry in Washington, D.C., to grow by 202 jobs per year until 2020. When this growth is extrapolated to the Washington, D.C., MSA, it is anticipated that 962 new jobs would be created annually until 2020 within the Washington, D.C., MSA. As the greatest historical year over year increase in construction jobs resulted in an increase of 22,000 construction jobs and as the maximum one year increase in construction laborers associated with this project is anticipated to be approximately 6,720 laborers, it is anticipated that the local construction labor pool could provide these workers. While it is anticipated that the majority of the construction workers would come from the Washington, D.C., MSA, due to the amount of future construction planned for the area, it is likely that some workers could relocate to the Washington, D.C., MSA as a result of RFDS 1. In addition, some specialized renovation workers may temporarily relocate to the Washington, D.C., MSA during the renovation period to fill jobs that cannot be filled by the local construction laborer pool. Any temporary relocation of construction workers to the Washington, D.C., MSA would have indirect, short-term, beneficial impacts to the local lodging and food and beverage sectors as these renovation workers spend their income in the Washington, D.C., MSA.

Some local businesses located near the JEH parcel could be impacted as a result of a gap in full-time employment at the JEH building during the renovation period and interruptions to foot traffic caused by the renovation. This could result in lost sales and income to these businesses.

Operations Employment

Under RFDS 1, there would be no measurable impact to employment and income from operations employment because the employed workforce of the redeveloped JEH building would not change from the Existing Condition, the operations-workforce is expected to currently reside in the Washington, D.C., MSA, and it is not anticipated that these workers would relocate their permanent residence as a result of this scenario.

RFDS 2

Under RFDS 2. There would be indirect, long-term, beneficial operations- and retail-related spending impacts to employment and income in Washington, D.C., and the Washington, D.C., MSA. Residents who relocate to Washington, D.C., or the Washington, D.C., MSA from outside of these two areas would have indirect, long-term, beneficial impacts on income, sales, and employment in Washington, D.C., and the Washington, D.C., MSA as a result of their spending on rent, food, and other services.

Construction, Commercial and Retail Operations, and Residential-related Spending

Impacts to sales, employment, and income occurring as a result of construction spending under RFDS 2 would be similar to, but greater than those described for RFDS 1. A larger construction workforce would be required under this scenario than under RFDS 1. Therefore, it is assumed that short-term impacts to business sales, employment, and income in Washington, D.C., and the Washington, D.C., MSA, resulting from spending of construction dollars, would be greater under this scenario than under RFDS 1.

Commercial and retail operations-related spending would be slightly greater than the operations-related spending described under RFDS 1 because RFDS 2 would add retail shops to the bottom level of the JEH parcel which would increase the amount of retail-related spending associated with the JEH parcel relative to RFDS 1. This would result in indirect, long-term, beneficial operations- and retail-related spending impacts to employment and income in Washington, D.C., and the Washington, D.C., MSA. Therefore, there would be indirect, short- and long-term, beneficial impacts to employment and income in Washington, D.C., and the Washington, D.C., MSA as a result of construction-related spending and operations- and retail-related spending.

The new 1,066 residential units would be home to approximately 2,100 people who would spend their income in Washington, D.C., and the Washington, D.C., MSA. Residents who relocate to Washington, D.C., or the Washington, D.C., MSA from outside of these two areas would have indirect, long-term, beneficial impacts on income, sales, and employment in Washington, D.C., and the Washington, D.C., MSA as a result of their spending on rent, food, and other services.

Construction Employment

Impacts to construction employment occurring as a result of construction spending under RFDS 2 would be similar to, but greater than, those described under RFDS 1 because a larger construction workforce would be required under this scenario. RFDS 2 is expected to generate approximately 183,000 more GSF of construction space than RFDS 1. This would result in a total employment of 7,232 full-time equivalent construction workers for a one-year period. This would result in approximately \$339 million in construction wages that would result directly from project spending. This increase in total employment and income associated with construction labor is about eight percent higher under RFDS 2 relative to RFDS 1.

**JEH TAXES
ENVIRONMENTAL CONSEQUENCES
SUMMARY**

No-action Alternative: No measurable impacts.

RFDS 1: Indirect, long-term, beneficial impacts to tax revenues. Indirect, short-term, beneficial impacts to sales and income tax revenues.

RFDS 2: Indirect, long-term, beneficial impacts to tax revenues; indirect, short-term, beneficial impacts to sales and income tax revenues.

Similar to RFDS 1, a majority of the construction workforce under this scenario are anticipated to come from the Washington, D.C., MSA and are not anticipated to relocate to the Washington, D.C., MSA as a result of this scenario. However, due to the amount of future construction planned for the area, it is likely that some workers could relocate to the Washington, D.C., MSA as a result of RFDS 2 and that the amount of workers that could relocate would be slightly greater under this scenario than under RFDS 1.

Additionally, similar to the RFDS 1, some specialized construction workers may relocate temporarily to the Washington, D.C., MSA during the construction period. This relocation would have indirect, short-term, beneficial impacts to the local lodging and food and beverage sectors as specialized workers spend their income in the Washington, D.C., MSA. It is likely that construction employment levels, including local construction workers, and the total cost of this project would be higher under this scenario than under RFDS 1. The impacts to local construction employment would depend on the total cost and anticipated construction employment, which are unknown at this time.

Similar to RFDS 1, some local businesses located near the JEH parcel could be impacted as a result of a gap in full-time employment at the JEH building during the construction period and interruptions to foot traffic caused by the construction. This would result in lost sales and income to these businesses that would likely be greater than impacts described under RFDS 1 as the construction period under RFDS 2 is expected to last longer than the renovation period under RFDS 1. This would result in indirect, short-term, adverse impacts to businesses near the JEH parcel.

Commercial and Retail Operations Employment

Under RFDS 2, the employed operations workforce would be slightly greater relative to RFDS 1, as a result of ground-floor retail operations. Employment associated with the commercial space in the JEH building would not change from the Existing Condition. This increase in the employed operations workforce would result in an indirect, long-term, beneficial impact to employment in Washington, D.C., and the Washington, D.C., MSA.

4.2.7.3 Taxes

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts to tax revenues in Washington, D.C., or the Washington, D.C., MSA because the JEH parcel would remain under the ownership of the Federal Government. This would mean that Washington, D.C., would continue to not receive property tax revenues from this parcel. There would be no employment of construction workers or spending on construction to generate sales or income taxes, and there would be no change in population or employment levels after construction to impact sales or income taxes.

RFDS 1

The transfer of the JEH parcel from a Federally owned parcel to a privately owned parcel would result in an increase in property tax revenues to Washington, D.C. Currently, no property taxes are collected on the site. Once the parcel is privately owned, property taxes can be collected.

There may be some impacts to income and sales taxes in Washington, D.C., and the Washington, D.C., MSA during the renovation period from income taxes that could be applied to the income of construction workers and sales taxes that could be applied to goods and services that are procured to support the renovation of the JEH building. This could result in indirect, short-term, beneficial impacts to sales and income tax revenues, respectively, for Washington, D.C. and Washington, D.C., MSA.

There would be no operations-related impacts to income and sales taxes because the workforce in the JEH building would remain approximately the same relative to the no action alternative, and the operations-related employees are not anticipated to relocate their permanent residences under this alternative. Therefore, there would be no measurable long-term impact to sales and income taxes under this scenario.

RFDS 2

Impacts to property taxes resulting from the transfer of the JEH parcel from a Federally owned parcel to a privately owned parcel would be the same as those described under RFDS 1.

Impacts to sales and income tax revenues for Washington, D.C., and the Washington, D.C., MSA, as a result of spending on the demolition and construction of the JEH parcel would be similar to but greater than those described under RFDS 1 because spending on demolition and construction under RFDS 2 is anticipated to be greater than spending on renovation under RFDS 1, resulting in comparably greater indirect, short-term, beneficial impacts to sales and income tax revenues.

Operations-related tax revenue impacts resulting from the income taxes of those employed in the commercial space in the new facility would be the same as those impacts described under RFDS 1 because the number of employees and the assumptions about the primary residences of those employees would remain the same under this scenario relative to RFDS 2. There would be no measurable long-term impact to sales and income taxes as a result of operation-related spending under this scenario.

There would be an increase in sales and income tax revenues to Washington, D.C., as a result of sales at the new retail and residential units under this scenario. Additionally, any products purchased within Washington, D.C., by individuals who relocated there, and any incomes earned by those same individuals would generate sales and income taxes for Washington, D.C. These increases in sales and income taxes in Washington, D.C., revenues would result in indirect, long-term, beneficial impacts.

4.2.7.4 Schools and Community Services

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impact to schools or community services because there would be no consolidation of the FBI HQ at a new site and no construction activities at the JEH parcel.

RFDS 1

While some specialized renovation workers may temporarily relocate to the Washington, D.C., MSA under this scenario, the majority of renovation workers are not expected to relocate. Over the long-term, the amount of future employees would not change from existing conditions, and all future employees likely reside in the Washington, D.C., MSA currently. Given the central location of the JEH parcel, it may be reasonably assumed that future employees would not relocate their permanent residence as a result of this development scenario. Therefore, no measurable impacts to local community services or schools would occur as a result of renovation or operations-related workforce employment.

The interior renovation of the JEH building is expected to result in a localized, incremental increase in demand for community services during renovation. The capacity of community services to respond to requests for assistance at the parcel likely already exists given its urban nature and the concentration of businesses already in the area. In particular, the progressively improved response times of the Washington, D.C. Metropolitan Police Department over the past two years indicate that this police force's capacity to respond to incidents has recently increased. However, there is insufficient information available at this time to determine these impacts as the amount of additional demand that would be placed on community services during the construction period is unknown.

RFDS 2

Impacts to schools and community services that would occur during the demolition and construction period under this scenario are similar to the impacts described during the renovation period under RFDS 1. However, impacts to police services, fire and emergency services, and medical facilities under this scenario would likely be slightly greater than those described under RFDS 1 because the construction activities would be of a larger magnitude and higher cost under RFDS 2, which could correlate with potentially greater adverse impacts to these community services. However, there is insufficient information available at this time to determine these impacts as the amount of additional demand that would be placed on schools and community services during the construction period is unknown.

The development of retail establishments and residential units under RFDS 2 would have a greater impact to schools and community services than the impacts described for RFDS 1 because the number of people occupying the site during the operational period would increase, as a result of employment at the retail establishments and the new residential population. This increased population would result in an increased number of school children and an increased use of community services.

The District of Columbia Public Schools currently enrolls 65,270 students. Current statistics provided by the U.S. Census indicate that 1 in every 14 persons in the census tract around RFDS 2 is a child. If all of these children attend schools then the local school population would grow by less than one percent as result of this scenario. Furthermore, it is likely that some of the future occupants of these units already live in Washington, D.C., and their relocation would not have an impact to the local school system. Impacts to schools, as a result of people relocating from outside Washington, D.C. and moving into these residential units is anticipated to result in an indirect, short-term, adverse impact to schools while schools adjust to this change in student population. Additionally, as public schools in Washington D.C. are currently underutilized (DCPS 2015) and schools would adjust over time to compensate for changes in enrollment, there would likely be no measurable impacts to schools. However, there is insufficient information available at this time to determine the long-term impacts that would occur to schools as the amount of additional demand that would be placed on schools as a result of this scenario is unknown.

Police services, fire and emergency services, and medical facilities in Washington, D.C., and the Washington, D.C., MSA would be impacted by those individuals that relocate from outside Washington, D.C., and the Washington, D.C., MSA to these residential units. The potential for indirect, adverse impacts would occur only while these services adjust to increases in the total serviced population. Over time, the income and property taxes paid by these new residents would be used to increase funding for community services in Washington, D.C., which would then be used to increase the service levels of these services, thereby avoiding long-term, adverse impacts resulting from the increased population at the parcel.

JEH SCHOOLS & COMMUNITY SERVICES ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

RFDS 1: Insufficient information available to determine impacts to community services. No measurable impacts to schools.

RFDS 2: Insufficient information available to determine impacts to community services and no measurable impacts to schools in the short-term. Short-term impacts to community services during the operational period while these services adjust to a change in serviced population. Insufficient information available to determine long-term impacts to schools.

**JEH RECREATION & OTHER
COMMUNITY FACILITIES
ENVIRONMENTAL CONSEQUENCES
SUMMARY**

Under the No-action Alternative, there would be no measurable impacts to recreation and community facilities.

Under both redevelopment scenarios, there is insufficient information available to determine impacts to recreation and other community facilities.

**JEH ENVIRONMENTAL JUSTICE
ENVIRONMENTAL CONSEQUENCES
SUMMARY**

No-action Alternative: No measurable impacts.

RFDS 1: No long-term adverse impacts to minority or low-income communities.

RFDS 2: No long-term adverse impacts to minority or low-income communities.

**4.2.7.5 Recreation and Other Community
Facilities**

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impact to recreation resources or community facilities because there would be no change in visitation to local parks, recreation centers, gyms, or other community facilities in the area surrounding the JEH parcel.

RFDS 1

Under RFDS 1, there could be a gap in full-time employment at the JEH building during the renovation period which would result in a temporary, slight decrease in visitation to local parks, recreation centers, gyms, or other community facilities. This impact could be short-term and both adverse and beneficial. Adverse impacts could result from visitors spending less income at these resources during the renovation period, and beneficial impacts could result to other recreation and community facilities users as a result of visitors using less of these facilities during the renovation period. Once the renovated building is re-opened, visitation and use of recreational facilities and other community facilities in proximity to the JEH parcel resulting from the redevelopment of this site would likely not measurably change from the existing conditions. However, there is insufficient information available at this time to determine the impacts that would occur to recreation and other community facilities at this site.

RFDS 2

Short-term impacts under this scenario would be the same as those described for RFDS 1, likely resulting in both adverse and beneficial impacts to local parks, recreation centers, gyms, and other community facilities during the demolition and redevelopment of the JEH parcel. Over the long-term, there could be greater visitation at recreation resources and other community facilities under this scenario as a result of the use of these resources and facilities by employees and visitors of the building's new retail establishments and residential units. The increased use of nearby community facilities as compared to the No-action Alternative, could also have both beneficial and adverse impacts. Given the increase in population at the parcel, there exists the potential for overuse of recreational resources and community facilities. As part of its long range planning, the companies and Washington, D.C. agencies that manage these facilities could explore adding capacity to existing facilities if they determine adequate demand exists. There could be beneficial impacts as a result of retail employees, retail visitors, and residential unit occupants spending their income at these resources and facilities. However, similar to the RFDS 1 scenario, there is insufficient information available at this time to determine the impacts that would occur to recreation and other community facilities.

4.2.7.6 Environmental Justice

Of the 18 census tracts within 1 mile of the JEH parcel in Washington, D.C., there are two tracts with relatively high minority populations, five tracts with more than 20 percent of their populations living below poverty, and one tract that meets both criteria. Therefore, slightly less than half of the census tracts within 1 mile of the JEH parcel contain sensitive communities.

No-action Alternative

Under the No-action Alternative at JEH, there would be no measurable impacts to sensitive populations because there would be no changes to employment, housing, income, population, schools or community services in Washington, D.C., or the Washington, D.C., MSA.

RFDS 1

The internal renovations of the current JEH building would create construction-related jobs in the short-term, resulting in further benefits to the local community and the Washington, D.C., MSA. These construction-related jobs could positively impact the local community and the Washington D.C., MSA through the creation of additional income and employment for local residents in the short-term. Some of the local residents that fill these jobs could come from low-income or minority communities. However, actual hiring practices would be determined by the construction contractor for this project; therefore, it is not certain that that any jobs created under this alternative would be filled by persons from the low-income or minority communities identified in section 4.2.7.6.

Under RFDS 1, there would be no measurable impacts to sensitive populations because, as indicated in sections 4.2.9, 4.2.10, and 4.2.11, there would be no adverse unmitigated impacts to transportation or transit services, air-quality, or noise, respectively, during the short- or long-term.