

**West Falls Church Joint Development
Washington Metropolitan Area Transit Authority
(WMATA)
Environmental Evaluation**

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1.0 INTRODUCTION

The Washington Metropolitan Area Transit Authority (“WMATA”) is proposing a joint development of the West Falls Church (WFC) Metro Station (the “Project”). The project area is in Falls Church, Virginia. The Project is bounded by I-66 to the north and east; by residential properties and Haycock Road on the south, and by Meridian High School and Northern Virginia Center on the west. A development team consisting of EYA, Hoffman, and Rushmark (“Developer”) has been selected and has begun planning of the site. The project location is shown in **Figure 1**. The proposed joint development project would include the following modifications of WMATA facilities to the south of the station:

- Reduce existing commuter Park & Ride capacity from 2,009 spaces to 1,350 spaces, eliminating the south parking lot.
- Relocate the Kiss & Ride spaces to a new roadway closer to station; reduce capacity from 64 spaces to approximately 20 spaces, including about 10 short-term paid spaces, two ADA spaces, and short-term and drop-off spaces.
- Replace the eight south side bus bays currently located in a bus loop with four to eight bus bays along a new roadway immediately adjacent to the station plaza.
- Eliminate or reduce 68 Metro-operated hourly paid parking spaces along the Metro Access Road.

Because the Project includes a modification of Metro station facilities and station access, an Environmental Evaluation has been prepared to assess the potential effects of this action. To support WMATA Compact requirements, specifically Section 14(c)(1), this Environmental Evaluation describes the Project, and documents the potential effects of the Metro Station facility modifications on the human and natural environment in terms of transportation, social, economic, and environmental factors. This Environmental Evaluation only assesses impacts where changes to the Metro facilities are proposed.

For purposes of project implementation, the Developer will be responsible for complying with Fairfax County, State of Virginia, and all federal requirements for the Project. WMATA and the Developer will coordinate with Fairfax County and, in accordance with County guidance, follow the county’s development process. This includes adhering to the recently enacted Site Specific Plan Amendment to the West Falls Church Transit Station Area, which established the vision and general characteristics of the desired development. The developer will then refine specific plans for the site based on input from county staff and the public for the Concept Development Plan and Final Development Plan submissions necessary to implement the project.

West Falls Church Joint Development
Environmental Evaluation

Figure 1. Project Location Map



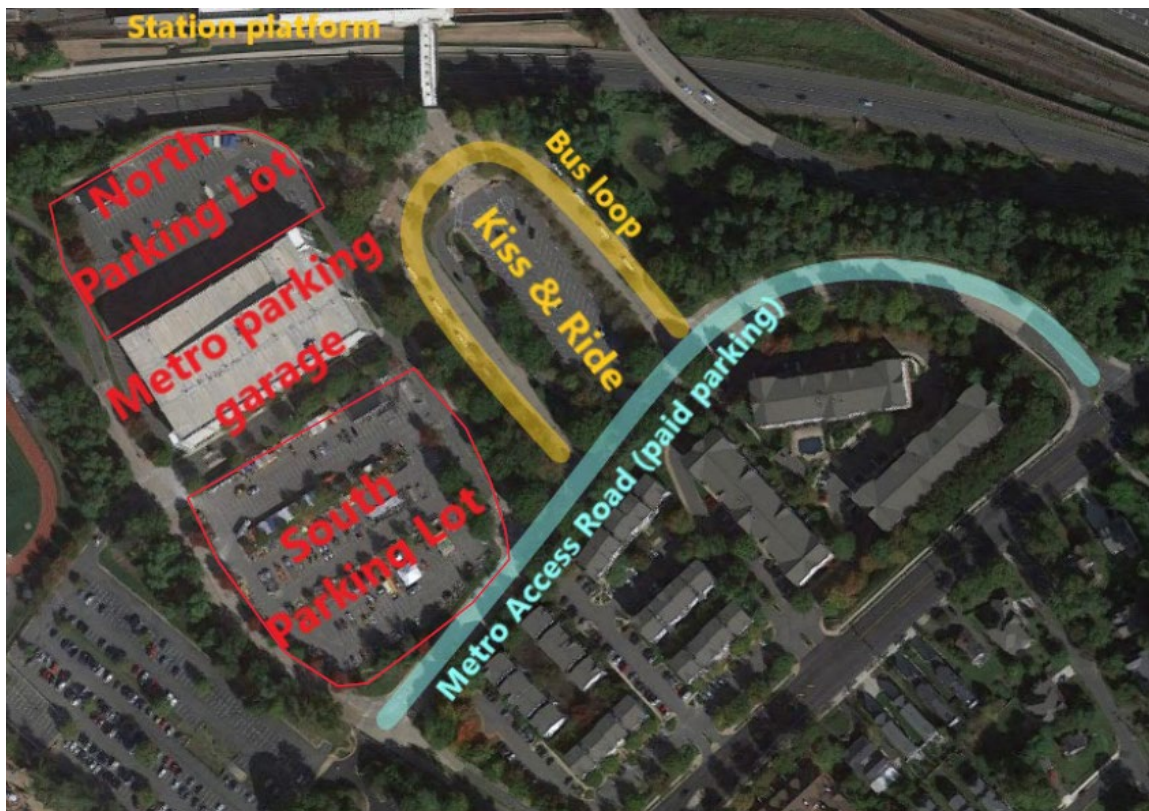
2.0 EXISTING SITE DESCRIPTION

Metro operates the West Falls Church Metro Station in Fairfax County, Virginia on the Metrorail Orange Line. It is served by Metrobus route 28A, Fairfax Connect routes 703 and 480, and Loudoun County Transit Route 902.

The Metro station has two entrances: the north side is accessible only from a bus loop, and the south side is accessible from buses, kiss-and-ride, and park-and-ride. The south entrance access facilities contain the Project Site. The Metro station entrance on this side is at grade level, with an overpass over eastbound I-66. The tracks and platform are located in the median of I-66 at a lower elevation.

An overview of the existing transportation facilities is shown in **Figure 2** and a detailed description in the subsections below, with a focus on access facilities for the south entrance:

Figure 2. Existing Transportation Facilities



2.1 Metrobus and Other Bus Providers

Fairfax Connector (Route 480 to Wolf Trap National Park) and Loudoun County Transit (Route 902 to Broad Run Farms) utilize the northside bus bays. Fairfax County Connector service begins two hours prior to each performance at the Wolf Trap Filene Center and the buses leave every 20 minutes, with the last bus leaving at showtime. Loudoun County Transit service departs from West Falls Church Metrorail Station Monday-Friday at 4:10 p.m., 5:30 p.m., and 6:50 p.m.

Metrobus Route 28A (Leesburg Pike Line) to Tysons Corner and King St-Old Town, and Metrobus shuttles utilize the southside bus bays. Route 28A to Tysons Corner operates seven days a week and departs from the station every 12 minutes every day from 7 a.m.-9 p.m. and every 12-20 minutes after 9 p.m. Route 28A to Alexandria operates seven days a week and departs every 12 minutes every day from 7 a.m.-9 p.m. every 12-20 minutes after 9 p.m. During track work and/or rail shutdown events, bus bays G and H will also be served by Metrobus shuttles. See **Table 1** for bus summary.

Table 1. Bus Summary Table

NORTH SIDE											
ROUTE	BOARDS AT BUS BAY	DESTINATION	OPERATOR	MONDAY - FRIDAY				SATURDAY		SUNDAY	
				AM RUSH	MIDDAY	PM RUSH	EVENING	DAY	EVENING	DAY	EVENING
Route 480	E	Wolf Trap National Park	Fairfax Connector	#	#	#	#	#	#	#	#
Route 902	F	Broad Run Farms	Loudoun County Transit	3 arrivals	n/a	3 departures	n/a	n/a	n/a	n/a	n/a
# Service begins two hours prior to every performance at Wolfe Trap Performance Center. Buses run every 20 minutes and the last bus leaves at showtime.											
SOUTH SIDE											
ROUTE	BOARDS AT BUS BAY	DESTINATION	OPERATOR	MONDAY - FRIDAY				SATURDAY		SUNDAY	
				AM RUSH	MIDDAY	PM RUSH	EVENING	DAY	EVENING	DAY	EVENING
Route 28A	C	King St-Old Town Station	Metrobus	Every 12 mins	Every 12 mins	Every 12 mins	Every 12-20 mins	Every 12 mins	Every 12-20 mins	Every 12 mins	Every 12-20 mins
Route 28A	D	Tysons Corner	Metrobus	Every 12 mins	Every 12 mins	Every 12 mins	Every 12-20 mins	Every 12 mins	Every 12-20 mins	Every 12 mins	Every 12-20 mins
Route 703	B	McLean Station	Fairfax Connector	Every 30 mins	Every 30 mins	Every 30 mins	Every 30-60 mins	Every 60 mins	Every 60 mins	Every 60 mins	Every 60 mins
Valley Flyer	A	Washington, D.C.	Virginia Breeze - DRPT	n/a	2:05 p.m.	n/a	n/a	2:05 p.m.	n/a	2:05 p.m.	n/a
Valley Flyer	A	Blacksburg, VA	Virginia Breeze - DRPT	n/a	10:00 a.m.	n/a	n/a	10:00 a.m.	n/a	10:00 a.m.	n/a
Shuttle	G/H	n/a	Metrobus	During trackwork and/or rail shutdowns, these bays will serve Metrobus rail shuttles.							
ESP	E/F	Prince William County	Omniride	During rail shutdowns and/or other disruptions, these bays will support Omniride's Emergency Service Plan (ESP)							

The Project does not anticipate bus rapid transit (BRT) services coming into the site. The current Northern Virginia Transportation Commission (NVTC) design for Envision Route 7 locates the BRT stop on Leesburg Pike by the high school.

2.2 Park & Ride

Park & Ride (P&R) demand at the West Falls Church station varies significantly throughout the year, with demand being higher during the spring and fall months. 2019 P&R utilization

exceeded 1,200 vehicles on 123 days in 2019, by an average of 86 vehicles. However, utilization occasionally exceeded 1,400 vehicles or fell below 900 vehicles. Given the variability in utilization throughout the year, WMATA prioritizes annual average peak-hour (AAPH) utilization for planning purposes to maximize revenue potential. Summaries of historical AAPH utilization at the station are provided in **Table 2**.

Table 2. Annual Average Peak-Hour P&R Utilization

Year	AAPH Utilization (approx.)	Notable Events
2010-2013 (avg.)	1,700	
2014	1500	WMATA Silver Line opened
2015	1050	
2016	900	
2017	850	WMATA P&R daily fare rate decrease
2018	950	I-66 and I-495 toll projects completed
2019	1,100	

When the Silver Line opened, the AAPH utilization steadily declined to a low of 862 vehicles in 2017. The AAPH utilization of the Park & Ride (P&R) increased prior to the pandemic, Source: Parking Analysis, 2021

2.3 Kiss & Ride

WMATA operates one Kiss & Ride (K&R) lot on the southside of the station. There are 47 short-term metered spaces, 9 accessible spaces, and 5 pick-up/drop-off designated spaces. The current K&R is underutilized, and observations indicate that it is likely being used by some riders as daily parking. The observed existing K&R demand was 14 vehicles, prior to the pandemic.

2.4 Paid On-Street Parking

WMATA operates 68 metered hourly spaces on Metro Access Road, which based on observations are also underutilized. WMATA has plans to replace the meters with new payment technologies, allowing payments by phone-based applications and/or pay stations.

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3.0 PROJECT DESCRIPTION

The purpose of the project is to partially replace and re-design existing WMATA facilities to facilitate the joint development on land owned by WMATA where the parking lots, bus loop, and green space are located adjacent to the Curtis Memorial Parkway (I-66), as shown in **Figure 1**.

1. The existing WMATA Parking Garage would remain.

The Joint Development of the WMATA parcel is being undertaken to create a mixed-use transit-oriented neighborhood, with the following goals:

- Increase Metro ridership – not only from development located on Metro’s property, but also through improved connections to surrounding development and existing communities.
- Improve transportation safety and efficiency.
- Enhance bicycle and pedestrian access and safety, by including:
 - Improvements to Station Entrance to increase visibility, and
 - A direct multi-modal link between the city development and the Metro Station, with new bike lanes and sidewalks.
- Promote transit-oriented development surrounding the Metro Station.
- Enhance the surrounding community and create inviting spaces around the Metrorail station’s transit facilities.

The selected Developer is responsible for planning, securing entitlements and constructing the project. An amendment to Fairfax County’s Comprehensive Plan was recently passed by the Board of Supervisors, which will allow for nearly one-million square feet of development on the Metro site. The Developer’s proposed program includes

- 24-acre mixed-use development
- 75 townhouses
- 700 multi-family units
- 12,000 square feet of retail
- 125,000 square feet of office
- 9 acres of open space

The final design will be refined through the local planning process.

The proposed Site Plan (see **Figure 3**) requires several modifications to Metro Transit Facilities, which are the subject of this evaluation.

Figure 3. Proposed Site Plan



3.1 Modifications to Parking Facilities

3.1.1 Kiss & Ride

The K&R facility will be concentrated along a new roadway within the development area across from the station plaza and will incorporate approximately 20 K&R Spaces (see **Figure 6**, below). Growth in K&R demand is difficult to predict due to increased market penetration of Transportation Network Companies (TNCs) and an increase in K&R volume combined with decreases in K&R dwell times. Using the same growth rates from the MWCOG model and Fairfax County Land Use Plan (LUP), the projected demand in year 2045 is between 16 and 19 vehicles.

3.1.2 Park & Ride

The existing total Park & Ride (P&R) capacity at the West Falls Church Metro station is 2,009 spaces, the majority of which is accommodated by the existing parking garage. The remaining parking spaces are in two surface lots, which will be redeveloped into residential and office buildings. It is anticipated that 2045 demand can be met by retaining approximately 1,350-1400 parking spaces, based on pre-COVID travel patterns. A detailed Parking Analysis of the station was prepared and is attached as **Appendix D**.

The project has a phasing plan to retain flexibility to address further parking demand. The project will retain the 1,200-space garage. In Phase 1 and 2, the project will retain an additional 150-200 spaces in the north parking lot (as shown in **Figure 4** below), which will be reconfigured to accommodate a new street grid. The north lot is planned as Phase 3, the last phase of the joint development. Prior to construction of that site – anticipated in about 10 years – Metro will reassess its parking needs. Metro will have the option to either 1) retain the north lot for parking (either as a surface lot or for constructing a new parking garage) or 2) allow the developer to redevelop the site and provide 150-200 commuter spaces in the private garages to be constructed on the site for the office and residential buildings planned there (**Figure 5** below).

Figure 5. Phases 1 & 2: Close south lot and reconfigure access to north lot

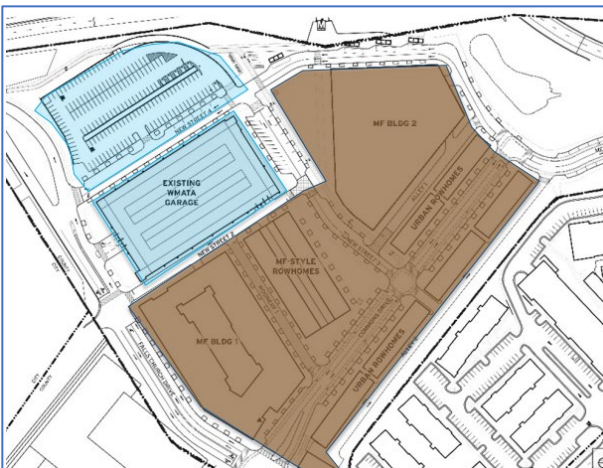


Figure 4. Phase 3: Decide in 2030 (est.) if expansion is needed with north lot development



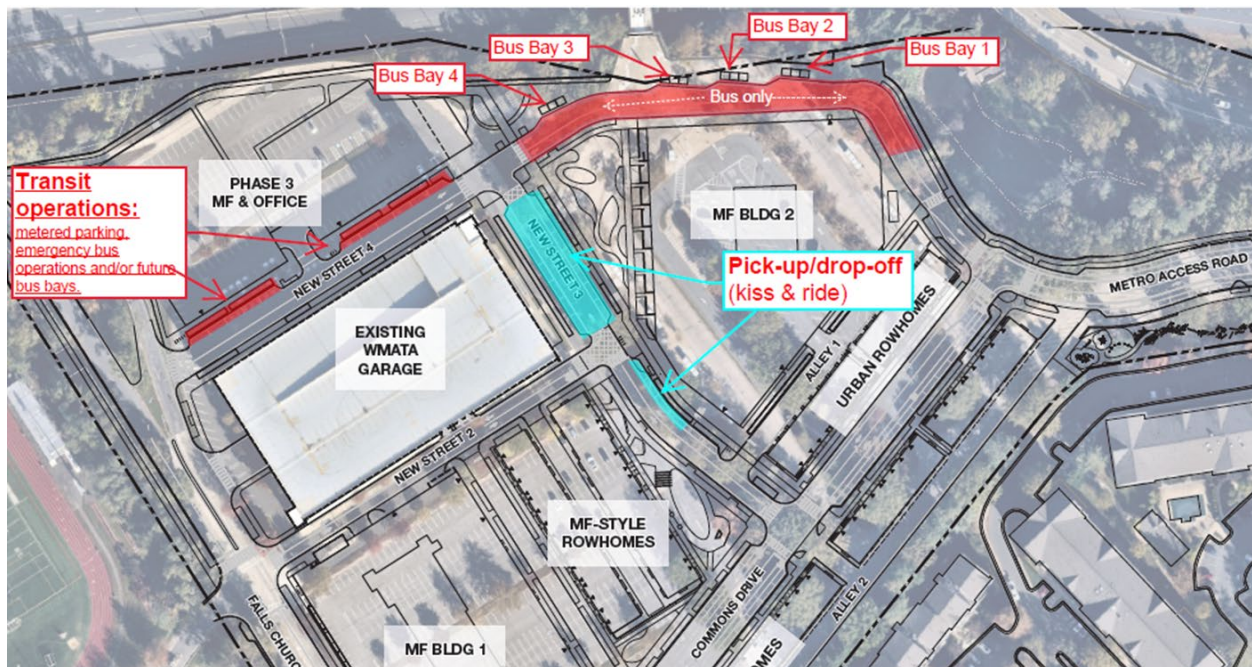
3.1.3 Paid on-street parking

Metro Access Road is planned to be realigned and reconstructed with a design to support multi-modal access to the Metro Station. This includes bicycle lanes, new sidewalks, and on-street parking. Currently, there are Metro-maintained parking meters along the roadway, available to the public. (Note: Metro has plans to replace the meters with new payment technology systems.) The Project proposes that paid parking would be retained along the street. However, ownership and operations of the paid parking spaces may be transferred to an entity other than Metro, depending on the final ownership and maintenance of the roadway.

3.2 Modifications to Bus Loop

Bus bays that are currently located on the Bus Loop will be relocated to a new roadway that will be immediately parallel to the station plaza. A minimum of four bus bays will be provided along the new roadway and will be designed to meet the requirements needed for the “Standard WMATA Tandem Bus” with sawtooth loading. The site design will allow for up to four additional bus bays and/or bus layover spaces, which may be constructed initially or phased in as needed. (See **Figure 6.**)

Figure 6. Proposed Bus and Kiss & Ride Facilities



4.0 PROJECT IMPACTS

This section evaluates the potential environmental effects of the Project, which consists of the proposed joint development and associated replacement of WMATA facilities described in Section 3.

4.1 Land Acquisitions and Displacements

Joint Development occurs when a public transportation agency joins with another private or public organization to develop land owned or operated by the transit authority. In the case of the West Falls Church Metro Station, WMATA has selected as its joint developer the team consisting of EYA, Hoffman & Associates, and Rushmark. Transit facilities at the Project site, including Metrorail, Kiss & Ride, Bus Bays, and Park & Ride facilities would remain within WMATA's control. The Developer would be allowed to construct other facilities to achieve transit-oriented development (TOD).

No land acquisitions by WMATA are required for the Project. The existing bus loop will be relocated to bus bays on an adjacent street. The existing Kiss & Ride in front of the Metro Station will be reconstructed to a plaza area and the spaces will be reduced due to demand and located on a street adjacent to the plaza. The WMATA parking garage will remain and will be enhanced. Aside from closing the South parking lot, reducing and reconfiguring P & R spaces, potentially replacing the North parking lot with a garage in the future and potentially removing paid parking on the Metro Access Road, no WMATA facilities will be permanently removed from the site.

Development pad sites will be conveyed to the Developer either fee simple for town houses and condominiums or ground leased for multi-family and office uses. The street grid is proposed to be dedicated as public streets, with appropriate right-of-way transfers or easements provided. The bus bay area, New Street 4, and the Kiss & Ride streets will be retained by WMATA. Private streets will be maintained by the owners of the development phases.

4.2 Transportation

4.2.1 Parking

As part of the Project, the Developer would remove approximately 600-650 Park & Ride spaces through development of the surface parking lots. **Table 3** breaks down existing capacity by facility type, shows other existing facilities, and summarizes proposed capacity in the station area.

Table 3. Existing and Proposed Parking Facilities

<u>West Falls Church Parking Facilities</u>		Existing Spaces	Proposed Spaces (Phases 1&2)	Proposed Spaces (Phase 3)	Option* (Alternative to Phase 3)
WMATA Facilities					
	Garage	1206	1200	1,200	1,200
	Private Garage with dedicated Metro P&R spaces	0		~150-200	
	Surface lot	803	~150-200		
	New Metro garage on north lot*				TBD
	<i>Total Park & Ride spaces</i>	<i>2,009</i>	<i>~1350</i>	<i>~1350</i>	<i>1,350 to TBD</i>
Kiss & Ride/Short-Term Parking					
	Short-term metered	50	~11	~11	~11
	Short-term driver-attend pick-up/drop-off	5	~6	~6	~6
	Short-term accessible spaces	9	~2	~2	~2
	<i>Total Kiss & Ride/short-term parking spaces</i>	<i>64</i>	<i>~19</i>	<i>~19</i>	<i>~19</i>

*WMATA will reassess its parking needs prior to Phase 3 and has the option to retain the property to build a Metro garage if determined to be needed.

The remaining 1,350-1,400 Park & Ride spaces are projected to accommodate demand through the year 2045, based on the full parking analysis performed for the West Falls Church Metro Station Development, attached as **Appendix D**.

WMATA will reassess its parking needs for West Falls Church as the Joint Development Project is implemented. Several factors could affect commuter parking demand, including post-COVID changes in commuter travel patterns, the planned openings of Silver Line phase 2 and the I-66 toll lane project, and efforts by Metro to manage parking demand. Additionally, the private development will construct approximately 700 parking spaces, which could potentially be used to serve maximum P&R demand, as described in the parking analysis.

Should there be changes in demand, WMATA is retaining the ability to both add capacity if needed and to manage demand. Prior to Phase 3 of the Joint Development, WMATA will have the option to either 1) retain the north lot for parking (either retaining the surface lot or for constructing a new parking garage expanding capacity) or 2) allow the developer to redevelop the site and provide 150-200 commuter spaces in the private garages to be constructed on the site for the office and residential buildings planned there.

4.2.2 Traffic

A Traffic Impact Study (TIS) was prepared by Gorove Slade in April 2021 in conjunction with a proposal to amend Fairfax County's *Comprehensive Plan* for the West Falls Church Transit Station Area (TSA) in order to provide compatible, non-automobile dependent development. This study was developed in accordance with guidelines and recommendations set forth by the Virginia Department of Transportation (VDOT), Fairfax County, and the City of Falls Church.

Under existing (2019) traffic, all intersections in the area except for VA 7 at Haycock Road operate at acceptable traffic levels of service (LOS) per VDOT standards. Under a future build condition in year 2030, due to anticipated vehicular traffic growth in the area and trips generated from the site development, some intersections in the area will not operate at acceptable LOS without mitigation. As a result, improvements are recommended such as signal timing and phasing modifications, addition of travel lanes, and other modifications to lane use. Complemented with new street connections in the project site, these measures would result in acceptable vehicular traffic operations. The full traffic study is provided in **Appendix A Traffic Impact Study**.

The Developer will be responsible for securing approval of the site plan for any private development, including the final traffic study, from Fairfax County and WMATA. Implementing roadway improvement commitments in these plans and traffic study are conditions for approval.

4.2.3 Metrorail

Transit-oriented joint development at the West Falls Church Metro Station is expected to increase overall ridership at the West Falls Church Metro Station. The addition of the office/multifamily space in accordance with the joint development plan is expected to generate as much as 1,000 new trips per day, based on WMATA's *Station Walk Area Ridership Model*.

Any increase in ridership at the Metro station due to new employment or residential opportunities associated with the joint development is not expected to be large enough to cause any significant impact on Metrorail operations. An increase in ridership due to the proposed employment uses on site would make better use of existing Metrorail capacity because of the potential for reverse commute rides.

4.2.4 Bus Routes

All routes accessing the bus bays may experience a marginal increase in ridership from people traveling to and from the employment and residential uses associated with the proposed development projects. Bus routes serving the station may experience travel time savings of 10

to 15 percent with route adjustments stemming from the new roadway network and bus bay layout.

4.2.5 Pedestrian and Bicycle Access

Dedicated on-street bicycle infrastructure does not currently exist in the area. Fairfax County's *Comprehensive Plan* calls for a variety of bicycle facility improvements within the vicinity of the study area. In particular, the *Comprehensive Plan* recommends a bike lane along Haycock Road west of I-66 and along Great Falls Street north of I-66, and shared lanes east and south of the respective I-66 crossings. It recommends a shared roadway along Grove Avenue and through the WMATA access drive to the Metro station and a shared-use path from near Falls Church Drive and Haycock Road to the Metro station. The *Comprehensive Plan* highlights a major regional trail system, and a major paved trail at least 8-foot-wide in the vicinity of the study area.

Proposed bicycle facilities around and within the site area are shown in **Figure 7**. The planned trail network is shown in **Figure 8**. Marked crosswalks currently exist at the signalized intersections within the study area, but not on all legs. All marked crossings at signalized intersections have pedestrian signalization provided, but the full suite of pedestrian crossing amenities is not provided at all locations (accessible pedestrian signals [APS], countdown pedestrian signals [CPS], and detectable warning surfaces on curb ramps). Marked crosswalks are in place on at least a portion of the legs at several unsignalized intersections. Pedestrian paths to Metro exist today and will continue to exist in the future. When the WMATA and Virginia Tech developments are built, pedestrian accessibility and connectivity will be more robust.

Figure 7. Site-Proposed Bicycle Network



Figure 8. Planned Trail Network



4.3 Land Use and Zoning

Based on the Fairfax County Planning & Zoning Viewer, the Project has been assigned a residential (R-30) zone. The purpose of the R-30 zone is to provide for multiple family dwellings at a density not to exceed 30 dwelling units per acre; to provide for affordable dwelling unit developments at a density not to exceed 36 dwelling units per acre; to allow other selected uses, which are compatible with the residential character of the district; and otherwise to implement the state purpose and intent of the ordinance. The majority of the Project area was determined to have an existing land use classification of utilities due to its use as a transit center. Zoning and current land use are shown in **Figure 9** and **Figure 10**.

Figure 9. Existing Zoning Map



Figure 10. Existing Land Use Map



4.4 Planning Consistency

Table 4 identifies applicable local plans and evaluates the consistency of the Project with them.

Table 4. Local Plans

Plan	Description	Author	Date	Inconsistencies
Concept for Future Development Map	Identifies the West Falls Church Metrorail Station property as one of 11 existing Metrorail stations, and one of 10 Transit Station Areas (“TSAs”) in the County. TSAs promote a land use pattern that supports Metrorail by encouraging a mix of uses in a compact, pedestrian-friendly urban form within walking distance of the rail station.	Fairfax County	2012	None
Fairfax County Comprehensive Land Use Plan Map – Baseline Recommendations	Identifies the baseline land use recommendation for the Property as “Public Facilities, Governmental and Institutional Uses,” and as a Metrorail station. The Comprehensive Plan map indicates the primary land use recommendation, and should be consulted in conjunction with the Area II Plan for more detailed recommendations than generally illustrated on the map.	Fairfax County	2018	None
Fairfax County Comprehensive Plan, 2017 Edition, Area II, McLean Planning District, West Falls Church Transit Station Area	Identifies the West Falls Church TSA as appropriate for higher intensity mixed-use development and is identified as a Transit Development Area (“TDA”). The TDA offers the most viable opportunities for development and redevelopment, including a baseline and options for redevelopment. A revised optional level of development was approved by the Board of Supervisors in July 2021, and recommends the following: <ul style="list-style-type: none"> - Maximum intensity of up to 0.96 FAR; - Between 105,000 and 120,000 square feet of office use, located adjacent to the Metrorail station entrance; 	Fairfax County	2021	None

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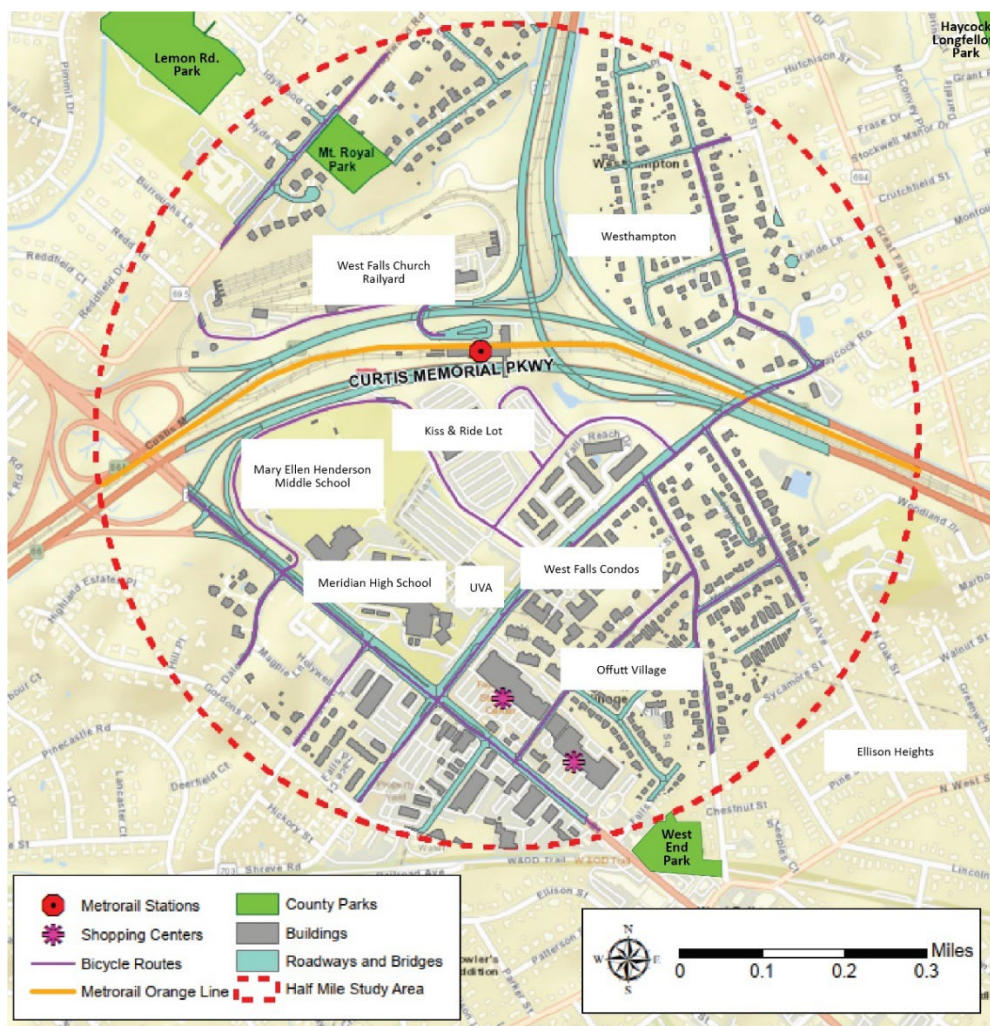
Plan	Description	Author	Date	Inconsistencies
	<ul style="list-style-type: none"> - Between 10,000 and 30,000 square feet of ground floor, community-serving retail or active ground floor uses; - Residential use should not exceed a maximum of 900 dwelling units, including approximately 80 townhomes on the periphery of the sub-unit; - Maximum building heights ranging from 35 – 120 feet; and - Provide publicly accessible parks and open spaces. 			
Transportation Recommendations West Falls Church Transit Station Area – M2 Community Planning Sector	<p>Identifies the planned roadway improvements in the vicinity of the West Falls Church TSA. The following specific transportation improvements are recommended:</p> <ul style="list-style-type: none"> - A high-quality transit system is expected along the Route 7 corridor; - Appropriately-sized bus bays and shelters should be accommodated adjacent to the WMATA Metrorail station entrance; and - Construction of a new two-lane roadway connecting the Metrorail station entrance to a new 2-lane roadway parallel to Haycock Road. 	Fairfax County	2015	None
Countywide Trails Plan map	Identifies the County’s planned, but not yet built, trail system. Recommendations include a major paved trail (asphalt or concrete), which is eight feet (or more) in width along Haycock Road.	Fairfax County	2018	None
Fairfax County Bicycle Master Plan Map	<p>Identifies the existing and planned bicycle facilities countywide with the following recommended improvements:</p> <ul style="list-style-type: none"> - A shared roadway facility connecting the Metrorail station entrance to Grove Avenue; - A shared use path from the Metrorail station entrance towards Route 7; and - A bike lane along Haycock Road. 	Fairfax County	2014	None

4.5 Neighborhoods and Community Facilities

Within a half-mile of the Project are two public schools (Meridian High School and Mary Ellen Henderson Middle School), Northern Virginia Center (UVA), Mount Royal Park, two shopping centers, and residential housing (see **Figure 11**). Two parks, West End Park and Lemon Road Park, are located just outside the half-mile radius.

The proposed development Project would not create a physical barrier within a neighborhood, isolate a portion of a neighborhood, or have a direct impact on a community facility or access to a community facility.

Figure 11. Neighborhood and Community Map



4.6 Environmental Justice Populations

This section identifies minority and low-income populations (collectively “Environmental Justice Populations”) in the Project area and assesses the potential for any disproportionately high and adverse impacts to those identified populations. Two block groups were identified within the half mile study area (Block Group 1 and Block Group 5).

4.6.1 Identification of Environmental Justice Populations

A half-mile radius around the Project area was determined to be the appropriate study area boundary (“Census Project Study Area”) to analyze the presence of Environmental Justice Populations; all U.S. Census block groups and any portions of block groups that fell within the half-mile boundary of the project site were included. The study area with block groups identified are shown in **Figure 12**. The City of Falls Church and Fairfax County were selected as comparison areas for the Environmental Justice analysis. Minority and low-income populations were then analyzed at the Census block group level using demographic and income data from the U.S. Census Bureau’s American Community Survey 5-Year Estimates (2015-2019).

Figure 12. Study Area with Block Groups

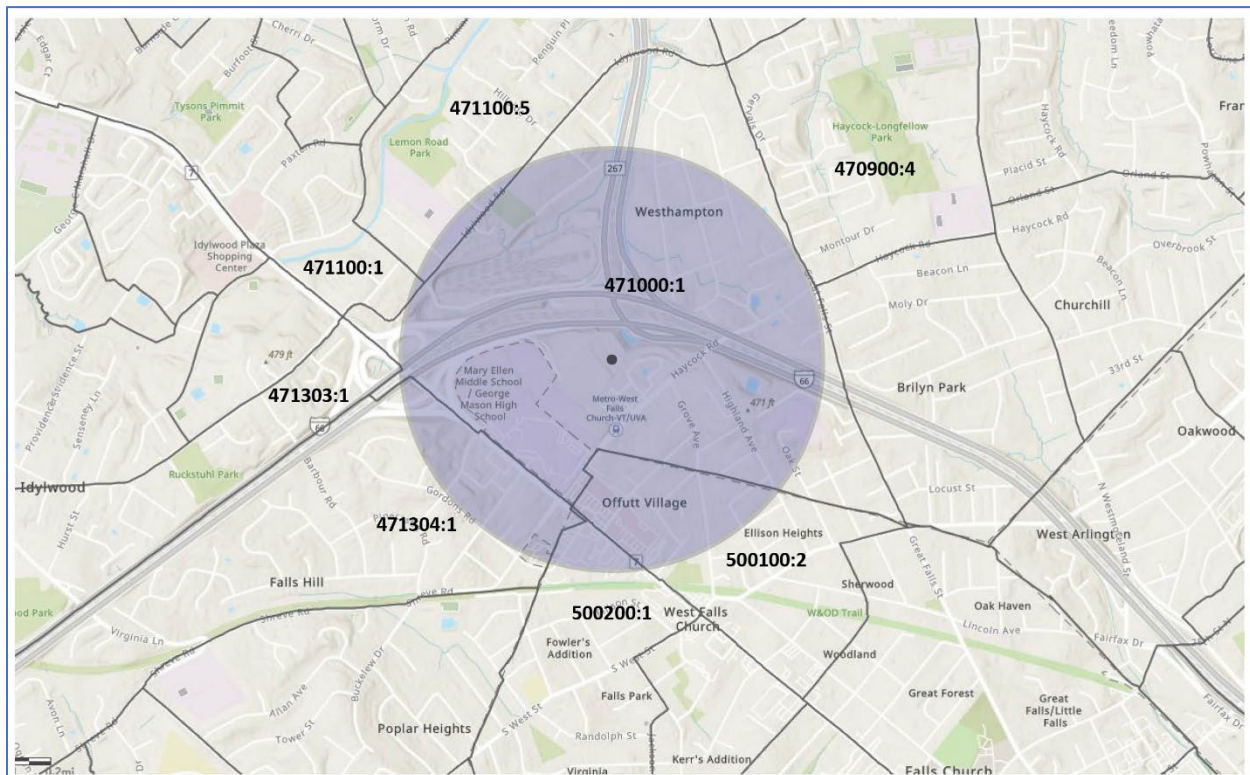


Table 5 lists the percentages of minority and low-income residents in the half-mile project study area in comparison to the City of Falls Church and Fairfax County overall. 30.7 percent of the study area population belongs to a minority group, which is about the same as the percentage within the City of West Falls Church, but lower than Fairfax County. Additionally, 2.4 percent of the study area population is low-income, which is lower than the percentage within the City of Falls Church and that within Fairfax County.

Table 5. Minority and Low-Income Population by Block Group

Census Tract	Block Group	Minority			Low-Income		
		Total Population	Minority Population	Percent (%)	Total Population	Low-Income Population	Percent (%)
470900	4	4	1	0.0%	4	0	0.0%
471000	1	1776	539	20.4%	1776	50	1.9%
471100	1	44	12	0.4%	44	2	0.1%
471100	5	203	74	2.8%	203	5	0.2%
471303	1	6	1	0.0%	6	0	0.0%
471304	1	164	49	1.9%	164	4	0.1%
500100	2	432	132	5.0%	432	2	0.1%
500200	1	10	4	0.1%	10	0	0.0%
Census Project Study Area Total		2640	812	30.7%	2640	64	2.4%
City of Falls Church		14,617	4,297	29.4%	14,617	468	3.2%
Fairfax County		1,147,532	593,274	51.7%	1,147,532	68,852	6.0%

Table 6 provides a breakdown of the minority groups present within the project study area. The largest minority groups within the study area are Asians (19.5%) and Hispanic/Latino (4.6%). The percentage of Black/ African Americans within the study area is significantly lower than the City of Falls Church (4.9%) and Fairfax County (10.6%).

Table 6. Minority Population by Group

Minority Group	Census Project Study		City of Falls Church		Fairfax County	
	# of Residents	% of Total Population	# of Residents	% of Total Population	# of Residents	% of Total Population
Black/ African American	53	2.0%	716	4.9%	121,638	10.6%
American Indian/ Alaska Native	4	0.2%	29	0.2%	5,738	0.5%
Asian	514	19.5%	1,447	9.9%	230,654	20.1%
Native Hawaiian or Other Pacific Islander	0	0.0%	0	0.0%	1,148	0.1%
Two or More Races	119	4.5%	541	3.7%	44,754	3.9%
Hispanic or Latino	122	4.6%	1,564	10.7%	189,343	16.5%
Minority Total	812	30.7%	4,297	29.4%	593,274	51.7%

4.6.2 Assessment of Disproportionately High and Adverse Impacts

There is no anticipated human environmental impact, including health, economic, and social, on the identified minority and low-income populations within the project study area. No adverse impacts to neighborhoods, community facilities, air quality, noise, vibration, or traffic are anticipated as a result of the Project. Considering these factors, the joint development project would not have “disproportionately high and adverse effects” on identified Environmental Justice Populations.

4.7 Cultural Resources

There are no above-ground historic structures within the Project area, and the ground has been substantially disturbed over the years as a result of development for the original Metro Station facilities.

The Virginia Cultural Resource Information System does not list the property as being located within a registered historic district and has no known archaeological sites.

4.8 Public Parklands

The Mount Royal Park, shown in **Figure 11**, is the only public parkland located within a half-mile of the study area. West End Park and Lemon Road Park are located just outside the half-mile radius. No parks or recreation areas would be impacted by the Project.

4.9 Wetland and Waters of the U.S.

A wetland and waterway delineation of the Project area resulted in the finding of one Palustrine, Unconsolidated Bottom (PUB) pond. This section summarizes the results of the routine wetland and waterway determination.

4.9.1 Methodology

A detailed wetland and Waters of the U.S. delineation was conducted on April 9, 2021 using the *1979 Corps of Engineers Wetlands Delineation Manual* and the *Regional supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0)*.

A combination of a desktop assessment and field reconnaissance was employed as part of the effort to determine the presence of wetlands and waterways. The desktop assessment included the review of the following:

- Aerial photography
- Lidar imagery
- United States Geological Survey Topographic maps
- Natural Resources Conservation Service Soil Survey Geographic Database (SSURGO) Web Soil Survey
- United States Fish & Wildlife Service National Wetland Inventory (NWI) mapper

After the desktop assessment, a detailed field investigation of existing natural resources was conducted. Wetlands were identified using an approach which requires interpretation of indicators representing hydrology, vegetation, and soils to determine the presence of a wetland. Wetlands typically are required to meet all three parameters to qualify as a wetland. The wetland indicator status of the observed vegetation was identified using the National Wetland Plant List (NWPL) (Lichvar, 2018). Soils were evaluated by using the Munsell Soil Color Chart.

4.9.2 Desktop Assessment – Soils

The SSURGO Web Soil Survey identified five, non-hydric, soil types within the project area. The soil survey report and mapping are included in **Appendix B Preliminary Desktop Review of Readily Available Data**. All soils within the project area are included in **Table 7**.

Table 7. Soils within Project Area

Map Unit Symbol	Map Unit Name	Acres in Project Area	Slope (%)	Hydric Rating
95	Urban land	14.7	-	No
101	Urban land-Wheaton complex	2.1	-	No

Map Unit Symbol	Map Unit Name	Acres in Project Area	Slope (%)	Hydric Rating
105B	Wheaton-Glenelg complex	0.3	2 to 7	No
105C	Wheaton-Glenelg complex	2.1	7 to 15	No
102	Wheaton loam	5.0	2 to 25	No

4.9.3 Desktop Assessment - NWI

Based on the desktop review of the NWI online mapping tool, no wetlands or waterways were identified within the Project area. A map of the Project area from NWI is included in **Appendix B Preliminary Desktop Review of Readily Available Data**.

4.9.4 Results

WET-1 (Wetland-1)

WET-1 is a stormwater management pond classified as PUB (see **Figure 13**). The pond's area is mapped as being underlain by Wheaton Loam 2-25% slope soil, with no frequency of flooding. The Wheaton Loam soil series does not have a hydric rating and is very well-drained. The depth to the water table is typically more than 80 inches. The hydrology for the open water pond is supplemented by periodic rainwater flooding from adjacent stormwater conveyed runoff channels. In their natural condition, these soils and their associated hydrology supported no known wetland community.

The development of a stormwater pond on these soils required extensive manipulation of the landscape and hydrology. Ponds were excavated, and underground drainage systems were installed to provide the necessary drainage to develop the metro station. Although the ponds were excavated to depths that typically would intercept the groundwater, they were likely lined with clay to ensure that water levels remained consistent for aesthetics purposes.

No Project impacts to WET-1 are anticipated. A photo of WET-1 is included in **Appendix C Photo Log**.

Figure 13. Natural Resources Map



4.9.5 County and State Water Resource Buffers

A minimum 25-foot-wide wetland buffer is required by state and county regulation. No impacts to the wetland buffer by the project are anticipated.

A review of Fairfax County's Potential Wetlands Area Map was performed, which resulted in no identified Waters of the US or Potential Wetlands within the project area, other than the delineated PUB.

4.10 Floodplains

The effective Federal Emergency Management Agency (“FEMA”) Flood Insurance Rate Map (“FIRM”) shows that there are no floodplains present within the Project area. The Project area is classified as an area of minimal flood hazard. See **Figure 14**.

Figure 14. National Flood Hazard Map

National Flood Hazard Layer FIRMette



4.11 Water Quality

The Project is not anticipated to affect the water quality of the adjacent streams and wetlands. Stormwater management facilities will be constructed in accordance with Fairfax County regulations, which control the rate and water quality of stormwater runoff. The Developer is solely responsible for obtaining all required permits and the stormwater management plan development. The overall joint development project will result in significant improvements to the treatment of stormwater management onsite.

Project area is not within a Chesapeake Bay Critical Area, does not contain highly erodible soils, and is not within a Tier II watershed. The Project site is within a watershed with a Total Maximum Daily Load for sediment. Erosion, sediment control, and site stabilization requirements will be integrated into site construction per Fairfax County Erosion and Sediment Control requirements. A Water Quality Impact Assessment will also be required. No new discharges (i.e., industrial), from the Project are anticipated that would require a National Pollutant Discharge Elimination System (NPDES) permit.

4.12 Air Quality

The Project site is located in Fairfax County, which is part of the EPA-defined Metropolitan Washington Air Quality Designation Area. The Greater Metropolitan Washington area is currently designated as a nonattainment area for 8-hour ozone (O₃) and annual average particulate matter less than 2.5 microns (PM_{2.5}). The Metropolitan Washington area is in attainment for all other pollutants including carbon monoxide (CO), particulate matter less than 10 microns (PM₁₀), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb).

No impact is anticipated by the Project.

4.13 Forest Stands

The Project is not anticipated to affect any forest stands. In addition, no specimen, champion, or historic trees are located on the site.

The Developer will be required to comply with Fairfax County's Tree Conservation Ordinance. The Developer will complete corresponding Tree Conservation Plans for any effect on forest stands and will be required to gain approval through the Land Development Services Division of Fairfax County. Per the Code of Virginia, based on the land use zoning of the Project area, the Developer will be required to maintain ten percent tree canopy.

The amount of reforestation required will be calculated using multiple factors such as net tract areas, land use category, existing forest cover, sensitive environmental features, and proposed clearing. Reforestation can occur either on- or off-site and may include the use of a pre-

approved tree canopy bank or paying into a tree canopy fund. The Developer would be responsible for implementing the approved Tree Conservation Plans for any impact to forest stands resulting from the Project.

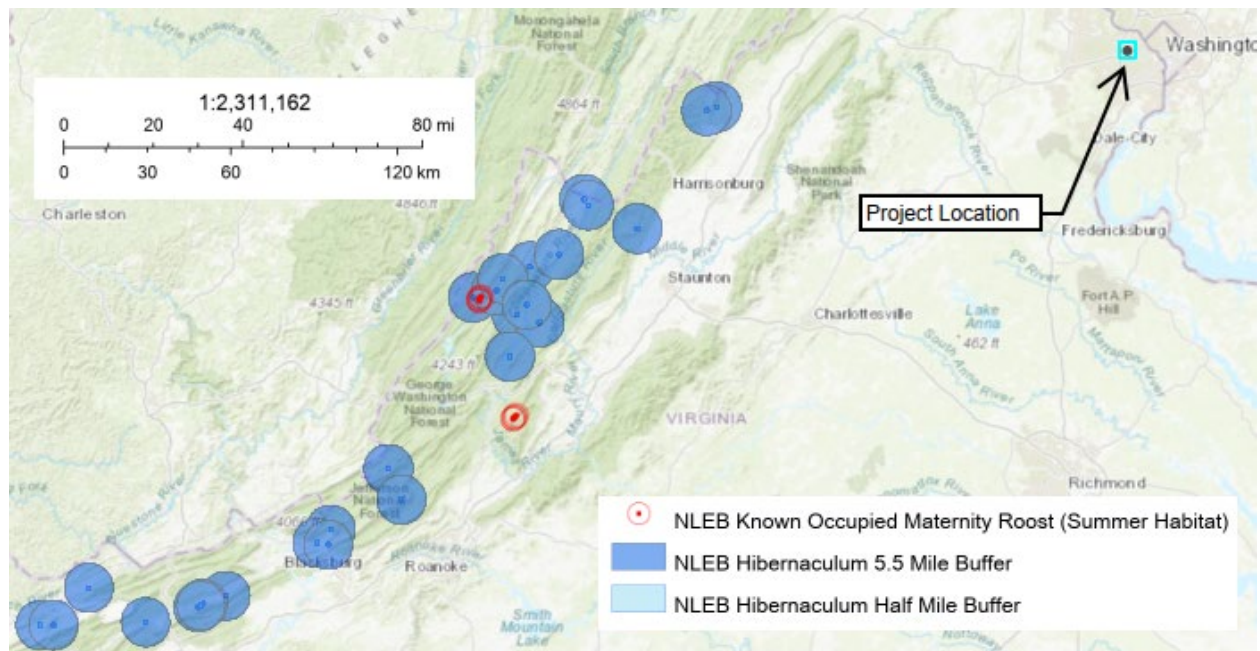
4.14 Threatened and Endangered Species

No impact to federally-protected species or habitat is expected as a result of the Project.

An official species list of potential threatened and endangered species from the USFWS IPaC online application (see **Appendix C Preliminary Desktop Review of Readily Available Data**) was reviewed for the project area. The Northern Long-eared Bat (NLEB) was the only species identified in the official species list for the Project area. No critical habitats were identified. The Virginia Department of Wildlife Resources (VDWR) provides an online mapping tool to help determine if projects are near NLEB habitat. Based on the VDWR NLEB Hibernacula mapping tool, there are no NLEB habitats located near the Project area, see **Figure 15**.

The Developer would be solely responsible for any permits or other documentation required related to protected species and critical habitats.

Figure 15. NLEB Hibernacula Map



4.15 Utilities

The Project is not anticipated to affect utilities that serve the project site and adjacent neighborhoods, including water, sewer, electric, and natural gas services. The Developer is responsible for providing adequate utility services for the proposed development and re-routing any affected existing utilities.

4.16 Hazardous and Contaminated Materials

Hazardous and contaminated materials include oil and other hazardous substances that present an imminent and substantial danger to the public health and the environment. Federal and state laws that regulate hazardous and contaminated materials include:

- Comprehensive Environmental Response, Compensation, and Liability Act;
- Resource Conservation and Recovery Act;
- Toxic Substances Control Act;
- Clean Water Act; and
- Clean Air Act.

A Phase I Environmental Site Assessment (ESA) was conducted for the Project (ECS Mid-Atlantic, LLC, October 15, 2019) consistent with the requirements of the American Society of Testing and Materials (ASTM) ESA procedures. The Phase 1 ESA Report is attached to this Environmental Evaluation as **Appendix E**.

A regulatory database search report was provided by Environmental Data Resources, Inc. (EDR). The database search involves researching a series of Federal, State, Local, and other databases for facilities and properties that are located within specified minimum search distances from the subject property. The report identified the subject property on the VA TIER 2 database for the storage of sulfuric acid. Information related to the purpose and duration of storage of sulfuric acid was not reported in the database listing. The property was not listed on the Resource Conservation and Recovery Act (RCRA) Information System (RCRIS), which would indicate generation or handling of hazardous wastes. In addition, the records obtained from the Fairfax County Fire Department indicated that the sulfuric acid was stored in traction power station, which is not located on the current subject property. Based on the absence of a RCRIS Generator listing or a reported release, this onsite listing is not considered to be a Recognized Environmental Condition (REC) for the subject property. The EDR report identified several off-site properties within the minimum ASTM search distances. Based on our review of available public records, none of the database listings are believed to represent a REC for the Project area.

4.17 Noise and Vibration

Existing noise sources within and adjacent to the project area are dominated by motor vehicle traffic along I-66 and VA-267 (the Dulles Toll Road), and Metro operations. No sources of vibration exist within the Project area since the West Falls Church Metro Station Platform is located in the median of I-66.

No impact on existing noise-sensitive receptors is anticipated as a result of the Project. If the Project is constructed, the existing Metrobus and Metrorail transit operations would continue to operate as they do now, and no increase in service is anticipated. The Metrorail tracks would continue to function as they do now; the tracks would not be realigned nor would any new switches be constructed on the tracks as a result of the project being built. The existing bus routes would continue to serve the Metro station as they do now although they would so from the proposed relocated bus bays on an adjacent street.

The Developer is solely responsible for quantifying and mitigating noise and vibration impacts from the Project on the private development project. The Developer is also responsible for constructing the joint development in a manner that mitigates potential noise and vibration impacts from rail, mass transit, and station-related sources to the Project's new residences and commercial uses. This mitigation includes compliance with the Fairfax County Noise Ordinance (Fairfax County Code, Chapter 108.1 – Noise Ordinance).

4.18 Secondary and Cumulative Impacts

4.18.1 Secondary Impacts

No adverse secondary impacts are anticipated as a result of the Project. Secondary impacts of the project would result from the increase in permanent residents and workers at the Project area. The joint development's office, housing, and commercial uses would increase the overall employee and resident population of the Falls Church area and would contribute to a marginal increase in economic activity in the project vicinity, including demand for goods, services, and housing.

4.18.2 Cumulative Impacts

No adverse cumulative impacts are anticipated as a result of the Project in combination with the adjacent development projects on the Virginia Tech and City of Falls Church Parcels.

Transit

The completion of the proposed joint development in combination with adjacent development, is projected to increase transit ridership at the Metro station and increase bus ridership on routes serving the Metro Station.

- *Metrorail* – WMATA assessed the impact of increased ridership from the joint development on the Metrorail station using the Station Walk Area Ridership Model and estimates up to 3,200 additional riders per day. The additional ridership is not anticipated to cause station crowding. The joint development has employment as well as residential users, and therefore a portion of the generated Metro trips would be in the reverse commute direction (outbound AM, inbound PM), compared to the majority of current Metro station customers. The additional ridership is not anticipated to lead to crowding on the Orange Line.
- *Metrobus* – WMATA assessed the impact of increased ridership from the completion of proposed phases of joint development on the bus services at the Metro Station. The results were that no additional bus bays would be needed on the south side of the Metro station.

4.19 Construction Impacts

During construction of the Project, pedestrian and vehicular traffic will be disrupted. Maintenance of Traffic (MOT) plans will be required for each phase, to reroute surface traffic and maintain access to and operations of Park & Ride, bus loop, Kiss & Ride, bicycle and pedestrian facilities. The new street network with bus lanes and sidewalks, bus loop, Kiss & Ride will be constructed in Phase 1. During construction of all phases, on-site Park & Ride capacity may be reduced. In Phase 1, the North Lot will be reconfigured. In Phases 2 and 3, on-site parking in the North Lot may be reduced for construction staging in support of the development project. If commuter parking demand justifies it, alternative off-site parking is to be provided.

Construction noise may impact surrounding neighborhoods, from the operation of construction machinery and vehicles and activities such as potential pile driving for the multi-family and office buildings. The Developer is solely responsible for ensuring that all construction activities adhere to noise control regulations as established in the Fairfax County Noise Ordinance, including time of day restrictions. Additional specific requirements may be established by the county through the plan review process.

Emissions from on-site diesel equipment and increased truck traffic and fugitive dust could negatively impact air quality during construction. “Good housekeeping” methods to minimize project-related dust include keeping dirt wet, rinsing vehicles exiting the site, providing street sweeping, and implementing other dust minimization measures when needed.

5.0 PUBLIC INVOLVEMENT

WMATA and the Developer will keep the public informed about the proposed Project through public outreach. A public hearing in accordance with the WMATA Compact will be scheduled, to be announced in a Notice published with this report. The hearing will provide the public with the opportunity to comment on the proposed modifications to the site.

The subject of this hearing will be on the following changes to Metro transit facilities:

- Permanent closure of the Park & Ride South Lot for future development, reducing parking capacity from 2,009 to about 1,350-1,400.
- Reduction of Kiss & Rides spaces from 64 to about 20 and relocation of the Kiss & Ride Parking Spaces to a proposed adjacent street
- Relocation of the existing eight bus bays within the Bus Loop to a proposed adjacent street, with four to eight bus bays which may be implemented as needed.
- Elimination of Metro-operated paid spaces along the Metro Access Road, with the intent allowing another public agency or entity to operating the spaces depending on the future ownership of the road.

Notice of the public hearing will be published in area newspapers. Additionally, information about the proposed changes will be posted in multi-language print publications across the region and on social media.

A public hearing staff report summarizing comments received during the public comment period with staff responses will be released for public review and comment. The staff report will be made available online and in hard copy at WMATA headquarters and as may be further described in the Notice.

WMATA will collect comments from the public through the following ways:

- Comments and documents submitted online at wmata.com/plansandprojects
- A Compact Public Hearing
- Written comments mailed to: Office of the Secretary, Washington Metropolitan Area Transit Authority, 300 7th Street, NW, Washington, DC 20024

All comments must be received by 5 pm Monday October 31, 2022 to be included in the public record.

The hearing process above is to be held by WMATA, about only the changes in transit facilities. The proposed private development components – the type, mix and density of development - will be subject to public involvement requirements of Fairfax County. The Project has followed an elaborate community engagement plan as part of the Fairfax County Comprehensive Plan

Amendment process. From January 2019 to April 2021, a community task force worked with County staff and neighboring communities to develop draft recommendations for the Project. More than 20 Task force meetings were held to collect public feedback on the Project. Task force meeting agendas, recordings, and presentation materials are publicly available through Fairfax County's Planning Division website. Additionally, details about the proposed project were presented by the developer at a Community Meeting on May 11, 2021, to the Fairfax County Planning Commission on June 16, 2021 and to the Fairfax County Board of Supervisors on July 13, 2021 when the amendment was adopted. Information about the comprehensive plan amendment is available on Fairfax County's website: www.fairfaxcounty.gov/planning-development/plan-amendments/west-falls-church-tsa-study

Going forward, the developer plans additional outreach to neighborhood associations, as it advances development plans through the county approval process.

6.0 REFERENCES

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