WEST ENTRANCE

Environmental Evaluation

Ballston-MU Metrorail Station West Entrance Project

October, 2024

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1.0 INTRODUCTION

1.1 Proposed Project

Arlington County, in coordination with the Washington Metropolitan Area Transit Authority (WMATA), is proposing the construction of a second entrance to the Ballston-MU Station (Proposed Project), serving the Ballston neighborhood of Arlington County, Virginia (see **Figure 1, "Project Location"**). WMATA operates the Ballston-MU Metrorail Station, serving the Metrorail Orange and Silver lines. Arlington County is preparing permits and providing funding for the Proposed Project on behalf of WMATA, which will be implementing the Proposed Project.

The Ballston-MU Station (station) is currently accessed at the street level via a single entrance at the intersection of N Stuart Street and Fairfax Drive. Ticket machines, fare gates, and platforms are located below grade and access is provided by two escalators and three elevators: one on the southwest corner of the intersection and two on the northwest corner. The Proposed Project would construct a new west station entrance with a new stairway at the southwest corner of the Fairfax Drive/N Vermont Street intersection, two new ADA-compliant elevators, and an emergency access stair and access hatch at the southeast corner of this intersection. A new underground chamber/mezzanine structure with ticket machines and fare gates, as well as a new pedestrian tunnel between the mezzanine and the station platform, would be constructed below ground. Additional street-level elements would also be introduced to improve pedestrian safety and circulation, including a new crosswalk across Fairfax Drive and an improved crosswalk and ADA-compliant reconstruction of curb ramps across N Vermont Street.

Construction is expected to begin in the summer of 2026, last approximately 36 months, and be complete in the summer of 2029. A construction phasing plan will be developed in coordination with WMATA as design advances.

1.2 Purpose and Need for the Proposed Project

While the Ballston neighborhood experienced rapid transit-oriented development after the station opened in 1979, expansion of high-density land uses in the 2010s, particularly to the west of the station, and the commencement of Silver Line service increased demand for transit access and associated pedestrian activities at the station. Arlington County and WMATA have identified a need for improved station access and circulation, increased traffic safety, and enhanced station design to increase user comfort and safety.

As such, the purpose of the Proposed Project is to provide safer and more effective transit operations and pedestrian access to Ballston-MU Station through the introduction of a new west station entrance and other station area improvements.[1] The new entrance would improve access from areas west of the station, provide additional egress capacity during emergency situations, improve bus-to-Metrorail transfers, relieve congestion at the current station entrance to the east, and improve passenger distribution on the train platform.

[1] DES-Ballston-Multimodal-Final-Study.pdf (arlingtonva.s3.amazonaws.com)

Since the initial project application in 2019, the Project has been identified as a significant project for funding by the Northern Virginia Transportation Authority (NVTA) and Arlington County. The development of a second entrance would provide access to the station over a quarter of a mile west of the existing entrance, providing more multimodal access to the station and greater passenger capacity. The Arlington County Board has identified the Project's importance to the greater regional transportation network by adopting a resolution that includes the Arlington County's financial commitment in the application to NVTA for regional transportation funding.[2] The resolution designates an additional $30,000,000 in local funding to be allocated the Project and identifies the Project as a top priority for the County's Transportation Capital Fund. The 2013 Ballston Multimodal Study identifies the Ballston neighborhood as a rapidly growing transportation hub for pedestrians and cyclists. Ballston Station serves the Metrorail Orange and Silver lines, along with multiple WMATA Metrobus and Arlington Transit (ART) bus routes. Growing transit ridership in the Ballston neighborhood has resulted in increased congestion and delay for passengers transferring between the Metrorail and the WMATA Metrobus and ART bus services serving the Ballston-MU station. The Project would create a new entrance to disperse the congestion at the current entrance, allowing for more efficient passenger movement throughout the station.

1.3 Summary

The Proposed Project includes a modification of WMATA station facilities and station access; therefore, this Environmental Evaluation (EE) has been prepared to assess the potential effects of this action. Consistent with applicable WMATA Compact requirements, specifically Section 14(c)(1), the EE describes the Proposed Project and documents its potential effects on the human and natural environment in terms of transportation, social, economic, and environmental factors.

The Proposed Project would not result in any significant adverse impacts to land use and zoning, transportation, air quality, visual quality, noise, vibration, hazardous materials, public parkland and recreation areas, water quality, floodplains, or safety and security, nor would it result in acquisitions and relocations, social impacts and community disruption, or disproportionate effects to potential environmental justice communities.

Minor temporary construction-period effects to transportation, air quality, noise, and vibration may occur, though construction contract documents will require that construction activities be managed to minimize or avoid any potential significant adverse construction-period impacts. As described in the transportation section, alternate transit options would be made available in coordination with the community, and any disruptions to traffic, cycling, or pedestrian infrastructure would be managed with a Maintenance of Traffic (MOT) plan. Minor effects related to air quality, noise, and vibration may occur but would be of limited duration and would be minimized or avoided through contract requirements.

All temporary easements necessary for construction are already in place; as construction plans advance, Arlington County and WMATA will coordinate and confirm with construction contractors and adjacent property owners. The contractor would be responsible for obtaining all construction permits.

[2] Arlington County Board Agenda Item, Meeting of October 16, 2021.
https://arlington.granicus.com/MetaViewer.php?view_id=2&clip_id=3979&meta_id=206062

2.0 PROJECT AREA

As shown on **Figure 3, "Project Area"** the Proposed Project would be located primarily within and below the roadbed and sidewalk of Fairfax Drive and N Vermont Street at their intersection, with the proposed entrance stair located within the loggia of the Arlington Gateway Building at 901 N Glebe Road (Project Area).[3] The Project Area encompasses the limits of all permanent features associated with the Proposed Project, both above and below ground, as well as areas that would be used for construction activities and staging.

Fairfax Road comprises a four-lane east-west arterial roadway with a central median, left turn lanes, bike lanes, and parking lanes in each direction. Fairfax Drive contains wide sidewalks, ranging in width between approximately 15 and 30 feet in the vicinity of the Project Area. N Vermont Street south of Fairfax Drive comprises a narrow two-lane north-south local roadway with no street parking or bicycle facilities. North of Fairfax Drive, N Vermont Street comprises a two-lane north-south local roadway with street parking on either side. This portion of N Vermont Street is designated as an on-street bicycle route. N Vermont Street contains sidewalks on both sides of the roadway in the vicinity of the Project Area. Two bus stops, one in each direction, serving the WMATA Metrobus 23A and 23T routes and the ART51 and ART72 routes, are located along Fairfax Drive in the immediate vicinity of the Project Area.

The existing Ballston-MU Station extends from the Project Area to the existing eastern station entrance, located approximately 1,000 feet to the east. The station is served by 12 bus bays: five bus bays located on N Stuart Street, six bus bays located on Fairfax Drive, and one bus bay located on N Stafford Street. A Capital Bikeshare station is located on N Taylor Street, across Fairfax Drive from the station entrance. Two corrals for dockless scooters and bicycles are located on N Stuart Street and Fairfax Drive, respectively. The Ballston station does not include any Park and Ride or Kiss and Ride facilities.

[3] No property acquisition is necessary. All temporary easements necessary for construction are already in place.

Source: USGS Topographic, 2024; STV Incorporated, 2024.

Project Location

FIGURE 1

Project Location

Ballston West Entrance Environmental Evaluation
Arlington County/WMATA

3.0 PROJECT DESCRIPTION

3.1 The Proposed Project

The proposed second entrance to the Ballston-MU Metrorail station would be located at the intersection of Fairfax Drive and N Vermont Street, approximately three blocks west of the existing entrance. Above-ground project elements would include an entrance stair, ADA-compliant elevators, and pedestrian improvements (See **Figure 2, "Project Elements"**). Project elements or improvements would occur on all four quadrants of the intersection, as described below.

The Proposed Project would include the following elements:

1. Stairs to a new entrance mezzanine located at the southwest corner of Fairfax Drive and N Vermont Street, under the north side loggia of the Arlington Gateway Building (901 N Glebe Road).

2. Underground entrance mezzanine located below N Vermont Street and the eastbound traffic lanes of Fairfax Drive. It would include passenger facilities such as a station manager kiosk, fare vending machines, a fare gate array, two public restrooms, and a refuge area.

3. Pedestrian tunnel to provide access between the entrance mezzanine and the platform mezzanine at the western end of the existing station platform.

4. Platform mezzanine (above the existing platforms), including two stairs and two elevators for the inbound platform and two stairs and a single elevator for the outbound platform.

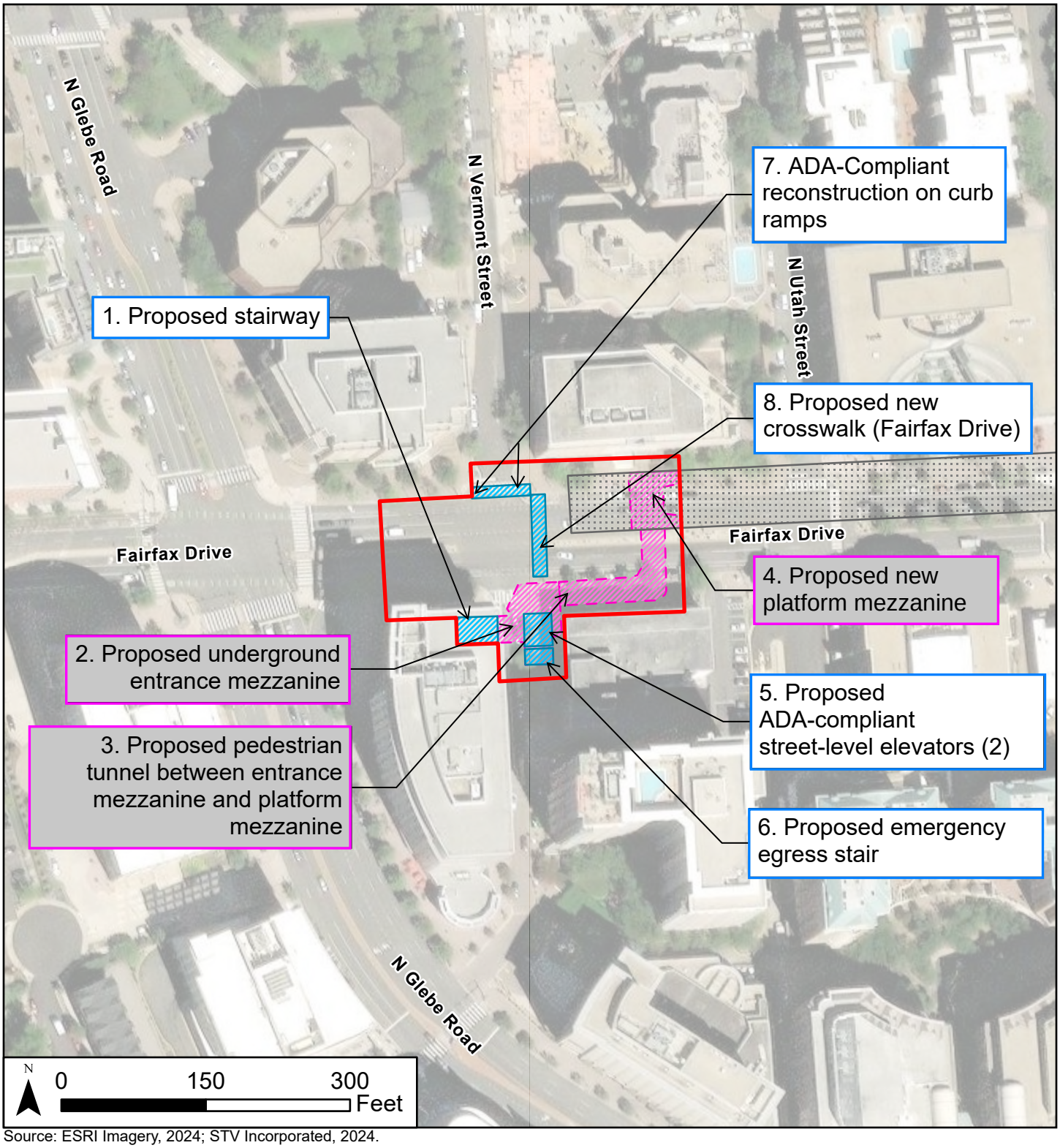
5. Two street-level elevators located at the southeast corner of Fairfax Drive and N Vermont Street, adjacent to the existing five-story office building at 4420 Fairfax Drive. These would operate between the street level and entrance mezzanine.

6. Emergency egress stair to street level located south of the street-level elevators operating between the street and entrance mezzanine.

7. Reconstruction of curb ramps and existing crosswalk at the intersection of N Vermont Street and Fairfax Drive to be fully ADA-compliant.

8. New crosswalk across Fairfax Drive, on the eastern side of the intersection of N Vermont Street and Fairfax Drive.

The Proposed Project is shown on **Figure 4, "Street-level Plan,"** and **Figure 5, "Mezzanine-level Plan**."



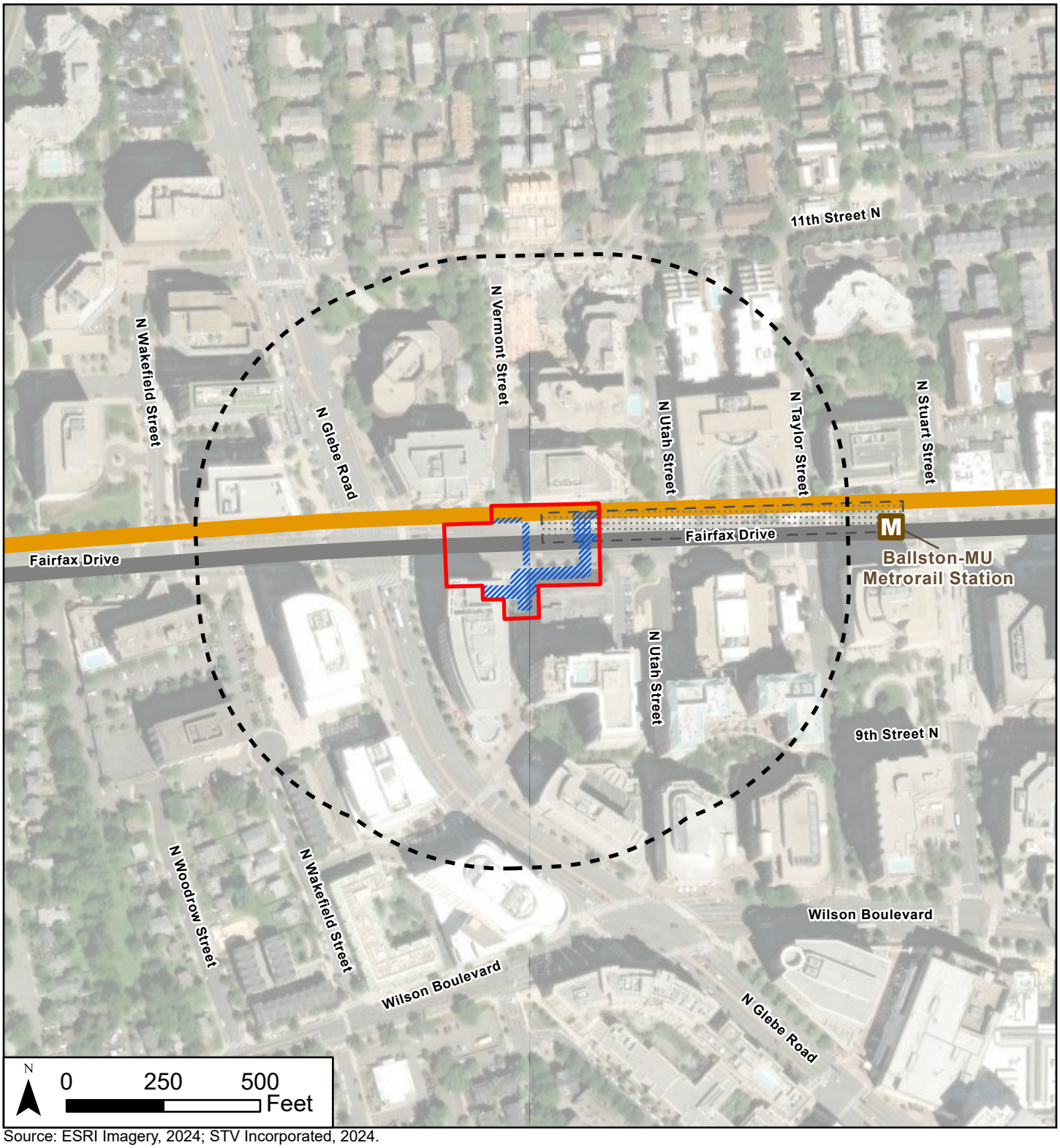
Source: ESRI Imagery, 2024; STV Incorporated, 2024.

- Project Area
- Existing Ballston-MU Station Platform
- Project Element Entirely Below Ground
- Project Element Partially or Entirely Above Ground

FIGURE 2

Project Elements

Ballston West Entrance Environmental Evaluation
Arlington County/WMATA

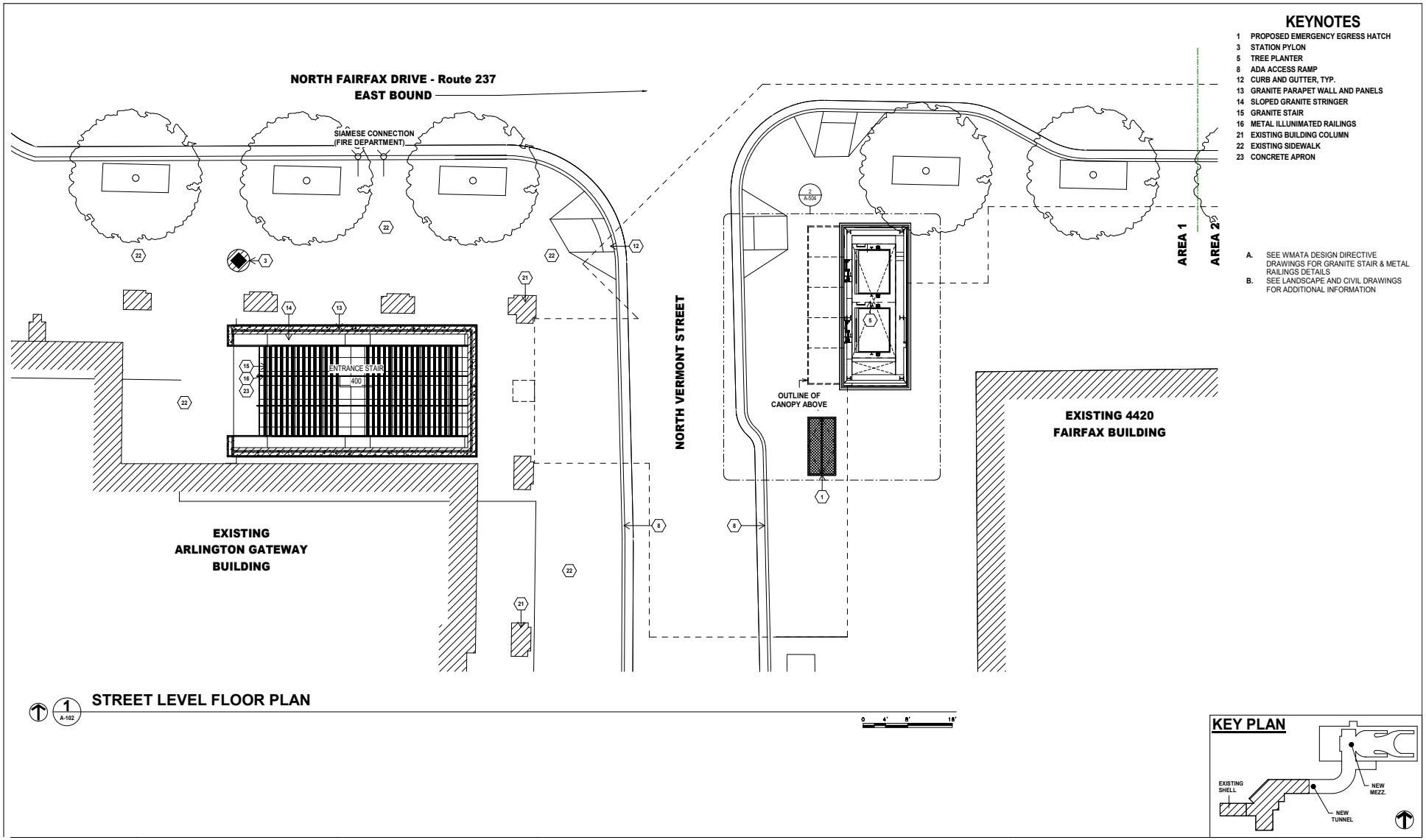


Source: ESRI Imagery, 2024; STV Incorporated, 2024.

- Project Area
- 500-foot Study Area
- Proposed Project Elements
- Existing Ballston-MU Station Platform
- Metro Rail Station
- Orange Line
- Silver Line

FIGURE 3
Project Area

Ballston West Entrance Environmental Evaluation
Arlington County/WMATA

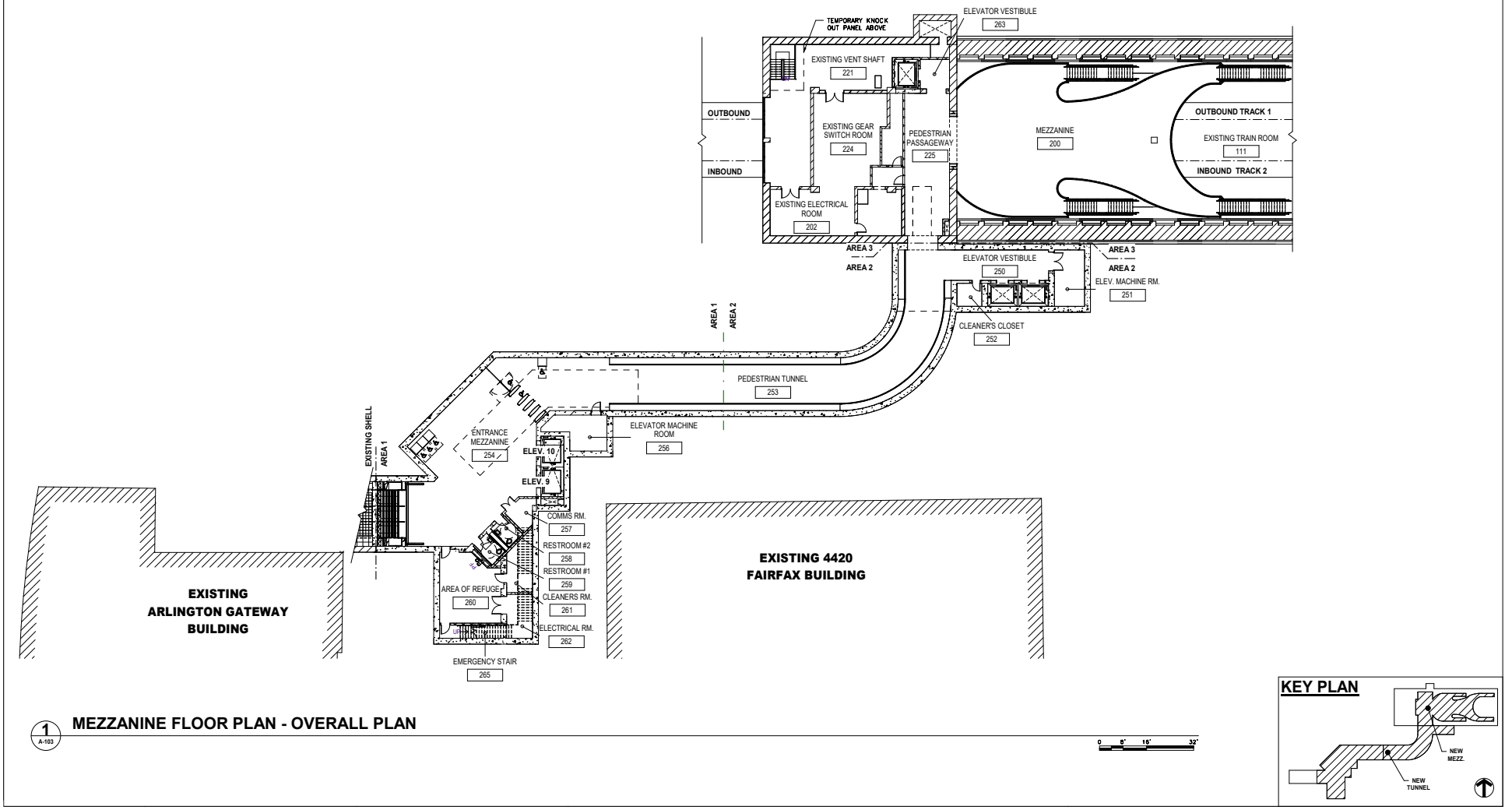


Source: STV Incorporated, 2024.

FIGURE 4

Street-level Plan

Ballston West Entrance Environmental Evaluation
Arlington County/WMATA



Source: STV Incorporated, 2024.

FIGURE 5

Mezzanine-level Plan

Ballston West Entrance Environmental Evaluation
Arlington County/WMATA

3.2 Construction Description

The anticipated construction duration is approximately 36 months.

As described above, the Project Area is located primarily within the existing roadbed and sidewalks of Fairfax Drive and N Vermont Street; however, the proposed new station entrance stair would be located within the loggia of the Arlington Gateway Building (901 N Glebe Road). An underground chamber left in place when the Arlington Gateway Building was constructed would be fitted out to create the proposed entrance mezzanine and the landing area for the proposed new entrance stairs. The sidewalk under the loggia on the north side of the Arlington Gateway Building comprises seamed panels, which would be lifted out to accommodate construction of the entrance stairs. The proposed pedestrian tunnel between the mezzanines would be constructed via cut-and-cover construction within the roadbed of Fairfax Drive.

All temporary easements necessary for construction are already in place. As construction plans advance, Arlington County and WMATA will coordinate and confirm with construction contractors and adjacent property owners. The contractor would be responsible for obtaining all construction permits.

4.0 PROJECT IMPACTS

4.1 Study Area and Methodology

Arlington County and WMATA reviewed the resources in and around the Project Area to determine whether the Proposed Project might result in impacts to those resources.

Environmental analyses apply a study area extending 500 feet from the Project Area. The study area is roughly bounded by N Wakefield Street to the west, N Taylor Street to the east, 11th Street N to the north, and Wilson Boulevard to the south. Analyses consider the potential for direct, indirect, and construction-related impacts to the human and natural environment. Supporting technical analyses, as appropriate, are included in the appendices to this EE.

This EE is based on publicly available information, as cited (specifically, reports, mapping, database searches); field observations; and agency coordination.

4.2 Resources Not Present and/or Screened Out of Analysis

The potential for the Proposed Project to result in impacts to various resources and environmental technical areas are analyzed in Section 4.2, "Resources Present and Relevant Subject Areas." Resources not present within the study area, as well as technical areas for which the Proposed Project would have no potential effects, are screened out of analysis and described below:

- **Historic and Cultural Resources:** A desktop survey of the Virginia Department of Historic Resources (DHR) archives and the Arlington County Historic Preservation Program identified no previously surveyed historic resources within the study area.

- **Neighborhood and Community Facilities**: No neighborhood and community facilities are present within the study area.

- **Wetlands and Waters of the U.S.:** There are no wetlands or other Waters of the U.S. present within the study area. The closest wetland are a freshwater emergent wetland within Ballston Wetland Park and a riverine wetland located approximately 800 feet west of the Project Area (see **Figure 10, "Natural and Recreational Resources"**).

- **Ecologically-Sensitive Areas and Endangered Species**: An Information, Planning, and Conservation System (IPaC) search showed that no protected species, critical habitat, or essential fish habitat is found in or near the study area. The Proposed Project is located in a developed urban area and there are no forest stands.

The Proposed Project would not have any impact on such resources, and no further assessment is warranted.

4.3 Resources Present and Relevant Subject Areas

This section assesses the potential for the Proposed Project to result in impacts to resources present within the study area as well as impacts relevant to the human and built environment, such as traffic and noise. The analyses consider direct effects (caused by the action and occurring at the same time and place); indirect effects (caused by the action and occurring later in time or farther removed in distance, but still reasonably foreseeable); and cumulative impacts (resulting from the incremental impact of the action when it is added to other past, present, and reasonably foreseeable future actions, regardless of which agency or person is or was responsible for such actions).

Land Use and Zoning

In the early 1970s, the development of the Metrorail system, including a subway line in the Rosslyn-Ballston Corridor, prompted the Ballston Sector Plan. The plan aimed to establish a "new downtown" in central Arlington by creating a neighborhood of multi-story buildings containing a mix of commercial, office, and residential uses.[4] It also facilitated the redevelopment of the Parkington Shopping Center as a commercial hub and increased permitted density around the Ballston-MU Metrorail station. In 2001, Arlington County adopted the Rosslyn-Ballston Corridor Retail Action Plan, which promoted smart growth with regulations intended to encourage additional high-density mixed-used development near Metrorail stations.

Two properties in the vicinity of the Project Area are currently undergoing redevelopment, and are anticipated to be completed before or concurrent with the completion of the Proposed Project:

- 4600-4610 Fairfax Drive, approximately 500 feet southwest of the Project Area, is being redeveloped with a seven-story, 432-unit residential building and two five-story, 15-unit residential buildings. It is anticipated to be completed and occupied in 2024.[5]

- "Ballston Station" is a new-mixed use development with affordable apartments, a church, and a childcare center at 4201 Fairfax Drive, approximately 800 feet east of the Project Area. The eight-story building will provide 144 committed affordable units. The Ballston Station development is slated to open in 2024.[6]

No other development or construction projects have been identified in the vicinity of the Project Area.

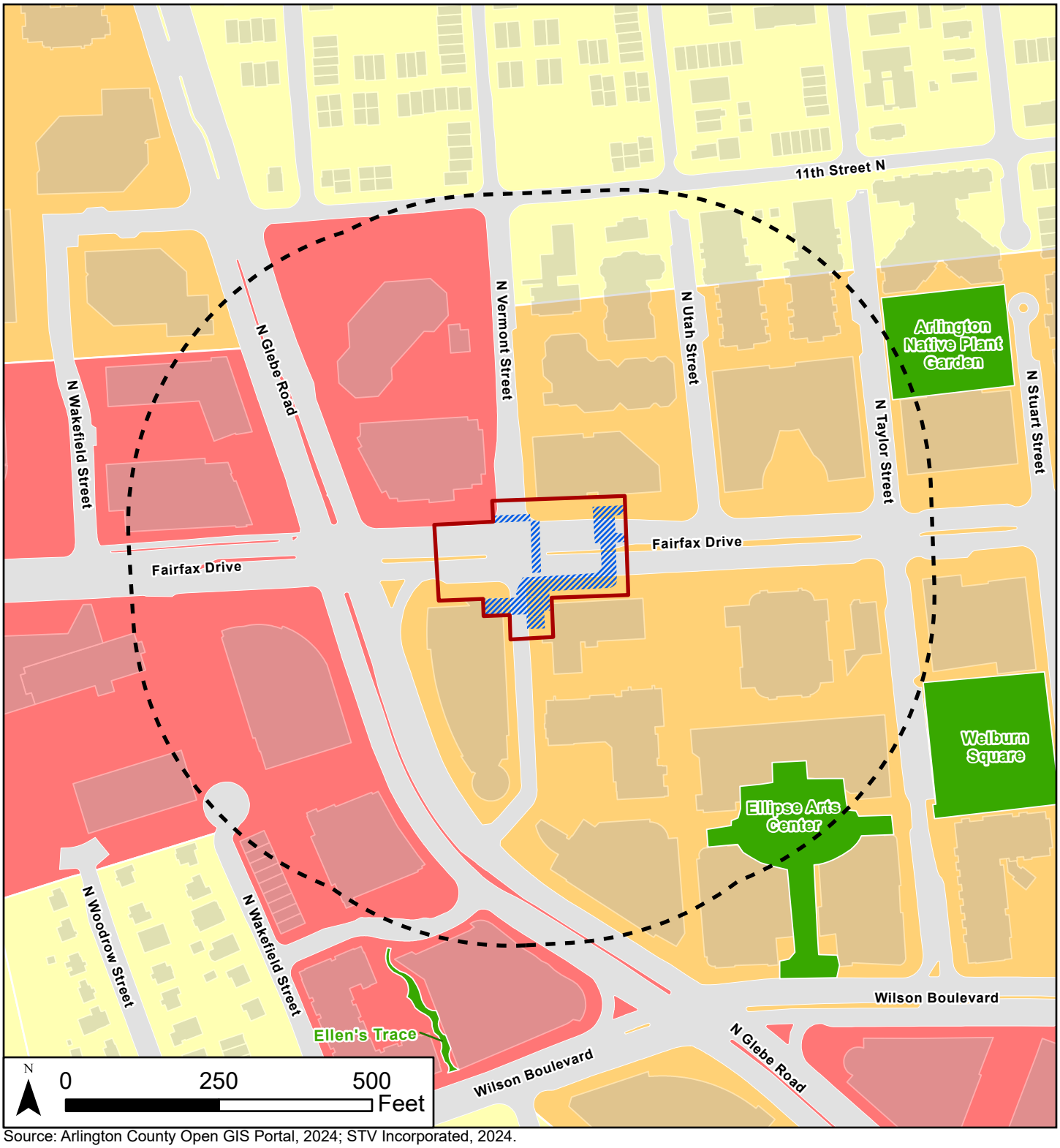
As described in Section 2.0, "Project Area," the Project Area comprises the sidewalk and roadway at the intersection of Fairfax Drive and N Vermont Street. No property would be acquired to implement the Proposed Project; however, the proposed entrance stairs would be located under north side loggia of the Arlington Gateway Building (901 N Glebe Road).

Land uses adjacent the Project Area include commercial to the west and mixed-use to the south and east. The southern portion of the Project Area is mapped with a C-O-A Mixed Use District, the northwest portion

[4] Ballston Sector Plan, Arlington County Department of Community Affairs Planning Division, May 1980
[5] Ballston Holiday Inn redevelopment proposal reaches Arlington County Board | ARLnow.com
[6] New apartments, church and daycare to open next year in Ballston | ARLnow.com

of the Project Area is mapped with a C-O-2.5 Mixed Use District, and the northeast portion of the Project Area is mapped with an R-C Multiple-family Dwelling and Commercial District (See **Figure 6, "Existing Land Use,"** and **Figure 7, "Zoning"**).

The Proposed Project would be consistent with existing land uses and zoning in the study area. The Proposed Project would lower passenger congestion at the existing entrance, improving station access. The new station entrance would support the Rosslyn-Ballston Corridor Retail Action Plan by accommodating growing ridership. As such, the Proposed Project would not result in direct or indirect effects to land use, zoning, and public policy, nor would it contribute to potential cumulative effects.



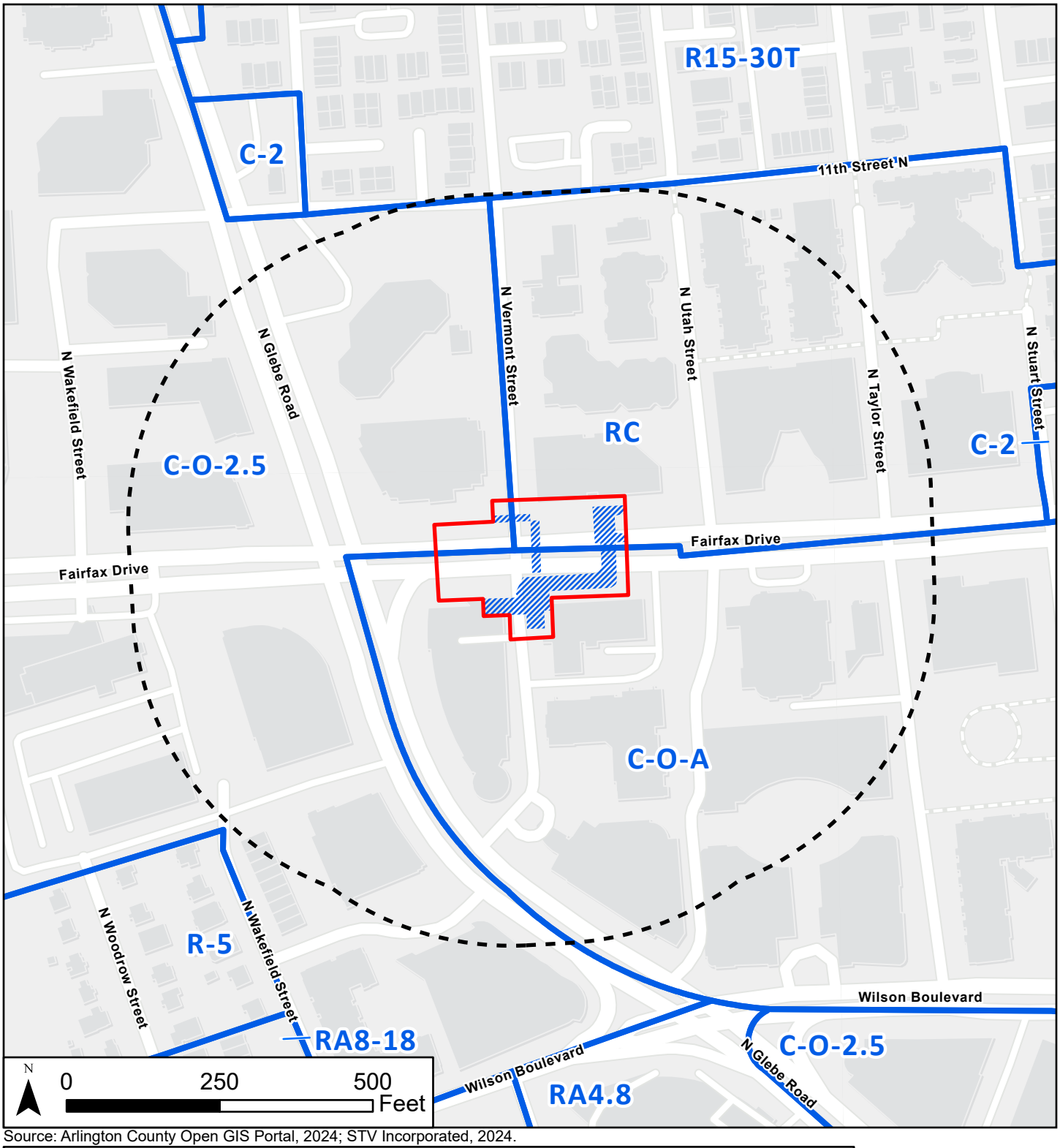
Source: Arlington County Open GIS Portal, 2024; STV Incorporated, 2024.

- Project Area
- 500-foot Study Area
- Proposed Project Elements
- Building Footprint
- Residential
- Mixed Use
- Commercial
- Open Space

FIGURE 6

Existing Land Use

Ballston West Entrance Environmental Evaluation
Arlington County/WMATA



Source: Arlington County Open GIS Portal, 2024; STV Incorporated, 2024.

Project Area
500-foot Study Area
Proposed Project Elements
Zoning District

Zoning Key

C-2 : Service Commercial - Community Business District
C-O-2.5, C-O-A: Mixed Use District
R-5 : One Family, Restricted Two Family Dwelling District
R15-30T : Residential Town House Dwelling District
RA4.8, RA8-18 : Apartment Dwelling District
RC : Apartment and Dwelling Commercial District

FIGURE 7
Zoning

Transportation

Ballston is a major multi-modal transportation hub. In addition to the Ballston-MU Metrorail Station, the transportation network in Ballston includes:

- **Roadways**: Ballston is bounded by Interstate 66 (I-66) to the north, N Kirkwood Road and 10th Street N to the east, Wilson Boulevard to the south, and N Glebe Road to the west. Fairfax Drive serves as the primary route for west-east circulation, supplemented by Washington Boulevard and Wilson Boulevard. Local north-south cross streets provide connectivity within Ballston.
- **Bicycle Network**: Arlington County has installed bike lanes on Fairfax Drive throughout the study area. North-south cross streets, including portions of N Utah Street and N Stafford Street, are designated as on-street bicycle routes. The Bluemont Junction Trail and the Custis Trail,[7] located approximately 1,000 feet and 1,900 feet west of the Project Area, respectively, can be accessed via Fairfax Drive.[8] There are two Capital Bikeshare stations in the vicinity of the Project Area: one at the intersection of Fairfax Drive and N Taylor Street, approximately 500 feet east of the Project Area, and another at the intersection of Stuart Street and 9th Street N, approximately 900 feet southeast of the Project Area.
- **Pedestrian Network**: The streets in Ballston generally have sidewalks and crosswalks at intersections.
- **Local Bus Network**: 10 Metrobus local bus routes and six ART bus routes serve Ballston. While all routes have stops at the existing Ballston-MU Metrorail station entrance at N Stuart Street and Fairfax Drive, bus stops are separated by bays along the station entrance. Bays A-D are located along N Stuart Street and service seven bus routes: five Metrobus bus routes and two ART bus routes. Bays E-H are located along Fairfax Drive and service seven bus routes: six Metrobus bus routes and one ART bus route. Bay J is located between Fairfax Drive and N Stafford Street and services one ART bus route.

Metrorail

The Metrorail Orange Line operates between the Vienna/Fairfax-GMU Metrorail Station in Fairfax County, Virginia and the New Carrollton Metrorail Station in New Carrollton, Maryland. The Metrorail Silver Line operates between the Ashburn Metrorail Station in Ashburn, Virginia and the Downtown Largo Metrorail Station in Largo, Maryland.

The Ballston-MU Metrorail Station averages 5,975 daily boardings in 2024.[9] **Table 1** provides average weekday passenger entries by time of day. The station experiences fairly balanced entries between the morning and evening peaks, with a slightly higher percentage of entries in the AM peak. Midday entries account for about 20 percent of total entries.

[7] Part of the Arlington Loop, a 16-mile Bicycle Circuit composed of multiple local trails around Arlington County.
[8] ARLCO_BIKE_2023_Map Side (bikearlington.com)
[9] WMATA Rail Ridership Viewer https://www.wmata.com/initiatives/ridership-portal/ Accessed July 31, 2024.

Table 1: Ballston-MU Metrorail Station Average Weekday Entries, 2024

Time*	Average Number Daily Entries	Percent of Total Entries
AM Peak Entries	2,131	35.67%
Midday Entries	1,278	21.39%
PM Peak Entries	1,889	31.62%
Evening Entries	659	11.03%
Late Night Entries	18	0.003%
Total	5,975	100%
*AM Peak = Open — 9:30 AM; Midday = 9:30 AM — 3:00 PM; PM Peak = 3:00 AM — 7:00 PM; Evening = 7:00 PM — 12:00 AM; Late Night = 12:00 AM — Close		

Source: https://www.wmata.com/initiatives/ridership-portal/

Metrobus

As shown in **Table 2**, there are 16 bus routes that serve the Ballston-MU Metrorail station, including 10 Metrobus routes (1A, 1B, 23A, 23B, 23T, 2A, 10B, 22A, 25B, and 38B), and six ART routes (ART 41, ART 42, ART 51, ART 52, ART 72, and ART 75).

Table 2: Transit and Commuter Bus Routes Serving Ballston-MU Metrorail Station

Route	Description	AM Peak Headway (minutes)	Midday Headway (minutes)	PM Peak Headway (minutes)
1A	Vienna Metrorail Station to Ballston-MU station	20	20	20
1B	Vienna Metrorail Station to Ballston-MU station	25	n/a	25
23A	Tysons Corner Center Metrorail Station to Crystal City Metrorail Station	12	15	12
23B	Tysons Corner Center Metrorail Station to Crystal City Metrorail Station	24	30	24
23T	Tysons Corner Center Metrorail Station to Crystal City Metrorail Station	24	30	24
2A	Dunn Loring Metrorail Station to Ballston-MU Metrorail Station	30	45	30
10B	Hunting Point to Ballston-MU Metrorail Station	30	30	30
22A	Ballston-MU Metrorail Station to Pentagon Metrorail Station	60	60	60
25B	Ballston-MU Metrorail Station to Mark Center Transit Station	15	30	15
38B	Ballston-MU Metrorail Station to Farragut West Metrorail Station	15	15	15
ART 41	Columbia Pike and Dinwiddie to Court House Metrorail Station via Ballston	15	15	15
ART 42	Ballston-MU Metrorail Station to Pentagon Metrorail Station	15	30	15

Table 2: Transit and Commuter Bus Routes Serving Ballston-MU Metrorail Station (Continued)

Route	Description	AM Peak Headway (minutes)	Midday Headway (minutes)	PM Peak Headway (minutes)
ART 51	Ballston-MU Metrorail Station to Virginia Hospital Center	30	30	30
ART 52	Ballston-MU Metrorail Station to East Falls Church Metrorail Station via Virginia Hospital Center	30	60	25-35
ART 72	Rock Spring to Shirlington Transit Center via George Mason Drive	30	30	30
ART 75	Shirlington Transit Center to Virginia Square Metrorail Station	30	40	30

In its permanent condition, the Proposed Project would not result in significant adverse effects to the existing bus, bicycle, or pedestrian networks. It would instead represent an improvement in conditions for pedestrians and transit users, in particular users transferring between Metrorail and bus services. It would not add any parking or passenger drop-off spaces. It is therefore anticipated to generate low levels of additional vehicular traffic, with no impacts on roadway and intersection levels of service.

Construction of the Proposed Project may result in occasional short-term disruptions to Metrorail service, bus service, traffic, cyclists, and pedestrians. Metrorail service interruptions would be accommodated through reliance on the existing supplementary bus service, or users may be advised to utilize the Virginia Square-GMU Metrorail Station, located approximately 2,000 feet east of the Project Area. Traffic, cyclist, and pedestrian disruptions would be limited to the Project Area and its immediate vicinity.

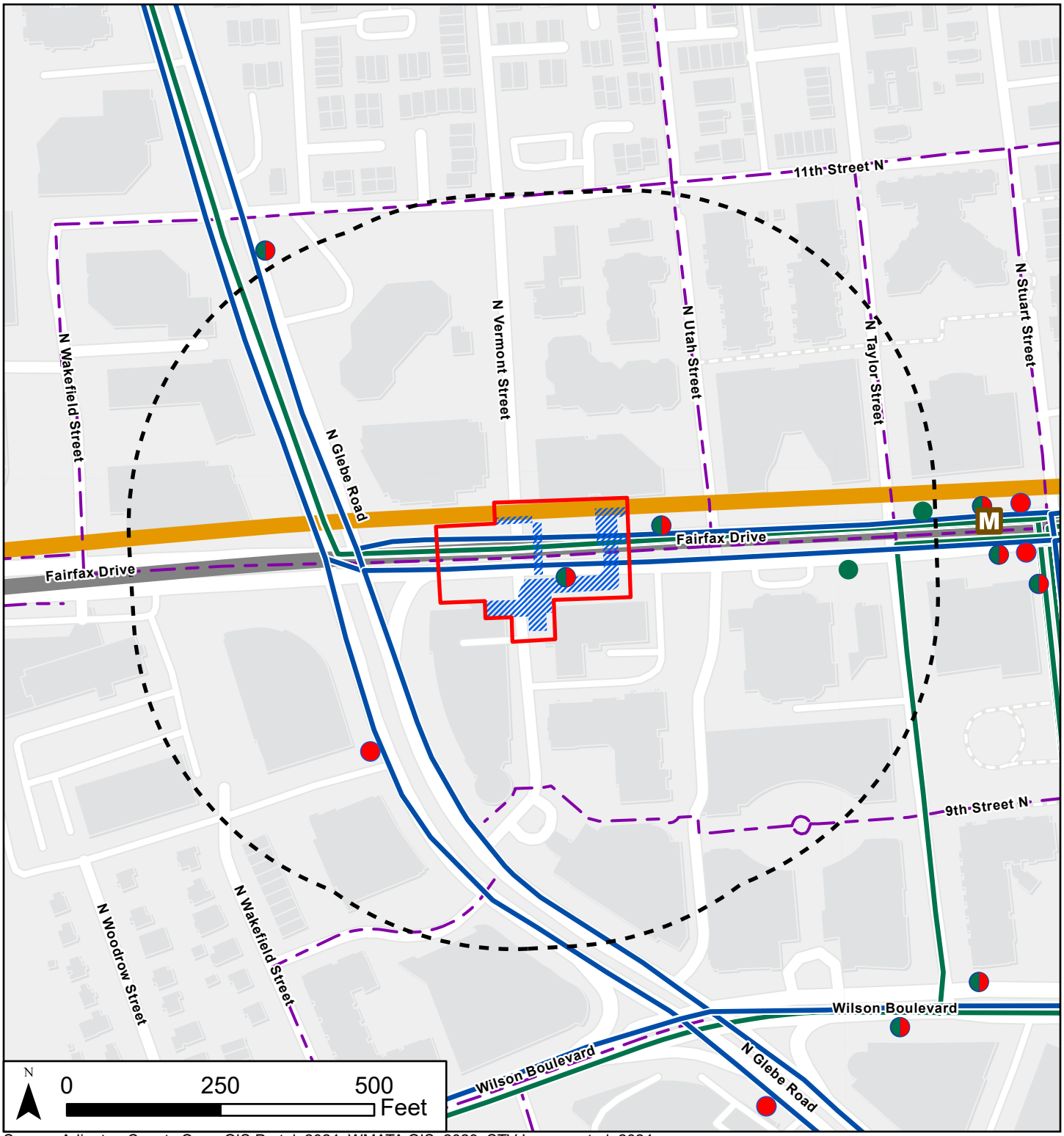
Prior to the start of construction, the Proposed Project would be required to prepare a Maintenance of Traffic (MOT) Plan and Arlington County/WMATA would require a Maintenance of Operations Plan (MOP) to address issues such as advanced coordination of station closures with a train bypass. Construction activities temporarily affecting traffic, pedestrian, and cycling infrastructure would include the following:

- During the construction of the below-grade pedestrian tunnel, the two travel lanes on eastbound Fairfax Drive would be fully closed to traffic, during which time a detour route would be implemented. Potential detour routes are currently being developed; a traffic analysis of potential detour route options would be performed during final design to determine the best route for traffic operations. Access to driveways in the vicinity, including an existing parking garage and surface parking along N Vermont Street, south of Fairfax Drive, would be maintained during construction.
- Parking along eastbound Fairfax Drive between N Glebe Road and N Utah Street would be temporarily removed during construction (approximately seven metered two-hour parking spaces).
- The existing bicycle lane along eastbound Fairfax Drive would be directly impacted during construction for approximately 300 feet. No viable bicycle detour route is available at this

location; as such, bicyclists would be required to share vehicular lanes with traffic and/or dismount and walk along the sidewalk for this stretch of roadway.

- The demolition and reconstruction of the crosswalk and curb ramps along the eastbound side of Fairfax Drive at N Vermont Street would require a reduction in sidewalk width. Construction is anticipated to be phased to allow for approximately half of this sidewalk area to remain open at all times. If the contractor determines that the entire sidewalk needs to be closed during a portion of construction, a temporary pedestrian detour route would be implemented. This would require pedestrians to cross Fairfax Drive at N Utah Street and continue west to the intersection of Fairfax Drive and N Glebe Road, where they could cross back to the southern sidewalk of Fairfax Drive.
- The existing bus stop on the corner of N Vermont Street and Fairfax Drive, currently serving WMATA routes 23A and 23T and ART routes ART51 and ART72, may be affected during the sidewalk demolition and reconstruction. If a temporary relocation of this bus stop is required, this relocation would be coordinated with WMATA prior to construction.

Therefore, the Proposed Project would not result in direct or indirect adverse effects with respect to transportation in the operational condition, nor would it contribute to potential cumulative effects; rather the Proposed Project would improve conditions for pedestrians and transit users. During construction, short-term disruptions to traffic along Fairfax Drive would result in temporary delays and increased vehicular travel time. Detours would be implemented to allow for continuous travel around the Project Area; detour routes are currently being considered and would be refined to minimize potential delays. A MOT Plan and MOP would be developed prior to the start of construction to minimize effects to traffic operations to the extent practicable. Cyclists and pedestrians walking along Fairfax Drive would also experience short-term disruptions and detours around active construction zones. These would occur only during a portion of the overall construction duration during certain excavation activities, and would not represent a significant adverse impact to traffic, transit, cyclists, or pedestrians.



Source: Arlington County Open GIS Portal, 2024; WMATA GIS, 2023; STV Incorporated, 2024.

- Project Area
- 500-foot Study Area
- Proposed Project Element
- Metro Rail Station
- Orange Line
- Silver Line
- Metrobus Stop
- ART Bus Stop
- Metrobus/ART Bus Stop
- Metrobus Route
- ART Bus Route
- Bike Lanes

FIGURE 8

Transportation Facilities

Ballston West Entrance Environmental Evaluation
Arlington County/WMATA

Air Quality

The Proposed Project would not change operations of Metrorail Orange and Silver Lines, nor would it result in permanent changes to roadways. Therefore, Proposed Project would not result in any significant adverse impacts to air quality in its permanent condition.

Construction is anticipated for a total of approximately 36 months. Intensive construction activities, as well as modifications to traffic operations, including temporary lane closures, are anticipated to be less than 24 months. Construction also would require the use of construction trucks and diesel-powered equipment, which have the potential to increase particulate emissions due to the generation of fugitive dust and mobile source emissions. Any potential construction-related air quality effects would last for a limited period. As construction plans advance, the contractor would be required to develop and implement appropriate minimization and/or mitigation measures to reduce or avoid any potential air quality impacts associated with Proposed Project construction.

Temporary construction-period air quality effects may occur, though it is anticipated that these would be short-term in nature and effectively addressed through the application of best management practices (BMPs) and mitigation/minimization measures during construction.

Therefore, neither the operation nor the construction of the Proposed Project would result in significant direct or indirect impacts to air quality, nor would it contribute to cumulative effects.

Visual Quality

Ballston is a highly urbanized environment, with primary visual features consisting of large buildings and transportation infrastructure. The Proposed Project would not degrade or alter the existing visual character or quality of the Project Area or its surroundings. The visible elements of the Proposed Project at street level would be the new entrance stair, two new elevators, an emergency stair surface hatch, and sidewalk and crosswalk improvements along the north side of Fairfax Drive at N Vermont Street. These elements would be consistent with the surrounding urbanized environment.

As such, the Proposed Project would not result in direct or indirect effects with respect to visual quality, nor would it contribute to cumulative effects.

Noise

No permanent noise impacts are expected as a result of the Proposed Project, as the operation of a second entrance to the Ballston-MU Metrorail station would not add any new above-ground noise sources.

Noise during construction would include noise from excavation, construction equipment operation, and construction vehicles traveling in and out of the Project Area. Construction is anticipated to last a total of approximately 36 months; however, intensive construction activities, as well as modifications to traffic operations, including temporary lane closures, are anticipated to last less than 24 months.

Construction would primarily be conducted during daytime hours. Certain activities, however, such as modifying the tunnel structure, would need to be done at night, when trains are not operating. The

surrounding ground would reduce noise levels at nearby receptors for construction activities conducted at lower elevations. Construction noise levels would not exceed the daytime (WMATA) noise limit during support of excavation (SOE) or tunnel wall demolition. If drilling were to occur at night, SOE construction noise levels would exceed nighttime (Arlington County) limits by up to 15 "A"-weighted decibels (dBA). For tunnel wall demolition, which is expected to occur at night, noise levels may exceed nighttime limits by up to 13 dBA prior to noise control measures.

In accordance with WMATA design criteria, construction noise monitoring would be conducted to assure compliance with the WMATA noise limits. The contractor would notify the Engineer of any complaints received from the community and inform the Engineer of noise control measures to be used and the schedule to implement them. Construction noise control measures would be implemented, if and as needed, to comply with applicable daytime and nighttime noise limits. Control measures may include source controls, such as using smaller and quieter equipment (i.e., smaller backhoes versus larger backhoes), or pathway controls, such as a temporary perimeter noise walls or enclosures around smaller equipment (e.g., generators or compressors). A perimeter noise wall approximately 10 feet tall and constructed of a material providing a sound transmission classification of 25 dBA or greater (such as ¾-inch plywood or a wire fence with acoustical curtains) would typically be effective in reducing construction noise by up to 10 dBA at ground-level receptors. For below-ground activities, the ground itself would attenuate construction noise. To reduce SOE construction noise levels by up to 15 dBA and tunnel wall demolition by up to 13 dBA, a combination of noise control measures would be required. The contractor would also control construction noise by completing particularly noisy construction activities during the day to help minimize impact.

As such, the Proposed Project would not result in direct or indirect effects with respect to noise, nor would it contribute to cumulative effects.

Vibration

No permanent vibration impacts are expected as a result of the Project. The operation of a second entrance to the Metrorail station would not add any new sources of vibration.

Like noise, construction vibration has the potential to annoy humans occupying nearby buildings. Construction vibration also has the potential to increase the risk of damage to nearby structures. Primary sources of construction vibration are earth-moving and impact operations such as excavating and drilling. Dump trucks can also generate vibration, particularly when running over steel plates or uneven roadway surfaces. The sensitivity of structures to vibration depends on their construction type. For most buildings that are in generally sound condition, WMATA design criteria limit peak particle vibration (PPV) outside of buildings to 0.2 inches per second (in/s) to reduce the risk of damage. Vibration lasting more than one hour per day would increase the risk of structural damage to buildings within 14 to 15 feet and may cause human annoyance in buildings 22 to 24 feet away.

Vibration-generating construction activities are generally expected to be more than 24 feet away from any nearby structures. In accordance with WMATA design criteria, construction vibration monitoring would be conducted to assure compliance with the WMATA vibration limits. Vibration monitors for potential structural damage would notify and alert the contractor and Engineer of any exceedances of

construction vibration limits. The contractor would notify the Engineer of any complaints received from the community and inform the Engineer of the vibration control measures to be used and the schedule to implement them. Therefore, the potential for construction vibration impacts causing human annoyance or an increased risk of structural damage to buildings is minimal.

As such, the Proposed Project would not result in direct or indirect effects with respect to vibration, nor would it contribute to potential cumulative effects.

Acquisitions and Relocations

The Proposed Project would not result in the permanent acquisition of private property. The Proposed Project is primarily located within and below the roadbed and sidewalk of Fairfax Drive and N Vermont Street. The proposed new entrance stairs would require the use of a portion of the north side loggia of the Arlington Gateway Building (901 N Glebe Road) per existing easements to facilitate their construction. The Proposed Project would not directly or indirectly displace any residents, businesses, or community facilities, nor would it have the potential to induce future actions which could lead to acquisitions, displacements and/or relocations of residents, businesses, or community facilities.

All temporary easements necessary for construction are already in place. As construction plans advance, Arlington County and WMATA would coordinate and confirm the final location, dimensions, and rights associated with any potential additional temporary construction easements with construction contractors and adjacent property owners.

Hazardous Materials

Arlington County and WMATA investigated the potential presence of contaminated sites and hazardous materials in the Project Area by running an Environmental Database Report (EDR). A Phase I Environmental Assessment was conducted in 2010 for the Project Area. One unregistered underground storage tank (UST) was identified at the Project Area in a previous study and may have been closed-in-place prior to 2000. However, that information could not be confirmed. If the UST is uncovered during excavation, it would have to be removed and disposed of according to Virginia DEQ UST regulations.

Due to a history of dry cleaners and service stations at surrounding sites, reported releases and spills from nearby USTs, and environmental reports prepared for other construction in the immediate area, the potential exists to encounter on-site contaminated soils and groundwater during excavation of subsurface soils to accommodate construction, particularly on the north and southwest sides of building (901 N Glebe Road). Any potentially contaminated soil and/or groundwater unearthed during construction could require treatment and disposal and would not be usable for backfilling excavations. Construction contractors excavating in the area should be prepared to remove and dispose of any contamination encountered. It is recommended that a Soil and Groundwater Materials Management Work Plan be developed to guide efforts during the construction phase.

As such, the Proposed Project would not result in direct or indirect effects to hazardous materials, nor would it contribute to potential cumulative effects.

Social Impacts and Community Disruption

The Proposed Project would not result in any community disruption (i.e. create barriers between communities or negatively affect existing travel patterns). The proposed stair would be within the loggia of the Arlington Gateway Building (901 N Glebe Road) and the proposed new elevators would be on a public sidewalk with sufficient width to maintain pedestrian travel and access. The Proposed Project would enhance access to the Metrorail system for people living, working, attending school, or shopping in the Ballston neighborhood as well as other transit users.

As such, the Proposed Project would not result in direct or indirect social impacts or community disruptions, nor would it contribute to potential cumulative effects.

Environmental Justice

The Project Area is located within Census Tract (CT) 1014.01, Block Group (BG) 1, and CT 1014.09, BG 2. The study area extends into CT 1014.02 BG 1 and BG 2, as well as CT 1014.09 BG 1. As shown in **Figure 9, "Potential Environmental Justice Communities,"** potential EJ communities surround the Project Area and are served by transit at this location.

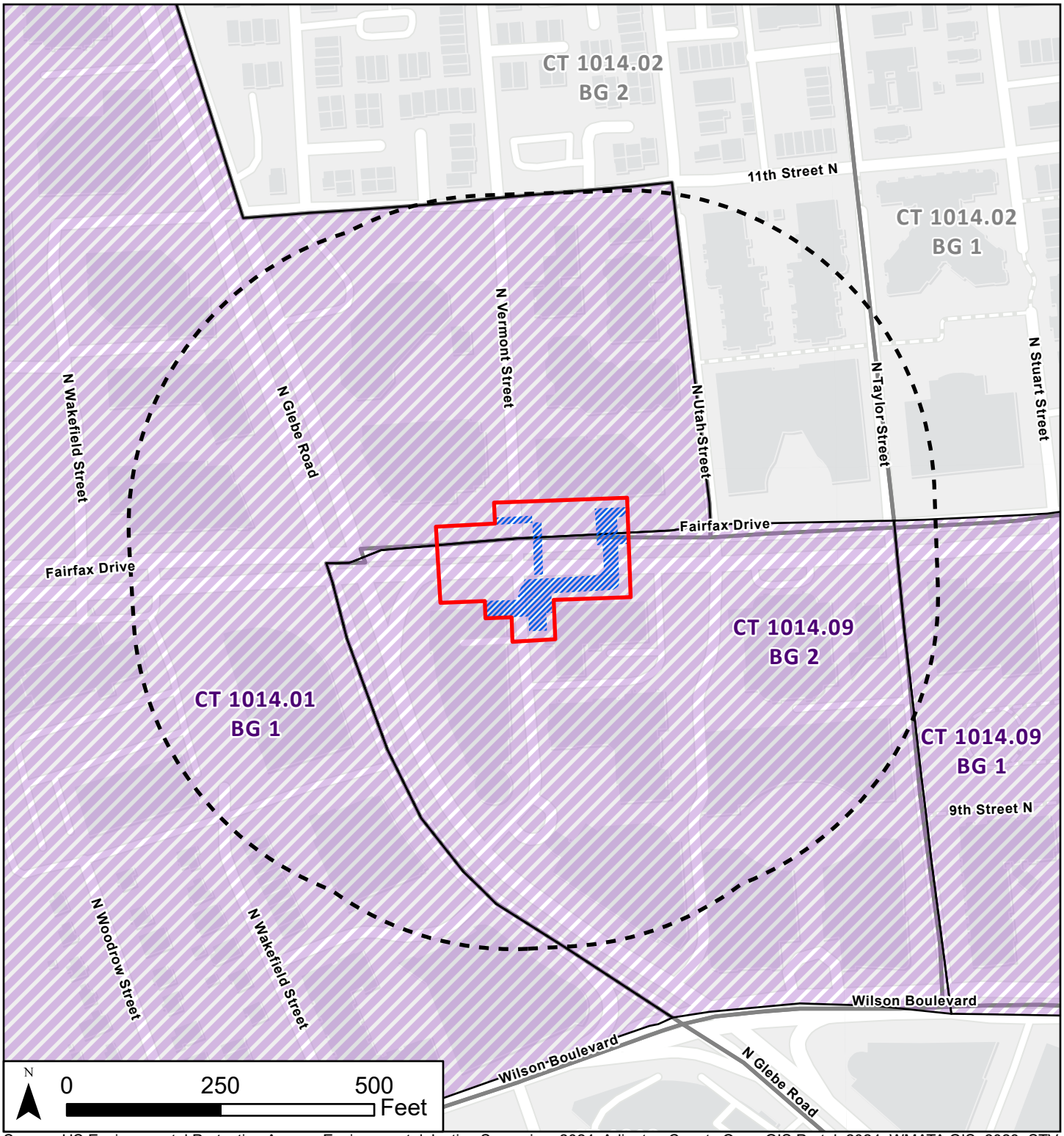
As described in Section 1.2, "Purpose and Need for the Proposed Project," the purpose of the Proposed Project is to improve transit access at this location. Therefore, in its permanent operational condition, the Proposed Project would be expected to benefit nearby potential EJ communities that may rely on Metrorail and bus service at this location.

There are no identified Transportation Access Burden EJ communities in the Project Area. The Transportation Access Burden Index is measured through an average of four transportation-related indicator percentiles, including Transportation Cost Burden, National Walkability Index, Percentage of Households with No Vehicle Available, and Mean Commute Time to Work.[10]

As described herein, minor temporary construction-period effects are anticipated with regard to transportation, air quality, noise, and vibration. Construction activities would, however, be managed to minimize or avoid any potential significant adverse construction-period impacts. For example, as described in the Transportation section, alternate transit options would be made available in coordination with the community, and any disruptions to traffic, cycling, or pedestrian infrastructure would be managed with a Maintenance of Traffic (MOT) plan.

Therefore, no significant adverse effects would be disproportionately borne by the potential EJ communities in the vicinity of the Project Area, but all potential EJ populations served by WMATA may benefit from the proposed improvements at this station.

[10] https://www.epa.gov/ejscreen/ejscreen-map-descriptions



Source: US Environmental Protection Agency Environmental Justice Screening, 2024; Arlington County Open GIS Portal, 2024; WMATA GIS, 2023; STV Incorporated, 2024.

- Project Area
- 500-foot Study Area
- Proposed Project Elements
- Potential Environmental Justice Community
- Other Census Block Group

FIGURE 9

Potential Environmental Justice Communities

Ballston West Entrance Environmental Evaluation
Arlington County/WMATA

Public Parkland and Recreation Areas

Two open space resources are located within the study area: the Ellipse Art Center, located approximately 350 feet to the southeast of the Project Area, and the Arlington Native Plant Garden, located approximately 475 feet northeast of the Project Area. The Ellipse Art Center comprises an approximately 0.9-acre passive open space with plantings, seating, and a fountain. The Arlington Native Plant Garden is an approximately 0.75-acre passive open space containing native vegetation and walking paths.

Two additional parks are located outside of the study area but in the general vicinity of the Project Area: Welburn Square and Ellen's Trace. See **Figure 10, "Natural and Recreational Resources,"** for a map showing parks and recreation areas in the study area.

The Proposed Project would not directly affect any open space resources, nor would it introduce new resident or worker populations that could indirectly affect the use and enjoyment of any open space resources. No open space resources would have views of the Proposed Project either during construction or in its permanent condition. Therefore, the Proposed Project does not have the potential to directly or indirectly affect public parkland and recreation areas, nor would it contribute to potential cumulative effects.

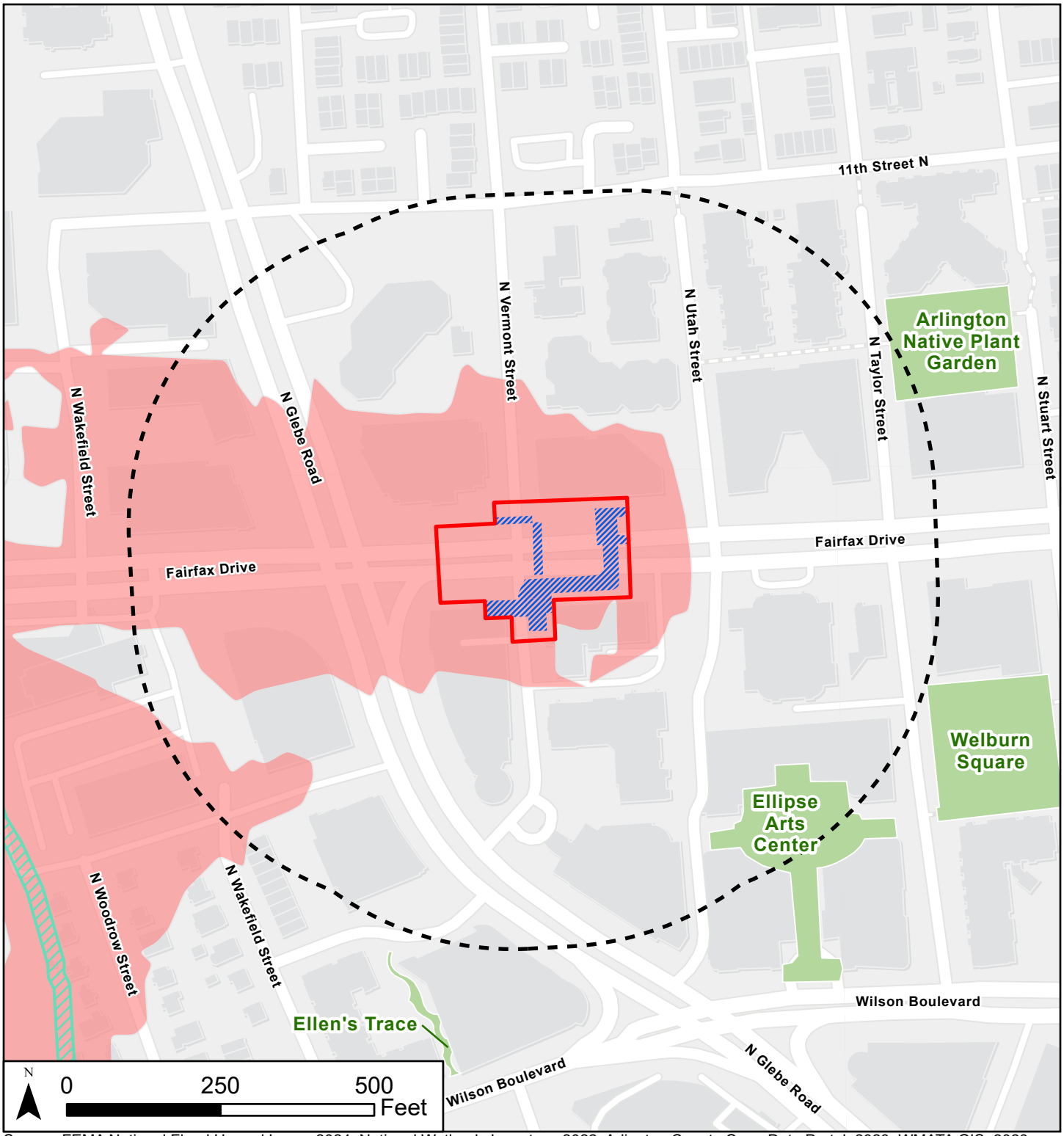
Water Quality

The Project does not have the potential to impact water quality, including during construction. The Project would not discharge directly to any water body and would not increase the amount of impervious surface in the study area. As ground disturbance would exceed 2,500 square feet, an Arlington County Land Disturbing/Stormwater Permit would be required. A Stormwater Pollution Prevention Plan, as required by the National Pollutant Discharge Elimination System Construction General Permit (NPDES), administered through the Virginia Department of Environmental Quality (DEQ) as the Virginia Pollutant Discharge Elimination System (VPDES), would be prepared prior to construction and implemented throughout construction. However, as the proposed area of disturbance is less than one acre, a registration statement and the Stormwater Pollution Prevention Plan (SWPPP) would not need to be submitted to Arlington County and coverage under the VPDES Construction General Permit would not be required.

As such, the Proposed Project would not result in direct or indirect effects to water quality, nor would it contribute to potential cumulative effects.

Floodplains

The Project Area and a portion of the study area primarily to the west of the Project Area are within a Federal Management Agency (FEMA)-designated floodplain, as shown on **Figure 10, "Natural Resources"**, although FEMA's latest data is unclear whether this is a 100-year or 500-year floodplain. WMATA's current design criteria has limitations to placement of facilities within both the 00-year and 500-year floodplains. This will be reviewed and addressed in Final Design. The Proposed Project would be located within a highly developed portion of Arlington County and would not result in an increase in impervious surfaces. Therefore, the Proposed Project is not anticipated to increase the potential for future damage associated with flooding, and would not result in an adverse effect related to floodplains.



Source: FEMA National Flood Hazard Layer, 2024; National Wetlands Inventory, 2022; Arlington County Open Data Portal, 2023; WMATA GIS, 2023; STV Incorporated, 2024.

- Project Site
- 500 Foot Study Area
- Proposed Project Elements
- 500-Year Floodplain
- NWI Wetland
- Open Space

FIGURE 10

Natural and Recreational Resources

Ballston West Entrance Environmental Evaluation
Arlington County/WMATA

As such, the Proposed Project would not result in direct or indirect effects with respect to floodplains and flood events, nor would it contribute to potential cumulative effects.

Safety and Security

The Proposed Project would be constructed in accordance with WMATA standards. All Metrorail facilities are designed and constructed in accordance with applicable laws, building codes, and accessibility guidelines in place at the time of construction. Therefore, the Proposed Project would not adversely affect safety or security, either directly or indirectly, nor would it contribute to potential cumulative effects.

Indirect and Cumulative Effects

The Proposed Project is not expected to result in indirect effects, as it would have a negligible effect on the study area roadway network (and would therefore not alter traffic patterns or increase traffic congestion). It would not alter land use patterns, population density, or the growth rate beyond what is already occurring and anticipated to occur in Ballston.

The Proposed Project is expected to have a beneficial cumulative impact on the accessibility of Ballston from the Glebe Road area and improve emergency egress from the station. No adverse cumulative effects are expected — as described in this EE, the Project is not expected to result in permanent adverse effects that would be more than negligible.

5.0 PROJECT PLANNING

Over the past twenty years, several studies have identified the need for the west entrance Ballston-MU Metrorail Station, as described below.

- In 2022, the Northern Virginia Transportation Authority approved an $80 million grant for the proposed west entrance at Ballston-MU Metrorail Station. The funding is park of the NVTA's **Fiscal Years 2022-2027 Six Year Program** to fund regional multimodal projects in Northern Virginia.[11]

- In May 2024, Arlington County Manager Mark Schwartz presented the **Fiscal Year 2025-2034 Capital Improvement Plan (CIP)**.[12] The plan showed the timeline for building, maintaining, upgrading, or replacing Arlington County facilities and infrastructure. The Ballston-MU Metrorail Station West Entrance is part of the external grant funds in the transportation sector and is predicted to cost approximately $177 million. The Project is anticipated to be constructed from Fiscal Year 2026 - Fiscal Year 2029.

- In April 2013, WMATA developed the **Ballston Station Multimodal Study** as a conceptual study of improvements for multimodal transportation and public space at Ballston Station. The study's goals and objectives were to increase traffic safety, improve transit circulation around the station, improve access and facilities, enhance the design and use of public spaces, and provide sustainable infrastructure. It also noted the need to improve the pedestrian experience at Ballston Station, which is currently subject to constricted circulation and obstructed visibility. The Project's purpose of creating station area improvements that would provide safer and more effect transit operations and pedestrian access to Ballston Station would further those goals and objectives. [13]

[11] ARL-021-Ballston-MU-Metrorail-Station-West-Entrance.pdf (thenovaauthority.org)

[12] Proposed FY 2025 - FY 2034 Capital Improvement Plan – Official Website of Arlington County Virginia Government (arlingtonva.us)

[13] DES-Ballston-Multimodal-Final-Study.pdf (arlingtonva.s3.amazonaws.com)