

**COMPREHENSIVE TRANSPORTATION REVIEW**

**5901 BLAIR ROAD, NW**  
**LARGE TRACT REVIEW**

**WASHINGTON, DC**

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## EXECUTIVE SUMMARY

The following report is a Comprehensive Transportation Review (CTR) for the 5901 Blair Road, NW project. This report reviews the transportation aspects of the project's Large Tract Review (LTR) application. Zoning Commission approval is not necessary for an LTR as the project will be developed by-right with the LTR application.

The purpose of this study is to evaluate whether the project will generate a detrimental impact to the surrounding transportation network. This report concludes that **the project will not have a detrimental impact** to the surrounding transportation network assuming that all planned site design elements are implemented.

### Proposed Project

The subject property (the "Site") is located in Ward 4 in the Northwest quadrant of the District. The Site is bounded by Blair Road to the west, Oglethorpe Street to the south, an animal hospital to the east, and a self-storage business to the north.

The project will redevelop an existing one-story industrial warehouse building into a four-story self-storage facility. The development consists of:

- An approximately 94,660<sup>1</sup> square foot self-storage facility.
- 27 covered parking spaces, consisting of 25 standard spaces and two (2) carshare spaces.
- Two (2) 30-foot loading berths, located in the parking area of the development.
- At least five (5) secure long-term bicycle parking spaces.

Parking and loading will be accessible from Oglethorpe Street using a reconfigured curb cut. The curb cut will be reduced in width to meet DDOT standards.

Vehicular parking for the development will utilize a covered parking lot that will replace the existing surface lot. 27 spaces will be provided, including 25 standard spaces and two (2) carshare spaces. The amount of on-site parking provided will meet zoning requirements and accommodate the anticipated parking demand generated by the Site.

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<sup>1</sup> The total GFA of the Project is 94,660 square feet. Including the penthouse and bays, the total GFA is 106,305 square feet. For

The amount of loading facilities on site will meet the project's needs. The two (2) loading berths supply the appropriate facilities to accommodate the practical needs of the site and meet zoning requirements. The development is expected to generate approximately two to three (2-3) loading trips per day. This consists of trash removal, mail, and parcel delivery. Based on the expected truck deliveries and the loading management plan provided, the loading plan for the development is adequate and will not adversely affect the local roadway network.

The development will meet zoning requirements for bicycle parking by including five (5) long-term bicycle parking spaces, as well as showers and lockers as required by zoning. The amount of bicycle parking, showers, and lockers will meet the practical needs of the development.

### Multi-Modal Impacts and Recommendations

#### *Transit*

The Site is well-served by Metrobus, which provides service to nearby Metrorail stations. The development will be generating minimal new transit trips on the network, the existing facilities have enough capacity to handle the new trips.

#### *Pedestrian*

The Site is surrounded by a well-connected pedestrian network. The existing pedestrian infrastructure surrounding the Site provides an excellent walking environment. There are some barriers east of the site due to the rail tracks, but overall there is a well-connected pedestrian network.

The Site will improve the overall pedestrian environment by providing improved sidewalks along the Blair Road frontage of the Site.

#### *Bicycle*

The Site has access to several on- and off-street bicycle facilities including the bicycle lanes on Kansas Avenue and signed routes on Peabody Street and 3<sup>rd</sup> Street. The Site is not expected to generate a significant amount of bicycle trips; therefore, all Site-generated bike trips can be accommodated on existing infrastructure.

purposes of calculating vehicle parking, bicycle parking, shower and changing facilities and loading requirements, the GFA is 95,754 square feet.



The development will provide five (5) long-term bicycle parking spaces within the covered parking area, meeting zoning requirements. The development will also provide showers and lockers as required by zoning requirements.

#### *Vehicular*

The Site is accessible from several principal arterials such as New Hampshire Avenue, North Capitol Street, Riggs Road, Missouri Avenue, and South Dakota Avenue. The arterials create connections to I-395, I-695, I-295, and ultimately the Capital Beltway (I-495) that surrounds Washington, DC and its inner suburbs as well as regional access to I-95. All of these roadways bring vehicular traffic within a half-mile of the Site, at which point minor arterials, collectors, and local roads can be used to access the Site directly.

The project is expected to generate fewer than 25 trips per hour in the peak direction during both morning and afternoon peak hours. Therefore, a vehicular capacity analysis is not applicable, as confirmed with DDOT during the scoping process.

#### *Summary and Recommendations*

This report concludes that **the proposed development will not have a detrimental impact to the surrounding transportation network, assuming that the proposed Site design elements are implemented.**

The development has several positive elements contained within its design that minimize potential transportation impacts, including:

- The inclusion of secure long-term bicycle parking, showers, and lockers.
- The inclusion of two (2) carshare spaces, which may be used by the public.
- Implementation of a Loading Management Plan (LMP) that minimizes the potential impacts from loading that the proposed development will have on the surrounding intersections and neighborhoods.
- A Transportation Demand Management (TDM) plan that reduces the demand of single-occupancy, private vehicles during peak period travel times or shifts single-occupancy vehicular demand to off-peak periods.



## INTRODUCTION

This report is a Comprehensive Transportation Review (CTR) of the 5901 Blair Road, NW development. This report reviews the transportation elements of the project's Large Tract Review (LTR) application. The Site, shown in Figure 1 and Figure 2, is located in the Brightwood-Manor Park neighborhood of Northwest, DC.

### PURPOSE OF STUDY

The purpose of this report is to:

1. Review the transportation elements of the development site plan and demonstrate that the site conforms to DDOT's general policies of promoting non-automobile modes of travel and sustainability.
2. Provide information to DDOT and other agencies on how the development of the Site will influence the local transportation network. This report accomplishes this by identifying the potential trips generated by the Site on all major modes of travel and where these trips will be distributed on the network.
3. Determine if development of the Site will lead to adverse impacts on the local transportation network.

### PROJECT SUMMARY

The development, which is currently a one-story industrial warehouse building, is located in the Brightwood-Manor Park neighborhood, in the Northwest quadrant of Washington, DC. The Site is generally bounded by Blair Road to the west, Oglethorpe Street to the south, an animal hospital to the east, and an existing self-storage business to the north.

The redevelopment plans call for a four-story self-storage facility containing 94,660 square feet on the Site. The project will feature the upper floors of the facility cantilevered over a 27-space ground-floor parking lot.

Loading facilities will consist of two (2) 30-foot berths, located within the covered parking area.

Access to both parking and loading facilities will be from a reconfigured curb cut along Oglethorpe Street. The existing curb cut will be reduced in width from 72 feet to 24 feet.

Pedestrian access to the Site is located off Oglethorpe Street, within the covered parking area.

Pedestrian facilities along Blair Road and Oglethorpe Street will be improved upon. Notably, the Oglethorpe Street curb cut will be reduced in width. The final design of these features will be coordinated with DDOT in the public space approval process.

Bicycle facilities will consist of at least five (5) secure long-term spaces provided inside the covered parking area. The section of Blair Road adjacent to the Site is along the proposed alignment for the Metropolitan Branch Trail.



## CONTENTS OF STUDY

This report contains seven (7) sections as follows:

- *Study Area Overview*  
This section reviews transportation-related elements of the area near and adjacent to the proposed project and includes an overview of the Site location.
- *Project Design*  
This section reviews the transportation components of the project, including the site plan and access.
- *Trip Generation*  
This section outlines the travel demand of the proposed project. It summarizes the proposed trip generation of the project.
- *Transit*  
This section summarizes the existing and future transit service adjacent to the Site, reviews how the project's transit demand will be accommodated, outlines impacts, and presents recommendations as needed.
- *Pedestrian Facilities*  
This section summarizes existing and future pedestrian access to the site, reviews walking routes to and from the project Site, outlines impacts, and presents recommendations as needed.
- *Bicycle Facilities*  
This section summarizes existing and future bicycle access to the Site, reviews the quality of cycling routes to and from the project Site, outlines impacts, and presents recommendations as needed.
- *Summary and Conclusions*  
This section presents a summary of the recommended mitigation measures by mode and presents overall report findings and conclusions.

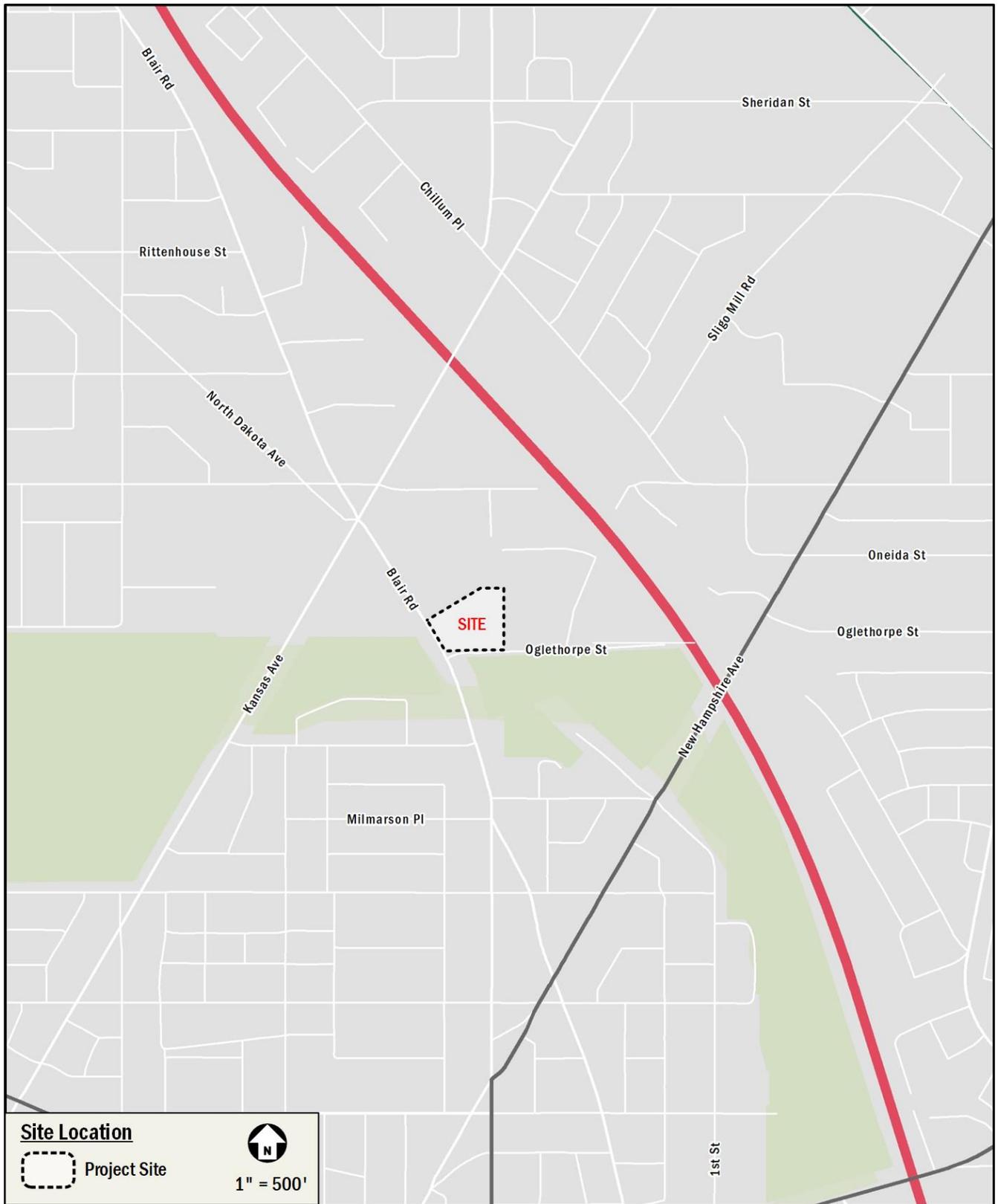


Figure 1: Site Location

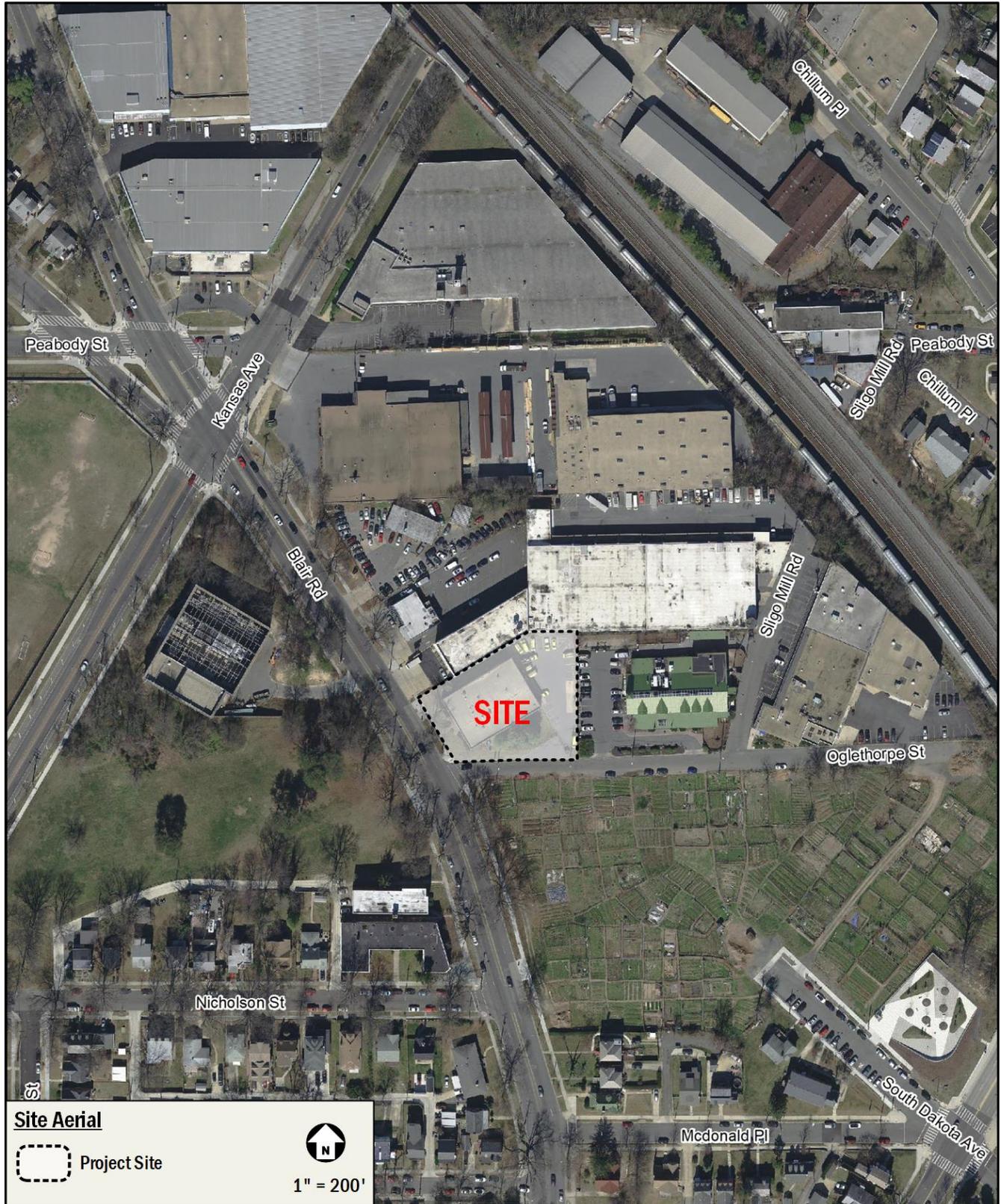


Figure 2: Site Aerial



## STUDY AREA OVERVIEW

This section reviews the existing conditions of the surrounding transportation network and includes an overview of the Site location, including a summary of the major transportation characteristics of the area and of future regional projects. More specific characteristics of each mode and their subsequent study areas will be defined in later sections of this report.

The following conclusions are reached within this chapter:

- The Site is surrounded by an extensive regional and local transportation system that will accommodate the employees and patrons of the proposed development.
- The Site is well-served by public transportation with direct access to local Metrobus lines, connecting to nearby Metrorail stations.
- There are several bicycle facilities surrounding the Site including bicycle lanes along Kansas Avenue.
- A future alignment of the Metropolitan Branch Trail is proposed to pass by the western frontage of the Site, along Blair Road.
- The Site is surrounded by a well-connected pedestrian environment, with the majority of sidewalks and crossings meeting DDOT requirements.

### MAJOR TRANSPORTATION FEATURES

#### Overview of Regional Access

Under existing conditions, the 5901 Blair Road, NW Site has ample access to regional vehicular- and transit-based transportation options, as shown in Figure 4, that connect the Site to destinations within the District, Virginia, and Maryland.

The Site is accessible from several principal arterials such as New Hampshire Avenue, North Capitol Street, Riggs Road, Missouri Avenue, and South Dakota Avenue. The arterials create connections to I-395, I-695, I-295, and ultimately the Capital Beltway (I-495) that surrounds Washington, DC and its inner suburbs as well as regional access to I-95. All of these roadways bring vehicular traffic within a half-mile of the Site, at which point minor arterials, collectors, and local roads can be used to access the Site directly.

The Site is near the Fort Totten Metrorail station, serviced by the Red, Yellow, and Green lines, which provide connections to

areas in the District, Maryland, and Virginia. All three (3) lines provide access to the District core. Of particular importance, the Yellow Line provides a direct connection to Reagan National Airport and the Red Line provides a direct connection to Union Station, which is a hub for commuter rail – such as Amtrak, MARC, and VRE.

Overall, the Site has access to several regional roadways and transit options, making it convenient to travel between the Site and destinations in the District, Virginia, and Maryland.

#### Overview of Local Access

There are several local transportation options near the Site that serve vehicular, transit, walking, and cycling trips under existing conditions, as shown on Figure 5.

The Site is served by a local vehicular network that includes several minor arterials and collectors such as Blair Road, Kansas Avenue, portions of New Hampshire Avenue, and Kennedy Street. In addition, there is an existing network of connector and local roadways that provide access to the Site.

The Metrobus system provides local transit service in the vicinity of the Site, including connections to several neighborhoods within the District and Prince George’s County, Maryland and nearby Metrorail stations. As shown in Figure 5 the K2 line directly services the Site along Blair Road, providing direct access to the Fort Totten and Takoma Metrorail stations. A detailed review of transit stops within a quarter-mile walk of the Site is provided in a later section of this report

There are several existing bicycle facilities in the vicinity of the Site that connect to areas within the District. North of the Site exist a mixture of bicycle lanes and shared lanes along Kansas Avenue. A future alignment is proposed for an extension of the Metropolitan Branch Trail that will run along the western frontage of the Site along Blair Road. A detailed review of existing and proposed bicycle facilities and connectivity is provided in a later section of this report.

In the vicinity of the Site, most sidewalks meet DDOT requirements. Anticipated pedestrian routes, such as those to public transportation stops, retail zones, and community amenities, provide well-connected pedestrian facilities. There are some pedestrian barriers in the area that limit the overall connectivity to and from the Site and some sidewalks that do not meet DDOT standards. A detailed review of existing and



proposed pedestrian access and infrastructure is provided in a later section of this report.

Overall, the Site is surrounded by a good local transportation network that allows for efficient transportation options via transit, bicycle, walking, or vehicular modes.

### Carsharing

Four (4) carsharing companies provide service in the District: Zipcar, Maven, Car2Go, and Free2Move. All four (4) services are private companies that provide registered users access to a variety of automobiles. Of these, Zipcar and Maven have designated spaces for their vehicles. There are currently no Zipcar or Maven carshare locations located within a quarter-mile of the Site.

Carsharing is also provided by Car2Go and Free2Move, which provides point-to-point carsharing. Car2Go currently has a fleet of vehicles located throughout the District and Arlington, with Free2Go located within select areas of the District. Car2Go and Free2Move vehicles may park in any non-restricted metered curbside parking space or Residential Parking Permit (RPP) location in any zone throughout the defined “Home Area”. Members do not have to pay the meters or pay stations. Car2Go and Free2Move do not have permanent designated spaces for their vehicles; however, availability is tracked through their website and mobile phone application, which provides an additional option for car-sharing patrons.

### Walkscore

Walkscore.com is a website that provides scores and rankings for the walking, biking, and transit conditions within neighborhoods of the District. Based on this website the

planned development is located in the Brightwood-Manor Park neighborhood. This project location itself has a walk score of 67 (or “Somewhat Walkable”), transit score of 65 (or “Good Transit”), and a bike score of 62 (or “Bikeable”). Figure 3 shows the neighborhood borders in relation to the Site location and displays a heat map for walkability and bikeability.

As shown in Figure 3, the Site is situated in a neighborhood that encompasses good walk and bike scores but is hindered by the WMATA rail tracks that creates a pedestrian and bicyclist barrier to the east. The Site itself is situated in the eastern portion of the neighborhood where there are more bus lines and bicycle facilities. Overall, the Brightwood-Manor Park neighborhood is well served with pedestrian, transit, and bike facilities, particularly in the direct vicinity of the Site.

### FUTURE PROJECTS

There are a few District initiatives located in the vicinity of the Site. These plans are summarized below.

#### Local Initiatives

##### *MoveDC: Multimodal Long-Range Transportation Plan*

MoveDC is an implementation-based plan that provides a vision for the future of DC’s transportation system. As the District grows, so must the transportation system, specifically in a way that expands transportation choices while improving the reliability of all transportation modes.

The MoveDC report outlines recommendations by mode with the goal of having them complete by 2040. The plan hopes to achieve a transportation system for the District that includes:

- 70 miles of high-capacity transit (streetcar or bus)

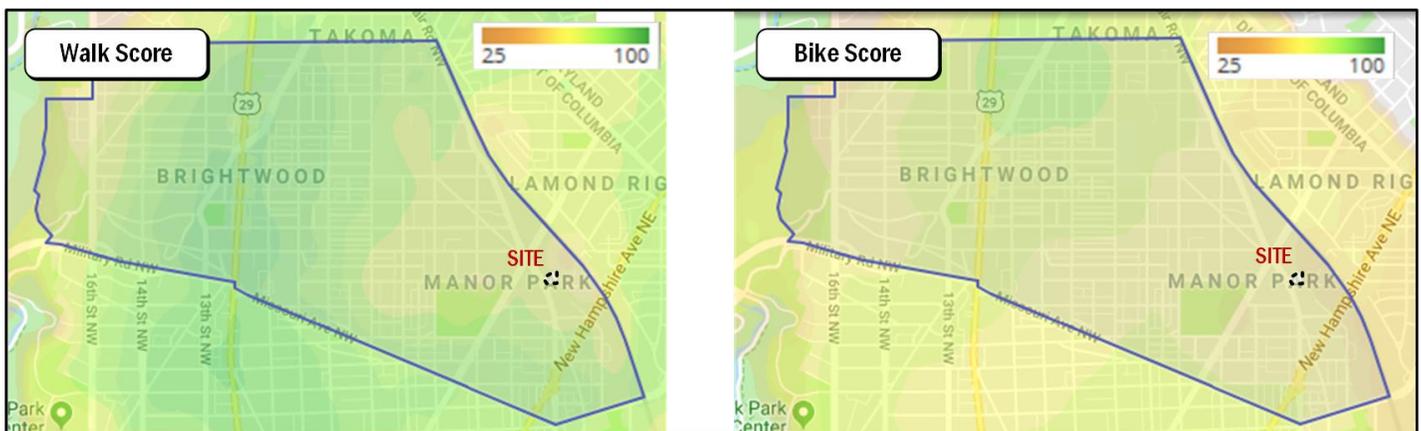


Figure 3: Summary of Walk and Bike Scores



- 200 miles of on-street bicycle facilities or trails
- Sidewalks on at least one side of every street
- New street connections
- Road management/pricing in key corridors and the Central Employment Area
- A new downtown Metrorail loop
- Expanded commuter rail
- Water taxis

In direct relation to the proposed development, the MoveDC plan outlines the completion of the Metropolitan Branch Trail from Fort Totten to the District/Maryland border and the implementation of high frequency local and regional bus corridors along New Hampshire Avenue from Riggs Road to the DC/Maryland border. These recommendations would create additional multimodal capacity and connectivity to the proposed development.

*Metropolitan Branch Trail Concept Plan (2005)*

This report discusses the conceptual plan to guide current and future development of the 10 miles of trail which resides in the District. The Metropolitan Branch Trail (MBT) extends from Union Station north to Silver Spring in Maryland through a variety of shared and dedicated right-of-way along the former rail line. The 2005 report highlights the preferred alignments of the trails as it traverses the Brightwood-Manor Park neighborhood. Adjacent to the Site, the preferred alignment of Blair Road between McDonald Place and Van Buren Street is a shared use path along the east side. An alternative route is for a shared use path to run along South Dakota Avenue, a service road, and Oglethorpe Street, connecting back to Blair Road.

The status of the shared use path along the east side of Blair Road is currently in the 30% design phase. The streetscaping of the proposed development will follow DDOT specifications along the Blair Road frontage in order to accommodate potential conversion into a shared use path.



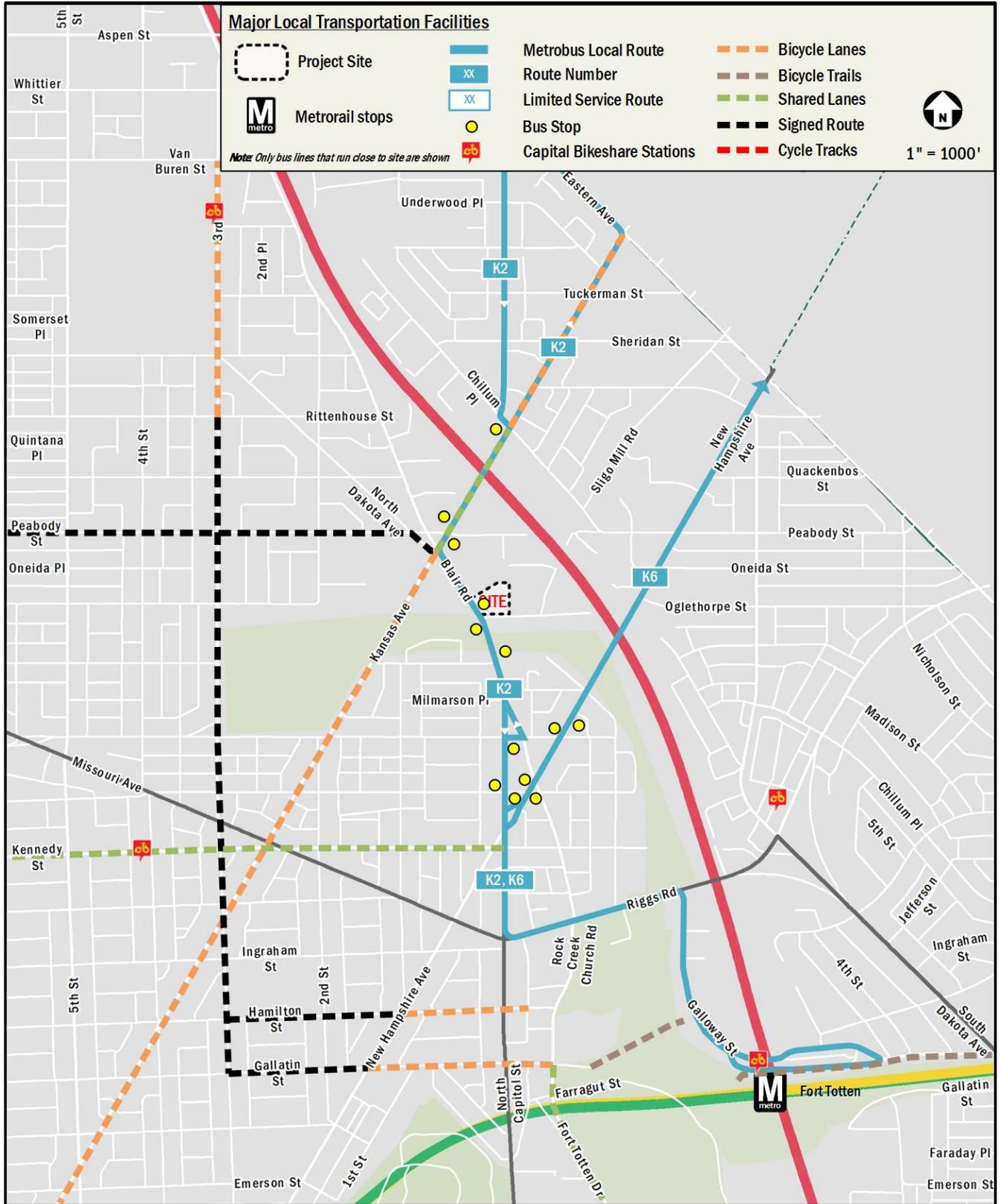


Figure 5: Major Local Transportation Facilities



## PROJECT DESIGN

This section reviews the transportation components of the 5901 Blair Road, NW development, including the proposed Site plan and access points. It includes descriptions of the Site's vehicular access, loading, parking, and Transportation Demand Management (TDM) elements.

The subject property (the "Site") is located at the northeast corner of the Blair Road and Oglethorpe Street intersection. It is bordered by Blair Road to the west, Oglethorpe Street to the south, an animal hospital to the east, and a self-storage business to the north. The Site consists of an existing one-story industrial warehouse and surface parking lot.

The project will redevelop the warehouse and surface lot into a four-story self-storage facility integrated with streetscape improvements, resulting in a more pedestrian-friendlier environment.

The 94,660 square foot self-storage facility will have frontage along Blair Road and Oglethorpe Street. For purposes of calculating parking and loading requirements, the square footage of the development excludes space for parking, bicycle, loading, and shower facilities, resulting in an area of 95,794 square feet.

27 parking spaces will be provided within a covered ground-level lot. Two (2) of the 27 spaces provided will be reserved for carshare services. Loading will occur within the covered parking area, consisting of two (2) 30-foot berths.

Figure 6 shows an overview of the development program and site plan elements.

### SITE ACCESS AND CIRCULATION

#### **Pedestrian Access**

Pedestrian access to the development is provided by an entrance within the facility office, accessible from within the covered parking area. An auxiliary exit will be provided along Blair Road.

#### **Bicycle Access**

Bicycle access to the secure long-term bicycle parking will be from the vehicle entrance to the facility, located off Oglethorpe Street. The five (5) long-term bicycle parking spaces will be located within the covered vehicle parking area.

Figure 7 shows a circulation plan with pedestrian and bicycle routes.

#### **Vehicular Access**

All vehicular access to the development will utilize the reconfigured curb cut off Oglethorpe Street to access the ground-level parking area. The existing curb cut at Oglethorpe Street will be reconfigured to allow for a 24-foot width, meeting DEM regulations for a two-way driveway.

Access to the loading facilities, consisting of two (2) 30-foot berths, will utilize the same curb cut providing access to the parking area. The two (2) berths will be located within the parking area, accompanied by two (2) loading platform spaces.

A circulation plan with vehicular and loading routes is shown on Figure 8. A curbside management plan is shown on Figure 9. Currently, no parking is allowed along the Blair Road and Oglethorpe Street frontage adjacent to the Site. The current on-street parking restrictions will remain the same, with no loss in the number of on-street spaces.

### LOADING AND TRASH

#### **Loading**

The proposed loading facilities will accommodate all delivery demand without detrimental impacts. Figure 6 shows the locations of the loading berths.

Truck routing to and from the Site will be mainly on designated primary truck routes, such as Blair Road, Missouri Avenue, Riggs Road, and North Capitol Street.

Per zoning regulations, the proposed development is required to provide one (2) loading berths for a facility greater than 25,000 square feet GFA. Consistent with this requirement, the proposed development will include two (2) loading berths at 30 feet, thus meeting zoning regulations.

The proposed development is expected to generate a maximum of approximately two to three (2-3) total truck trips per day. This consists of two (2) general deliveries consisting of mail and parcel delivery occurring daily and trash removal occurring twice weekly. The 30-foot loading berths may also be used by passenger vehicles to drop-off and pick-up large bulk materials, providing additional flexibility.

The loading facilities provided by the development will be sufficient to accommodate this demand.



DDOT standards stipulate that truck movements for a site should be accommodated without back-in movements through public space. The ground-floor of the proposed development has been designed to accommodate head-in/head-out loading maneuvers for the 30-foot trucks.

Turning maneuvers in and out of the Site are included in the Technical Attachments.

### **Loading Management Plan**

The Applicant has proposed the following measures to address any potential impacts the loading activities of the proposed development might have on the surrounding intersections and neighborhoods:

- A loading dock manager will be designated by facility management. The dock manager will coordinate with vendors to schedule deliveries and will be on duty during delivery hours.
- The loading dock manager will also assist in truck routing, where requested.
- Trucks using the loading dock will not be allowed to idle and must follow all District guidelines for heavy vehicle operation including but not limited to DCMR 20 – Chapter 9, Section 900 (Engine Idling), the regulations set forth in DDOT’s Freight Management and Commercial Vehicle Operations document, and the primary access routes listed in the DDOT Truck and Bus Route System.

Based on the expected number of truck deliveries and the amount of loading facilities provided, this report concludes that the loading plan for the Site is adequate.

### **Trash**

Trash for the development will be accommodated using two (2) three-yard dumpsters located inside loading area. No trash will be stored in public space.

## **PARKING**

The parking provided for the proposed development in the covered location off of Oglethorpe Street will accommodate all parking needs associated with the project.

### **On-Site Parking**

Based on current District zoning regulations, self-storage facilities are treated as “warehouses” to determine their parking requirement. Such uses are required to provide a base

rate of one (1) space per 3,000 square feet in excess of 3,000 square feet, resulting in 31 spaces required.

Under 11-C DCMR § 708.3, up to two (2) dedicated carshare spaces can be provided, each of which may count as three (3) required parking spaces. With this credit applied, the proposed development will supply 27 spaces, including 25 standard spaces and two (2) carshare spaces, thus meeting requirements.

## **BICYCLE AND PEDESTRIAN FACILITIES**

### **Bicycle Facilities**

Per zoning regulations, a self-storage development is required to provide one (1) long-term bicycle space per every 20,000 square feet, with no requirements for short-term spaces. This results in five (5) long-term spaces being required. The development will meet these requirements by providing five (5) secure long-term spaces within covered parking area. Figure 6 shows the proposed location for the long-term bicycle spaces. Showers and lockers will be provided to meet zoning requirements.

### **Pedestrian Facilities**

As part of the proposed development, pedestrian facilities around the Blair Road and Oglethorpe Street frontage of the Site will be improved. These facilities will meet or exceed DDOT and ADA requirements and provide an improved pedestrian environment. The reconfiguration of the Oglethorpe Street curb cut will reduce the width from 72 feet to 24 feet, improving the pedestrian experience and reducing pedestrian-vehicular conflicts.

The improvement of facilities along Blair Road will conform with DDOT guidelines to allow for the future alignment of the Metropolitan Branch Trail extension. The sidewalk along Blair Road may be converted into the 10-foot shared-used path envisioned.

Overall, the 5901 Blair Road, NW development will further improve the pedestrian environment surrounding the Site and increase the porosity and connectivity of the neighborhood.

## **TRANSPORTATION DEMAND MANAGEMENT (TDM)**

TDM is the application of policies and strategies used to reduce travel demand or to redistribute demand to other times or spaces. TDM typically focuses on reducing the demand of single-occupancy, private vehicles during peak period travel



times or on shifting single-occupancy vehicular demand to off-peak periods.

While it is noted that the self-storage use may dictate the use of vehicular traffic for delivery and moving trips, the following Transportation Demand Management (TDM) measures for the development have been recommended in order to encourage fewer vehicular trips when possible.

- The Applicant will meet Zoning requirements by providing five (5) long-term bicycle parking spaces in the covered parking/loading area.
- The Applicant will provide a bicycle repair station to be located in the secure long-term bicycle area.
- The Applicant will provide shower, changing, and storage facilities for patrons of the facility. Four (4) showers and three (3) lockers will be provided.
- The Applicant will make the two (2) carshare spaces available to the public. The vehicles will be located within the covered parking area and will be outside of a secure security gate.

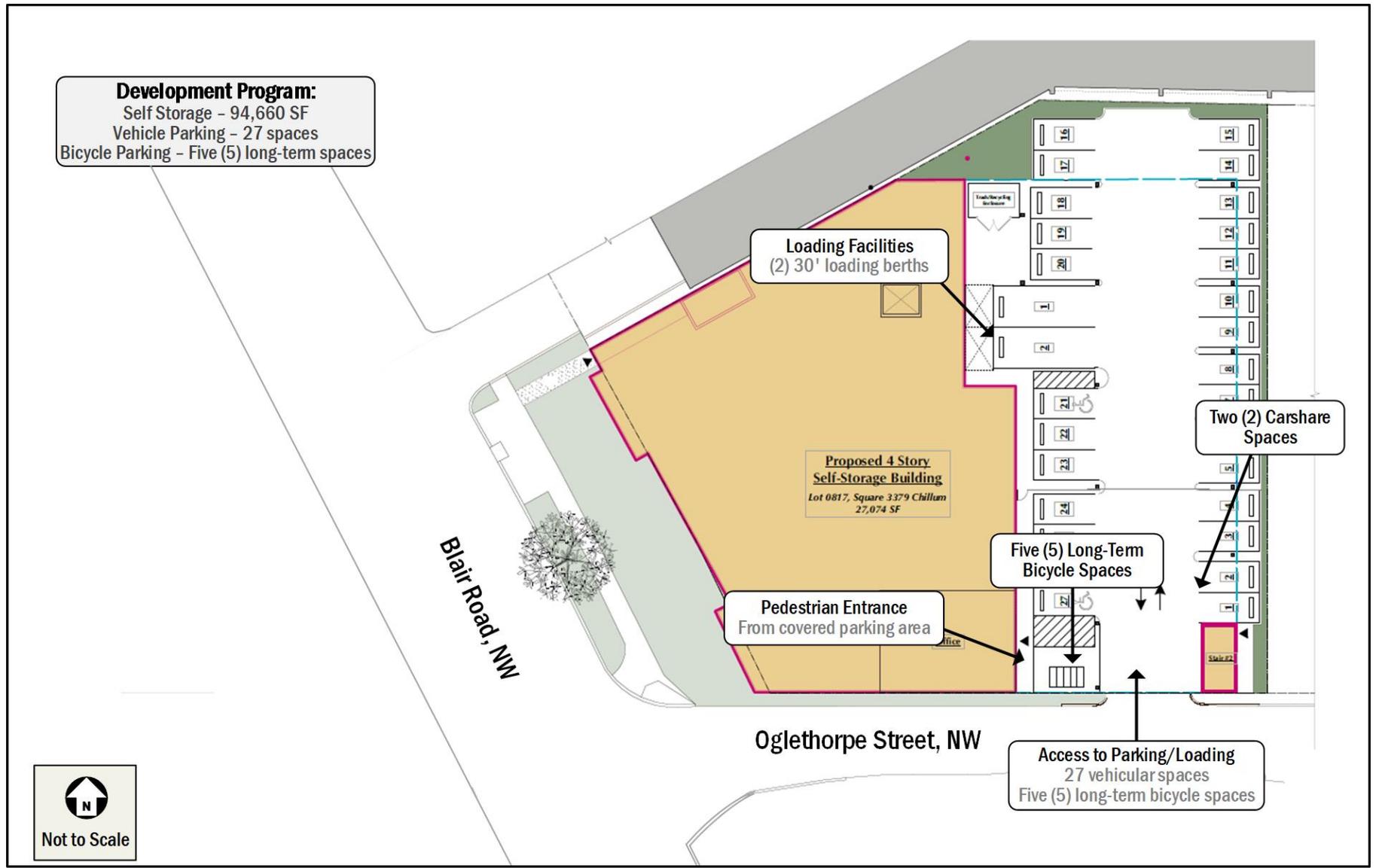


Figure 6: Site Plan

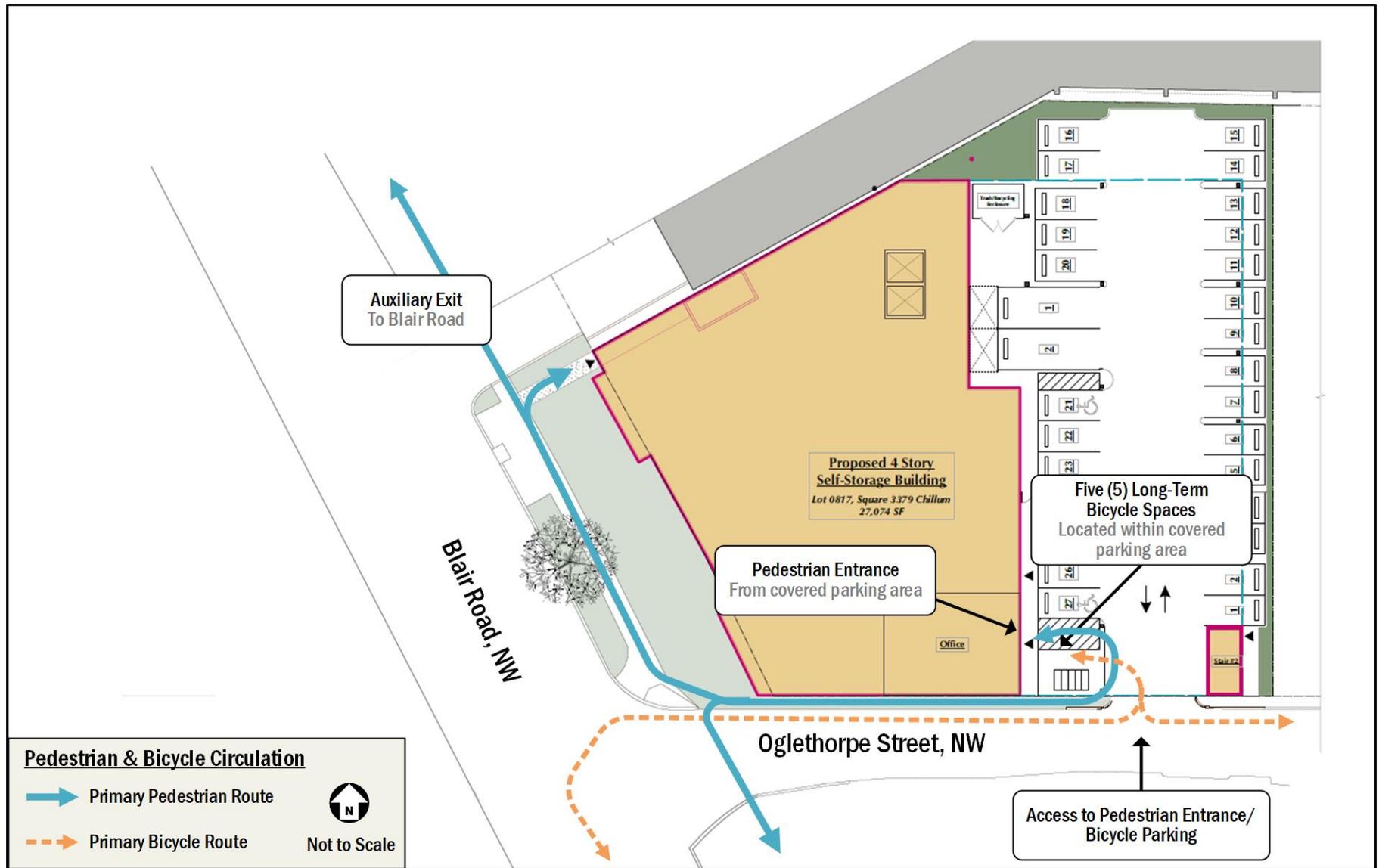


Figure 7: Pedestrian and Bicycle Circulation

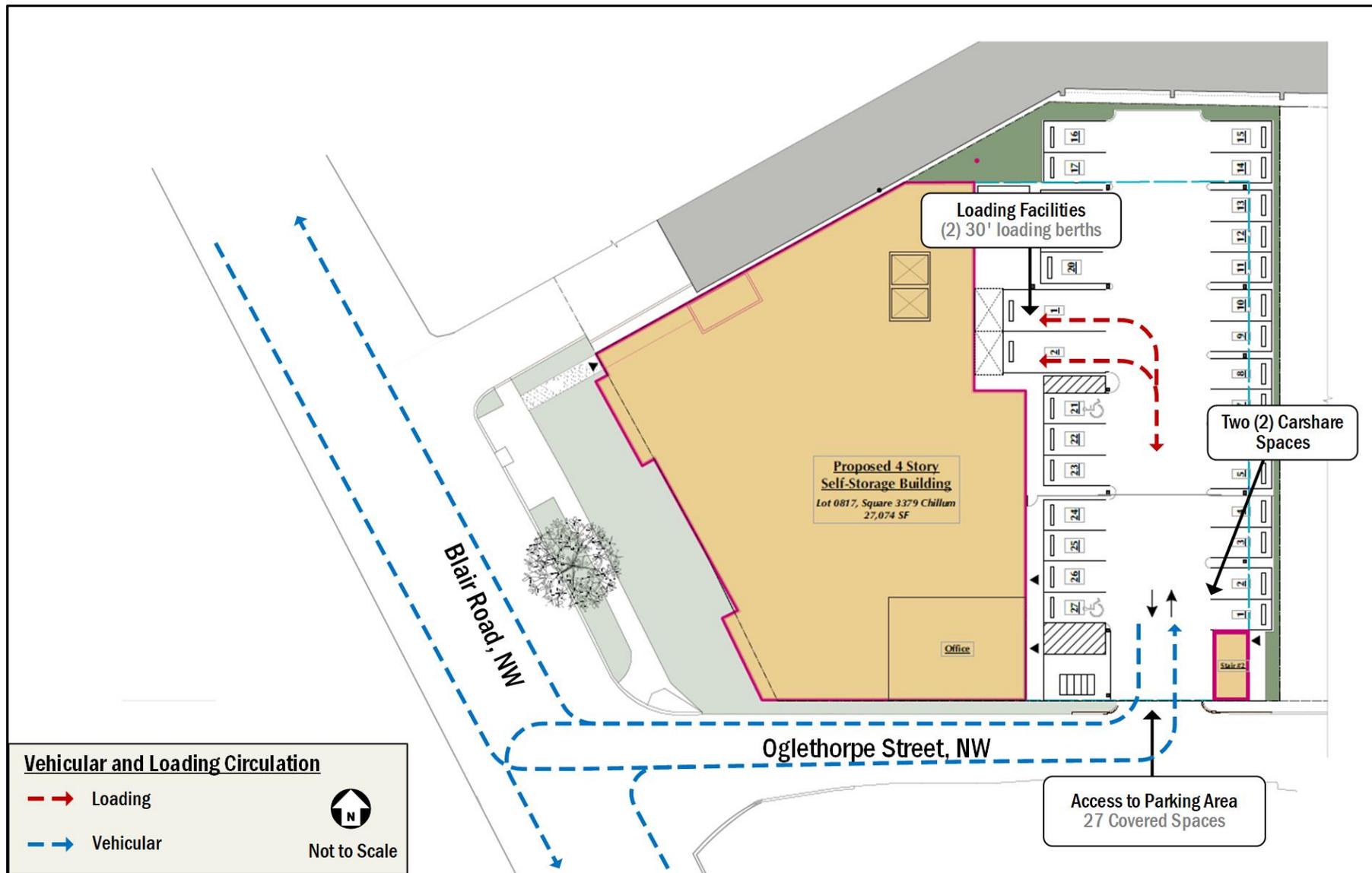


Figure 8: Vehicular and Loading Circulation

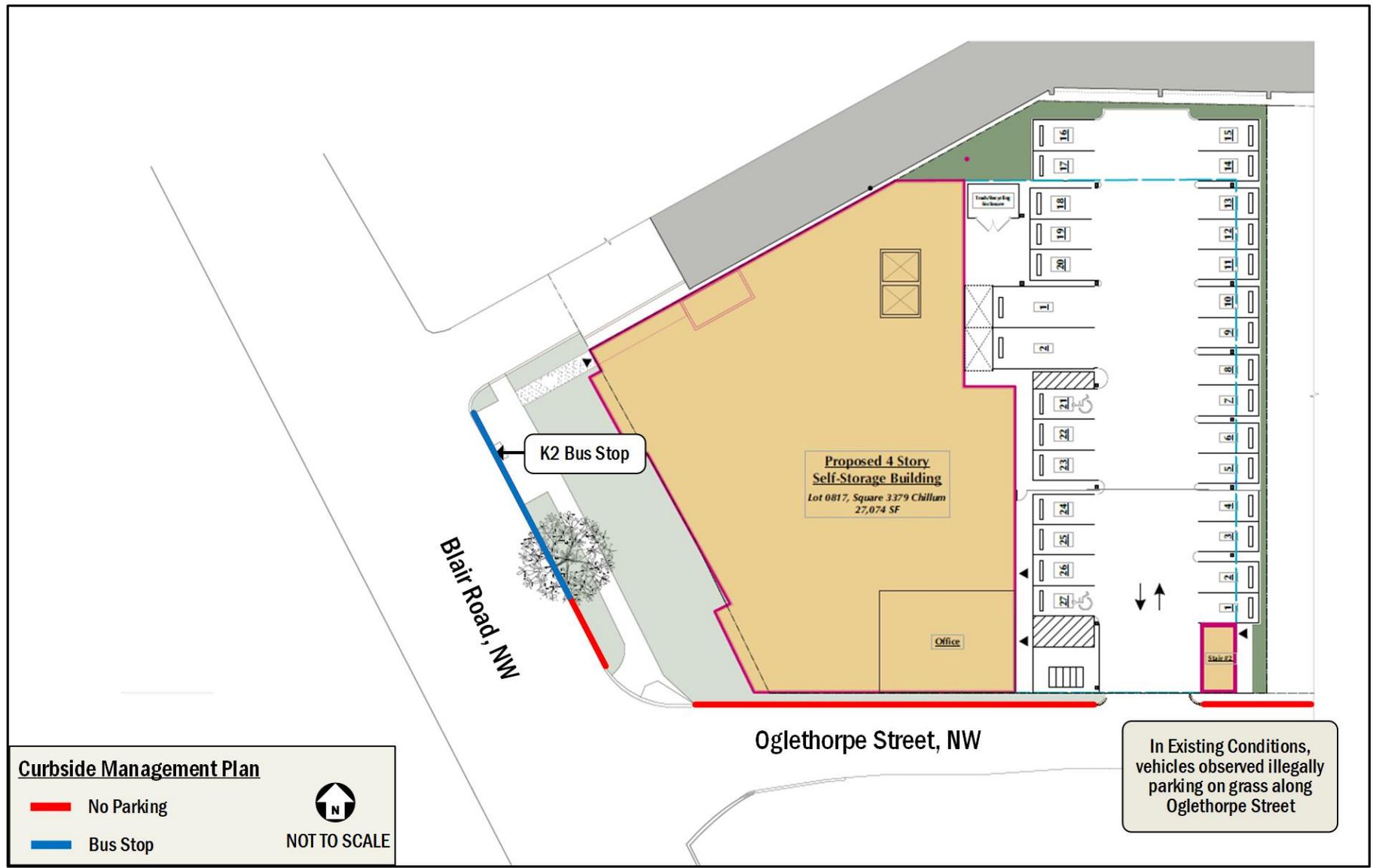


Figure 9: Curbside Management Plan



## TRIP GENERATION

This section outlines the transportation demand of the proposed 5901 Blair Road, NW development. It summarizes the projected trip generation of the site by land use and by mode, which forms the basis for the chapters that follow. These assumptions were vetted and approved by DDOT as a part of the scoping process for the study.

Traditionally, weekday peak hour trip generation is calculated based on the methodology outlined in the Institute of Transportation Engineers' (ITE) Trip Generation, 10<sup>th</sup> Edition. This methodology was supplemented to account for the urban nature of the site (Trip Generation provides data for non-urban, low transit uses) to generate trips for multiple modes, as vetted and approved by DDOT.

Self-Storage trip generation was calculated based on ITE land use 151, Mini Warehouse, splitting trips into different modes. Usually mode splits are assumed using Census Data from the site TAZ and nearby developments with approved scopes., A self-storage facility is likely to generate a different vehicular mode share than typical residential land uses due to the process of moving bulk materials in and out. A lower mode share for transit and bicycle was applied to account for employees on the parking supply provided and availability of nearby bus stops.

In order to present a conservative analysis, the trip generation calculations used the total gross floor area of the project: 106,305 square feet.

The mode split assumptions for all land uses within the development is summarized in Table 1. A summary of the multimodal trip generation is shown on Table 2 for morning and afternoon peak hours and shows that the development is expected to generate nine (9) morning peak hour (five (5) inbound and four (4) outbound) trips and 14 afternoon peak hour (seven (7) inbound and seven (7) outbound) trips, fewer than DDOT's 25 peak hour/peak direction threshold for a full vehicular analysis (and noted by DDOT during the scoping process for this CTR). Detailed calculations are included in the Technical Attachments.

**Table 1: Summary of Mode Split Assumptions**

Land Use	Mode			
	Auto	Transit	Bike	Walk
Mini Warehouse	80%	15%	1%	4%

**Table 2: Trip Generation for Development**

Mode	Land Use	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Mini-Warehouse	5 veh/hr	4 veh/hr	9 veh/hr	7 veh/hr	7 veh/hr	14 veh/hr
Transit	Mini-Warehouse	2 ppl/hr	1 ppl/hr	3 ppl/hr	2 ppl/hr	3 ppl/hr	5 ppl/hr
Bike	Mini-Warehouse	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr
Walk	Mini-Warehouse	0 ppl/hr	1 ppl/hr	1 ppl/hr	1 ppl/hr	0 ppl/hr	1 ppl/hr



# TRANSIT

This section discusses the existing and proposed transit facilities in the vicinity of the Site, accessibility to transit, and evaluates the overall transit impacts of the 5901 Blair Road, NW project.

The following conclusions are reached within this chapter:

- The Site has good access to transit
- The Site is approximately 0.8 miles from the Fort Totten Metrorail station and is directly served by Metrobus which travels to the station.
- The Site is expected to generate a minimal amount of transit trips, and the existing service is capable of handling these new trips.

## EXISTING TRANSIT SERVICE

The study area is well-served by Metrobus, which provides direct service to Metrorail. Combined, these transit services provide local, city wide, and regional transit connections and link the Site with major cultural, residential, employment, and commercial destinations throughout the region. Figure 10 identifies the major transit routes, stations, and stops in the study area.

The Fort Totten Metrorail station is located approximately 0.8 miles south of the Site and is serviced by the Red, Green, and Yellow Lines. The Red Line travels south from Shady Grove, travels through Downtown DC, and continues north to Glenmont. The Green Line travels south from Greenbelt, travels through Downtown DC, and continues south to Branch Avenue. The Yellow Line travels south from Fort Totten, travels through Downtown DC, and continues south into Arlington and Alexandria, Virginia. Red Line trains run approximately every four (4) minutes during the morning and afternoon peak periods, every 12 minutes during weekday middays, every 8 to

12 minutes on weekday evenings after 7 pm and 12 to 15 minutes on the weekends. Green and Yellow line trains run every eight (8) minutes during the morning and afternoon peak periods, every 12 minutes during weekday middays and weekday evenings after 7 pm, and every 15-20 minutes on the weekends. Trains from Fort Totten allow for direct connections to both Union Station via the Red Line and Reagan National Airport via the Yellow Line.

The Site is also serviced by Metrobus along Blair Road and New Hampshire Avenue. The bus lines along these roads connect the Site with nearby Metrorail stations and areas in Prince George’s County, Maryland. Table 3 shows a summary of the bus route information for the routes that serve the site, including service hours, headway, and distance to the nearest bus stop. The K2 line stops adjacent to the Site at Blair Road and Oglethorpe Street. This line provides a direct, one-seat connection to the Fort Totten and Takoma Metrorail stations.

Figure 10 shows a detailed inventory of the existing Metrobus stops within a quarter-mile walkshed of the Site. Each stop is evaluated based on the guidelines set forth by WMATA’s Guidelines for the Design and Placement of Transit Stops, as shown in Table 4. A detailed breakdown of individual bus stop amenities and criteria for standards is included in the Technical Attachments.

## PLANNED TRANSIT SERVICE

### MoveDC

The MoveDC report outlines recommendations by mode with the goal of having them complete by 2040. The plan hopes to achieve a transportation system for the District that includes:

- 70 miles of high-capacity transit (streetcar or bus)
- 200 miles of on-street bicycle facilities or trails
- Sidewalks on at least one side of every street
- New street connections

**Table 3: Metrobus Route Information**

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
K2	Takoma-Fort Totten Line	Weekdays: Northbound: 6:25 AM-7:47 AM Southbound: 6:04 AM-7:09 PM	11-22 min	< 0.1 miles, 1 minute
K6	New Hampshire Ave-Maryland Line	Weekdays: 5:17 AM-12:30 AM Weekends: 6:01 AM-1:16 AM	5-35 min	0.3 miles, 5 minutes



- Road management/pricing in key corridors and the Central Employment Area
- A new downtown Metrorail loop
- Expanded commuter rail
- Water taxis

As part of the 2-year outline plan, the MoveDC report outlines the need for high frequency local and regional bus corridors along New Hampshire Avenue from Riggs Road to the DC/Maryland border, connecting Friendship Heights with Fort Totten. This recommendation would create additional multi-modal capacity and connectivity to the Site.

#### WMATA Studies

WMATA studied capacity of Metrorail stations in its Station Access & Capacity Study (2008). The study analyzed the capacity of Metrorail stations for their vertical transportation, the capacity of the station at elevators, stairs, and escalators to shuttle patrons between the street, mezzanine, and platforms.

The study also analyzed stations capacity to process riders at fare card gates. For both analyses, vertical transportation and fare card gates, volume-to-capacity ratios were calculated for existing data (from 2005) and projections for the year 2030. According to the study, the Fort Totten station can currently accommodate future growth at all access points.

WMATA has also studied capacity along Metrobus routes. DC's Transit Future System Plan (2010) lists the bus routes with the highest load factor (a ratio of passenger volume to bus capacity). A load factor is considered unacceptable if it is over 1.2 during peak periods or over 1.0 during off-peak or weekend periods. According to this study, none of the Metrobus routes that travel near the Site operate at a load factor that is above capacity during any part of the day.

**Table 4: Transit Stop Requirements**

Feature	Basic Stop	Enhanced Service Bus Stop	Transit Center
Bus Stop Sign	Yes	Yes	Yes
ADA 5'x8' Landing Pad - at a minimum, a clear, unobstructed, paved boarding area that is 8 feet deep (perpendicular to the curb) by 5 feet wide (parallel to the curb) and compliant with the ADA Accessibility Guidelines (ADAAG)	Yes	Yes	Yes
Sidewalk - connected by a paved sidewalk that is at least 4 feet wide	Yes	Yes	Yes
Lighting - adequate lighting either from street lights, lights from an adjacent business, or shelter lighting (particularly stops that are served in the evenings)	Evening Service	Yes	Yes
Seating	Trip Generator Based	Yes	Yes
Information Case - detailed schedule information on services	Yes	Yes	Yes
Trash Receptacle - trash receptacle (particularly at locations that are close to fast food establishments and convenient stores)	Site Specific	Yes	Yes
Shelter(s) - shelter with interior seating if there are 50 or more boardings per day (including transfers)	1 (50+ boardings/day)	1	2+
System Map	Contingent on Shelter	Yes	Yes
Real-time Display (LED + Audio)	Optional	Yes	Yes
Interactive Phone System On-Site - real time bus arrival information through an interactive phone and push button audio system	No	No	Yes
Expanded Boarding & Alighting Area (Rear-door Access)	No	Site Specific	Yes
Bus Bay (Pull Off)	No	Site Specific	Yes



## TRANSIT SITE IMPACTS

### **Site-Generated Transit Trips**

The proposed development is projected to generate three (3) transit trips (2 inbound, 1 outbound) during the morning peak hour and five (5) transit trips (2 inbound, 3 outbound) during the afternoon peak hour.

US Census data from 2006 to 2010 was used as a basis for determining the distribution of those taking Metrorail and those taking Metrobus. The Site lies within TAZ 20247 which shows that approximately 65 percent of transit riders used Metrorail and the remaining 35 percent use Metrobus. Given the transit trip generation of the development, approximately two (2) people will use Metrorail and one (1) will use Metrobus during the morning peak hour; approximately three (3) people will use Metrorail and two (2) will use Metrobus during the afternoon peak hour.

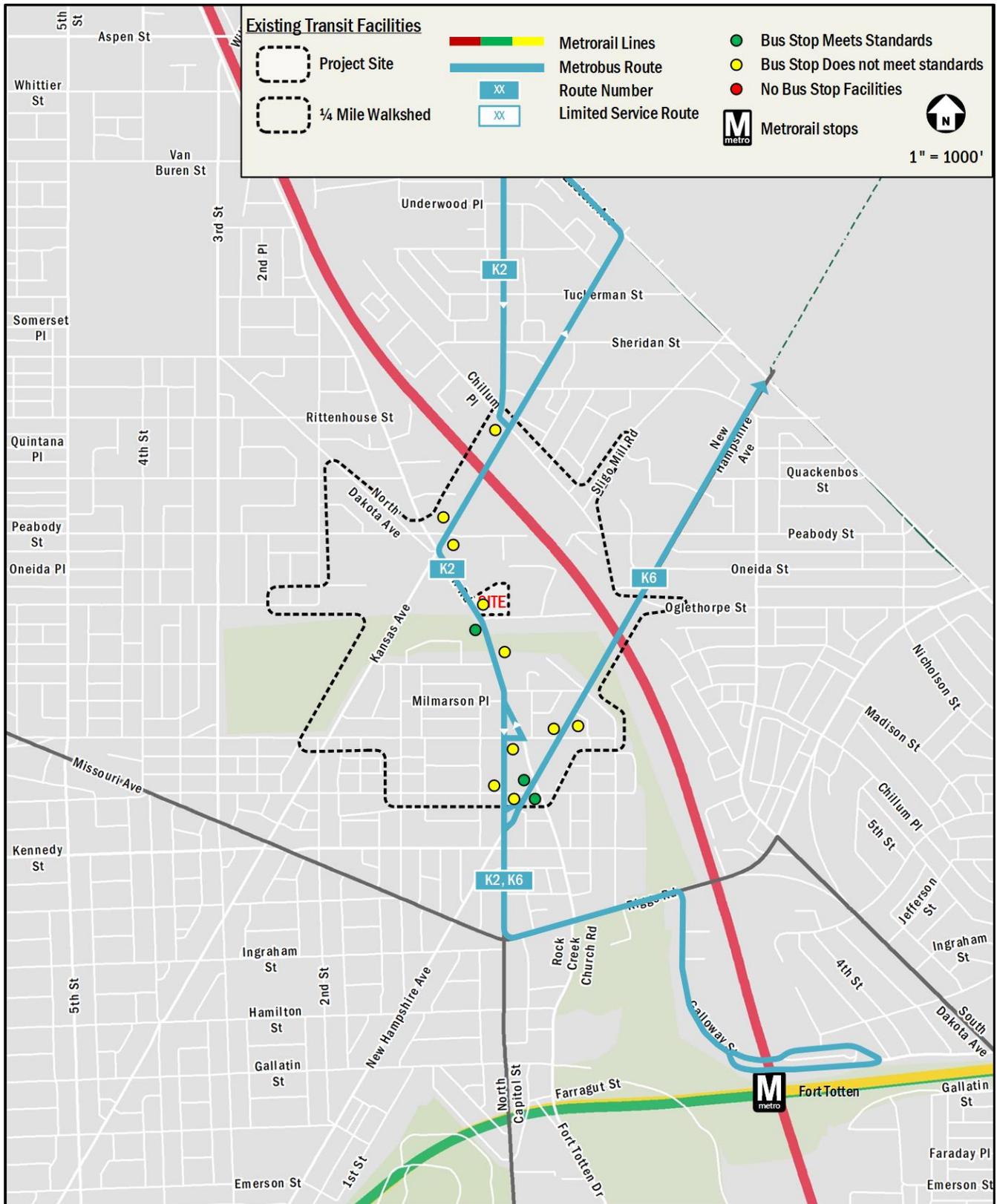


Figure 10: Existing Transit Service



## PEDESTRIAN FACILITIES

This section summarizes the existing and future pedestrian access to the Site and reviews walking routes to and from the Site.

The following conclusions are reached within this chapter:

- The existing pedestrian infrastructure surrounding the Site provides an excellent walking environment. There are some barriers east of the Site due to the rail tracks, but overall there is a well-connected pedestrian network.
- Future pedestrian improvements are expected in the vicinity of the Site, particularly along the east side of Blair Road as part of the future Metropolitan Branch Trail alignment.
- The Site will improve the overall pedestrian environment by providing improved facilities along the perimeter of the Site.

### PEDESTRIAN STUDY AREA

Facilities within a quarter-mile of the Site were evaluated. The Site is accessible to several Metrobus stops along Blair Road (K2 line) and New Hampshire Avenue (K6 line). There are some barriers and areas of concern within the study area that negatively impact the quality of and attractiveness of the walking environment. This primarily includes the Red Line Metrorail tracks which create some limitations to the number of pedestrian connections available to the east. Figure 11 shows suggested pedestrian pathways, walking time and distances, and barriers or areas of concern.

### PEDESTRIAN INFRASTRUCTURE

This section outlines the existing and proposed pedestrian infrastructure within the pedestrian study area.

### Existing Conditions

A review of pedestrian facilities surrounding the planned development shows that many facilities meet DDOT standards and provide a quality walking environment. Figure 12 shows a detailed inventory of the existing pedestrian infrastructure surrounding the Site. Sidewalks, crosswalks, and curb ramps are evaluated based on the guidelines set forth by DDOT’s Design Engineering Manual (2017) in addition to ADA standards. Sidewalk widths and requirements for the District are shown below in Table 5.

Within the area shown, the majority of roadways are surrounded by low to moderate density residential, with some industrial businesses fronting roadways near the rail tracks. Most of the sidewalks surrounding the Site comply with DDOT standards and all primary pedestrian destinations are accessible via routes with sidewalks, some of which met DDOT standards.

ADA standards require that all curb ramps be provided wherever an accessible route crosses a curb and must have a detectable warning. Additionally, curb ramps shared between two crosswalks is not desired. As shown in the figure, under existing conditions there are minimal issues with crosswalks and curb ramps near the Site.

### Pedestrian Infrastructure Improvements

As a result of the development, pedestrian facilities along the Blair Road frontage of the Site will be improved to meet DDOT and ADA standards. This includes the sidewalk on Blair Road that meets or exceed width requirements and curb and detectable warnings. Additional design elements such as plantings and streetscaping will result in further improvements over existing conditions.

In preparation for the future alignment of the Metropolitan Branch Trail along the east side of Blair Road, the proposed sidewalk fronting the Site will meet DDOT requirements for the future Metropolitan Branch Trail, allowing for adaptation into a

**Table 5: Sidewalk Requirements**

Street Type	Min. Buffer Width	Min. Sidewalk Unobstructed Width	Total Min. Sidewalk Width
Low- to Moderate-Density Residential	4-6 ft	6 ft	10 ft
High-Density Residential	4-8 ft	8 ft	13 ft
Central DC and Commercial Areas	4-10 ft	10 ft	16 ft



shared-used path. These improvements are shown on Figure 13.

## SITE IMPACTS

### **Pedestrian Trip Generation**

The 5901 Blair Road, NW development is expected to generate a minimal amount of walking trips. One (1) walking trip (0 inbound, 1 outbound) during the morning peak hour and one (1) walking trip (1 inbound, 0 outbound) during the afternoon peak hour are expected. The origins and destinations of these trips are likely to be:

- Employment opportunities where nearby patrons can walk to work.
- Residential locations in the vicinity of the Site for facility employees.
- Retail locations in the vicinity of the Site.
- Nearby neighborhood destinations, such as schools, community gathering areas, or trails.

In addition to these trips, the transit trips generated by the Site will also generate some pedestrian demand between the Site and nearby transit stops.

A low pedestrian trip generation is forecasted as it is more likely for patrons of the self-storage facility to be transporting bulk items rather than handheld items that can easily be walked with.

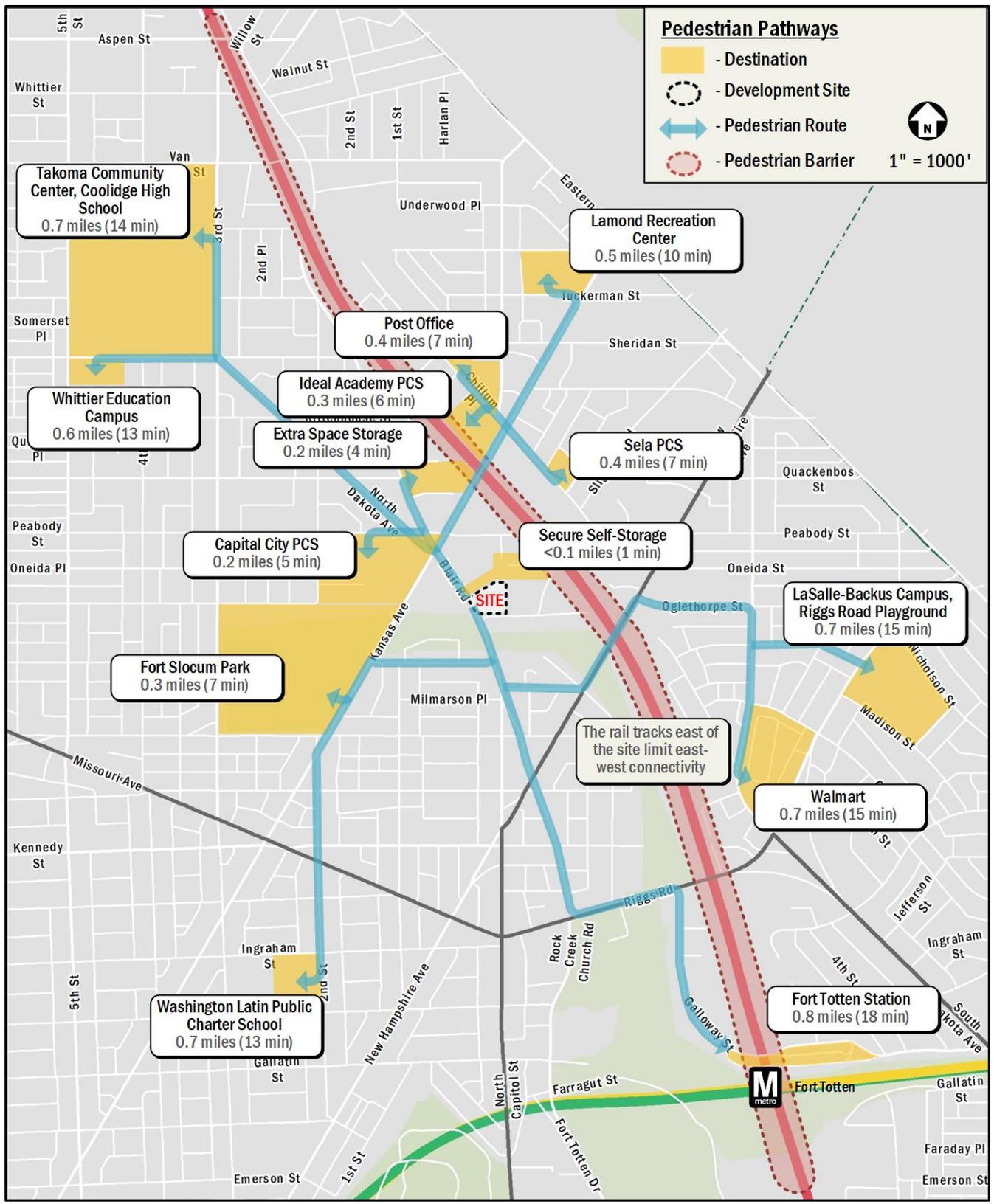


Figure 11: Pedestrian Pathways

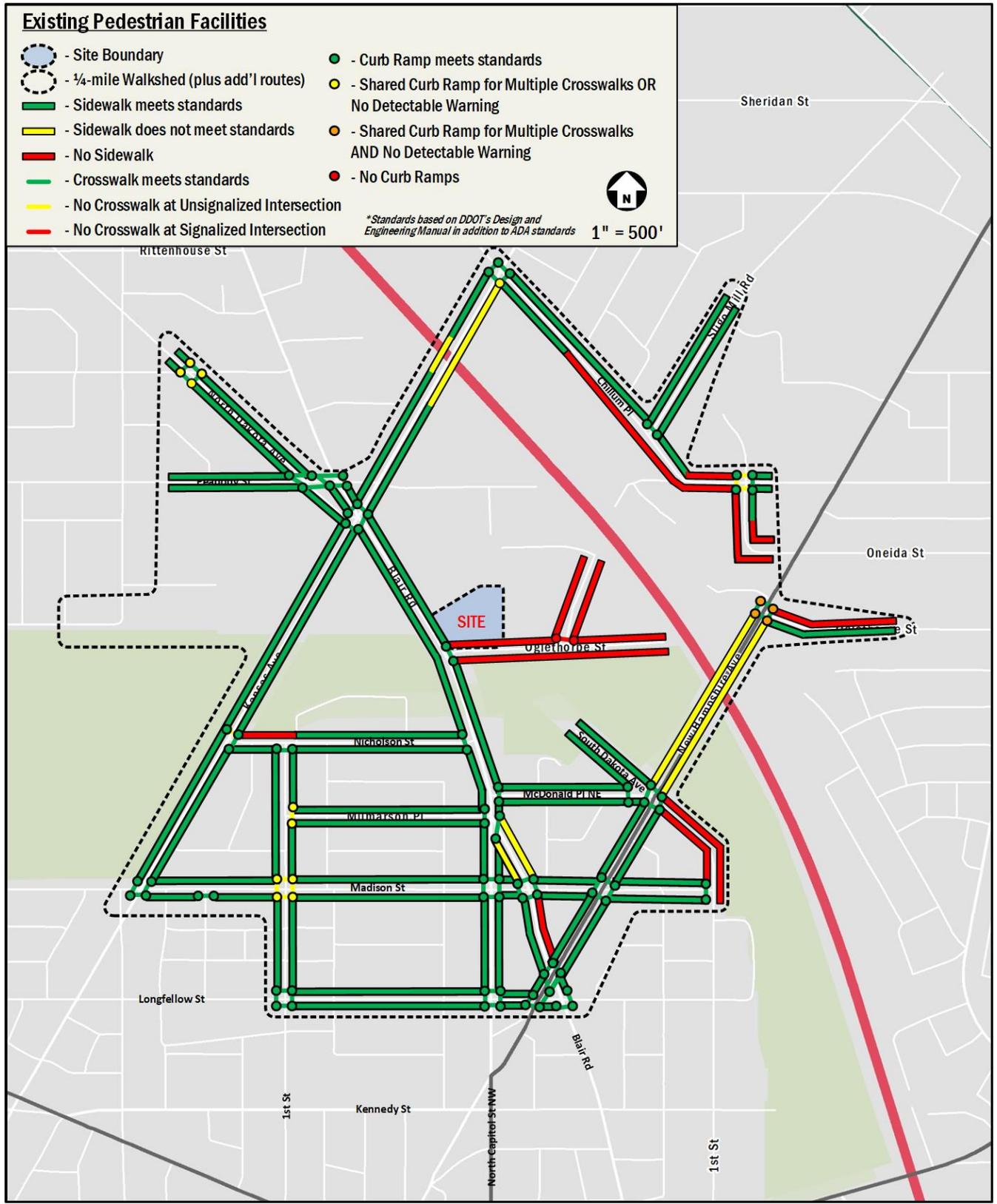


Figure 12: Existing Pedestrian Facilities

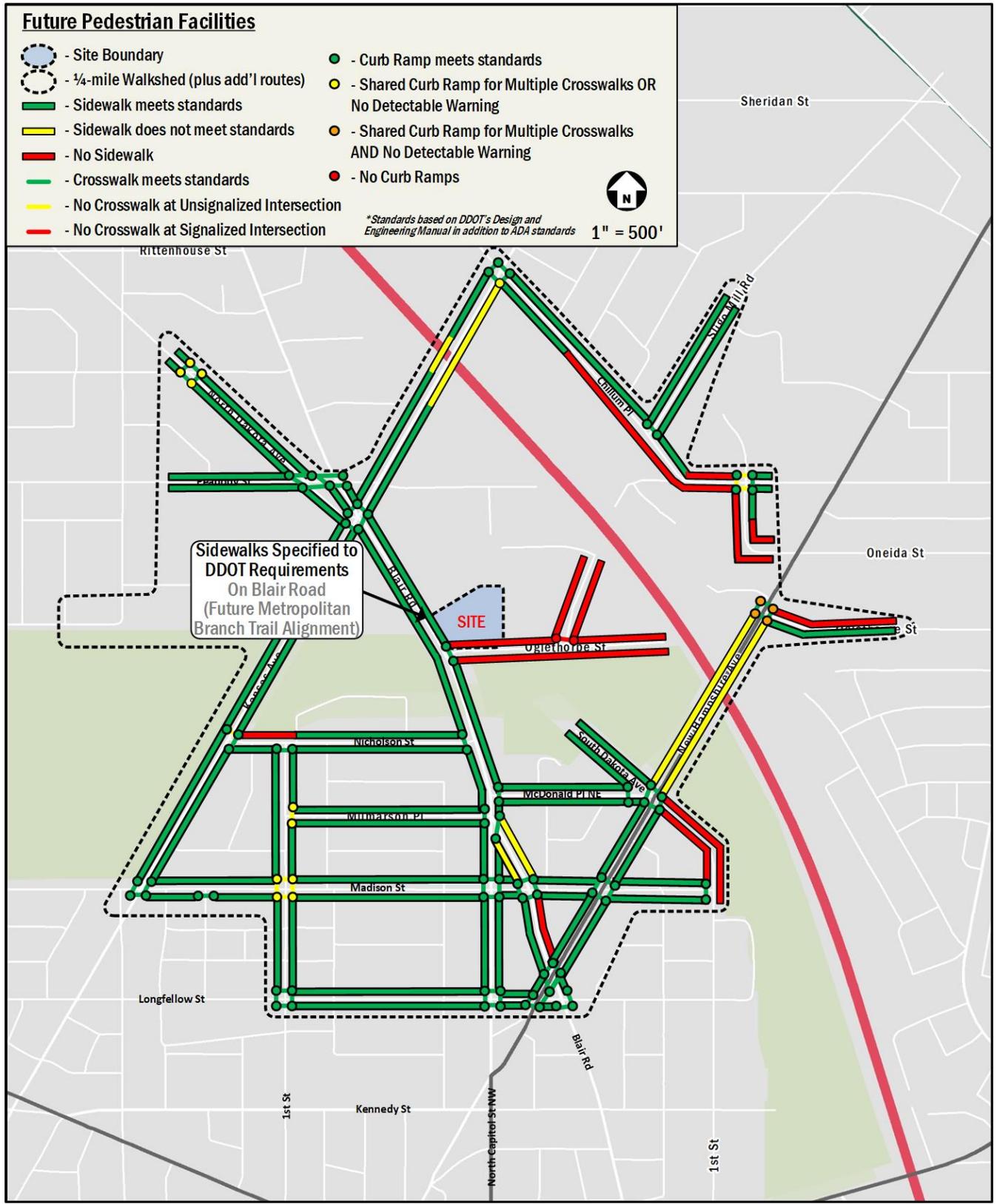


Figure 13: Future Pedestrian Facilities



## BICYCLE FACILITIES

This section summarizes existing and future bicycle access, reviews the quality of cycling routes to and from the Site, and presents recommendations.

The following conclusions are reached within this chapter:

- The Site has access to several on- and off-street bicycle facilities including bicycle lanes on Kansas Avenue and signed routes on Peabody Street and 3<sup>rd</sup> Street.
- The section of Blair Road adjacent to the Site is a future alignment of the Metropolitan Branch Trail.
- The Site is not expected to generate a significant amount of bicycle trips; therefore, all site-generated bike trips can be accommodated on existing infrastructure.
- The development will include long-term bicycle parking within the facility, meeting zoning requirements.

### EXISTING BICYCLE FACILITIES

The Site has access to several existing on-street bicycle facilities. The 5901 Blair Road, NW development is located just south of Kansas Avenue, where a mixture of shared lanes and bicycle lanes exist. The Kansas Avenue bicycle facilities extend northeast to the Maryland border and southwest towards Sherman Circle and the Petworth neighborhood.

Additional north-south bicycle facilities exist on 3<sup>rd</sup> Street, located west of the Site. These facilities connect to bicycle facilities along Gallatin Street, which provide access to the Fort Totten Metrorail station and the Metropolitan Branch Trail.

No bicycle parking is provided along the perimeter of the Site under existing conditions. This can result in cyclists using street signs, parking meters, or similar objects to secure their bicycles.

In addition to personal bicycles, the Capital Bikeshare program provides additional cycling options for patrons and employees of the planned development. The Bikeshare program has placed over 500 Bikeshare stations across Washington, DC, Arlington, and Alexandria, VA, Montgomery County, MD, and most recently Fairfax County, VA, with 4,300 bicycles provided. Although there are no existing Capital Bikeshare stations within a quarter-mile of the Site, the nearest station is located at

Underwood and 3<sup>rd</sup> Streets (0.7 miles northwest of the Site with 19 available bicycle docks).

Figure 14 illustrates the existing bicycle facilities in the area and the anticipated access routes to and from the Site.

### PROPOSED BICYCLE FACILITIES

The MoveDC plan outlines several bicycle improvements in the vicinity of the site. These improvements are broken up into four tiers that rank the priority for implementation. The four (4) tiers are broken down as follows:

- Tier 1  
Investments should be considered as part of DDOT's 6-year TIP and annual work program development, if they are not already included. Some projects may be able to move directly into construction, while others become high priorities for advancement through the Project Development Process.
- Tier 2  
Investments within this tier are not high priorities in the early years of MoveDC implementation. They could begin moving through the Project Development Process if there are compelling reasons for their advancement.
- Tier 3  
Investments within this tier are not priorities for DDOT-led advancement in the early years of MoveDC's implementation. They could move forward earlier under circumstances such as real estate development initiatives and non-DDOT partnerships providing the opportunity for non-District-led completion of specific funding.
- Tier 4  
Generally, investments within this tier are not priorities for DDOT-led advancement and are lower priority for project development in the early years of implementation.

Due to the timeline of the 5901 Blair Road, NW development, this report focuses on the Tier 1 recommendations within the vicinity of the Site. There is one (1) Tier 1 recommendation near the Site: the proposed 3.9-mile completion of the Metropolitan Branch Trail from Fort Totten to the DC/Maryland line. In the vicinity of the Site, the trail will take on a shared-use path running along the east side of Blair Road.

Although this project is currently funded and included in DDOT's Transportation Implementation Plan, it will not be



completed by the 2019 opening of 5901 Blair Road, NW. The Site will be developed in a way to not preclude the future alignment of the trail along Blair Road.

## **SITE IMPACTS**

### **Bicycle Trip Generation**

The planned development is expected to generate zero (0) bicycle trips during the morning peak hour and zero (0) bicycle trips during the afternoon peak hour. Bicycles will not be a common mode of travel to and from a self-storage facility due to the nature of transporting bulk packages. The impacts from bicycling will be relatively less than impacts to other modes.

### **On-Site Bicycle Elements**

Per zoning regulations, a self-storage facility of this size is required to provide one (1) long-term bicycle space per every 20,000 square feet. This results in five (5) long-term spaces being required. Short-term bicycle parking is not required for a self-storage facility and will not be provided.

The development will meet these requirements by providing five (5) secure long-term spaces. The five (5) spaces will be located within in the covered parking area.

The development will also provide showers and lockers as required per zoning requirements. These will be located inside the building.





## SUMMARY AND CONCLUSIONS

This report has presented a Comprehensive Transportation Review (CTR) for the 5901 Blair Road, NW project. This report reviewed the transportation aspects of the project's Large Tract Review (LTR) application. Zoning Commission approval is not necessary for an LTR as the project will be developed by-right with the LTR application.

The purpose of this study has been to evaluate whether the project will generate a detrimental impact to the surrounding transportation network. This report concludes that **the project will not have a detrimental impact** to the surrounding transportation network assuming that all planned site design elements are implemented.

### Proposed Project

The subject property (the "Site") is located in Ward 4 in the Northwest quadrant of the District. The Site is bounded by Blair Road to the west, Oglethorpe Street to the south, an animal hospital to the east, and a self-storage business to the north.

The project will redevelop an existing one-story industrial warehouse building into a four-story self-storage facility. The development consists of:

- An approximately 94,660 square foot self-storage facility.
- 27 covered parking spaces, consisting of 25 standard spaces and two (2) carshare spaces.
- Two (2) 30-foot loading berths, located in the parking area of the development.
- At least five (5) secure long-term bicycle parking spaces.

Parking and loading will be accessible from Oglethorpe Street using a reconfigured curb cut. The curb cut will be reduced in width, improving pedestrian flow.

Vehicular parking for the development will utilize a covered parking lot that will replace the existing surface lot. 27 spaces will be provided, including 25 standard spaces and two (2) carshare spaces. The amount of on-site parking provided will meet zoning requirements and accommodate the anticipated parking demand generated by the Site.

The amount of loading facilities on site will meet the project's needs. The two (2) loading berths supply the appropriate facilities to accommodate the practical needs of the site and meet zoning requirements. The development is expected to

generate approximately two to three (2-3) loading trips per day. This consists of trash removal, mail, and parcel delivery. Based on the expected truck deliveries and the loading management plan provided, the loading plan for the development is adequate and will not adversely affect the local roadway network.

The development will meet zoning requirements for bicycle parking by including five (5) long-term bicycle parking spaces, as well as showers and lockers as required by zoning. The amount of bicycle parking, showers, and lockers will meet the practical needs of the development.

### Multi-Modal Impacts and Recommendations

#### *Transit*

The Site is well-served by Metrobus, which provides service to nearby Metrorail stations. The development will be generating minimal new transit trips on the network and the existing facilities have enough capacity to handle the new trips.

#### *Pedestrian*

The Site is surrounded by a well-connected pedestrian network. The existing pedestrian infrastructure surrounding the Site provides an excellent walking environment. There are some barriers east of the site due to the rail tracks, but overall there is a well-connected pedestrian network.

The Site will improve the overall pedestrian environment by providing improved sidewalks along the Blair Road frontage of the Site.

#### *Bicycle*

The Site has access to several on- and off-street bicycle facilities including the bicycle lanes on Kansas Avenue and signed routes on Peabody Street and 3<sup>rd</sup> Street. The Site is not expected to generate a significant amount of bicycle trips; therefore, all Site-generated bike trips can be accommodated on existing infrastructure.

The development will provide five (5) long-term bicycle parking spaces within the covered parking area, meeting zoning requirements. The development will also provide showers and lockers as required by zoning requirements.

#### *Vehicular*

The Site is accessible from several principal arterials such as New Hampshire Avenue, North Capitol Street, Riggs Road, Missouri Avenue, and South Dakota Avenue. The arterials



create connections to I-395, I-695, I-295, and ultimately the Capital Beltway (I-495) that surrounds Washington, DC and its inner suburbs as well as regional access to I-95. All of these roadways bring vehicular traffic within a half-mile of the Site, at which point minor arterials, collectors, and local roads can be used to access the Site directly.

The project is expected to generate fewer than 25 trips per hour in the peak direction during both morning and afternoon peak hours. Therefore, a vehicular capacity analysis is not applicable, as confirmed with DDOT during the scoping process.

#### *Summary and Recommendations*

This report concludes that **the proposed development will not have a detrimental impact to the surrounding transportation network, assuming that the proposed Site design elements are implemented.**

The development has several positive elements contained within its design that minimize potential transportation impacts, including:

- The inclusion of secure long-term bicycle parking, showers, and lockers.
- The inclusion of two (2) carshare spaces, which may be used by the public.
- Implementation of a Loading Management Plan (LMP) that minimizes the potential impacts from loading that the proposed development will have on the surrounding intersections and neighborhoods.
- A Transportation Demand Management (TDM) plan that reduces the demand of single-occupancy, private vehicles during peak period travel times or shifts single-occupancy vehicular demand to off-peak periods.