

TECHNICAL MEMORANDUM

To: Sam Hollman
Ed Johnson
Network Realty Partners

From: Maribel Wong
Daniel Solomon, AICP
Daniel B. VanPelt, P.E., PTOE

Date: August 21, 2020

Subject: 2100 M Street NW Comprehensive Transportation Review (BZA Case No. 20291)

Introduction

This memorandum presents the findings of a Comprehensive Transportation Review (CTR) in support of DC Board of Zoning Adjustment (BZA) Application No. 20291 for the proposed renovation and expansion to the existing building located at 2100 M Street in Northwest Washington, DC. Figure 1 identifies the regional site location within the District and Figure 2 identifies the location of the site in relation to the neighborhood. Figure 3 shows an aerial of the site. The property is currently improved with an existing nine (9)-story building with approximately 257,535 square feet of office space and 11,389 square feet of ground-floor retail space. The project site is generally bounded by existing hotel and office buildings to the west and south, 21st Street NW to the east, and M Street NW to the north.

The proposed development expands the existing office space by approximately 107,398 square feet and the ground-floor retail by 8,051 square feet, resulting in a proposed project size of 364,933 square feet of office space and 19,440 square feet of retail. Additionally, the applicant proposes to reduce the existing garage by five (5) spaces, providing 266 vehicle parking spaces; an additional 21 spaces are provided in public space vaults adjacent to the property. Vehicle parking will not be reserved for the exclusive use of the building and will continue to function as public parking with a portion of the spaces reserved for the site's office and retail uses. Renovations also include the addition of a third loading berth and a bicycle storage room for 100 long-term bicycle parking spaces that exceeds ZR16 requirements. Figure 4 shows the proposed site plan.

The purpose of this CTR is to:

- Provide a review of the existing site conditions, details on the proposed redevelopment plans, and projected future site trip generation;
- Review the major transportation elements of the site plan, namely the project's vehicular and bicycle parking accommodations and loading facilities, to determine whether the project will have a detrimental impact on the surrounding transportation network and provide recommendations for mitigation as necessary.
- Provide a Loading Management Plan for the site's loading activity.
- Provide a Transportation Demand Management (TDM) plan for all of the site's uses.

The findings of this study conclude that:

- The Applicant's request of BZA relief from the 14' vertical loading clearance based on structural constraints the Applicant's continued use of the existing 21st Street NW curb cut are consistent with existing conditions and will not have a detrimental impact on the area's transportation network;

Board of Zoning Adjustment
Board of Zoning Adjustment
District of Columbia
District of Columbia
Case No: 20291
CASE NO. 20291
EXHIBIT NO. 33A
EXHIBIT NO. 33A1

-
- The 2100 M Street NW site is surrounded by an existing network of transit, bicycle, and pedestrian facilities that creates an excellent environment for safe and effective non-vehicular transportation;
 - The proposed project does not result in any significant increase in vehicular travel and will not have a significant impact on the local area's roadways;
 - The project introduces bicycle facilities that exceed zoning requirements with the addition of a secure bicycle storage room with 100 long-term parking spaces and 16 short-term bicycle parking spaces along the property's frontage;
 - The project includes the reduction of the existing garage by five (5) parking spaces and introduces new on-site bicycle facilities, including long-term bicycle parking and showers and changing facilities to the building that exceed zoning requirements;
 - The proposed loading area location and loading access are consistent with existing conditions and therefore will not adversely impact future conditions as compared to existing conditions;
 - The addition of a 30-foot loading berth increases the site's capacity to accommodate loading activity;
 - Implementation of a Loading Management Plan minimizes loading truck-related disruptions to traffic flow on adjacent roadways; and
 - The Transportation Management Demand (TDM) measures that will be implemented at the renovated building adequately promote non-vehicular modes of travel.

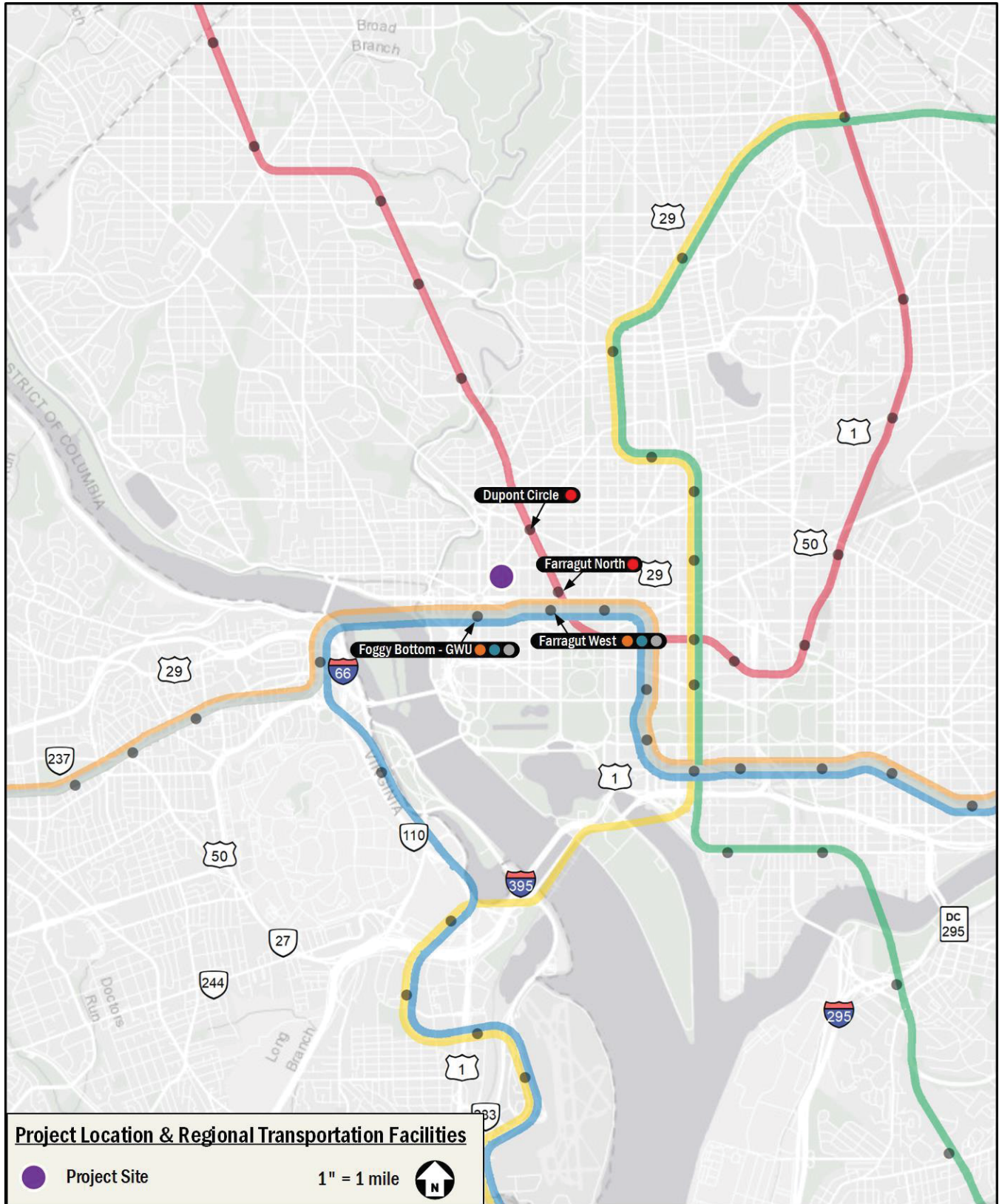


Figure 1: Project Location and Regional Transportation Facilities

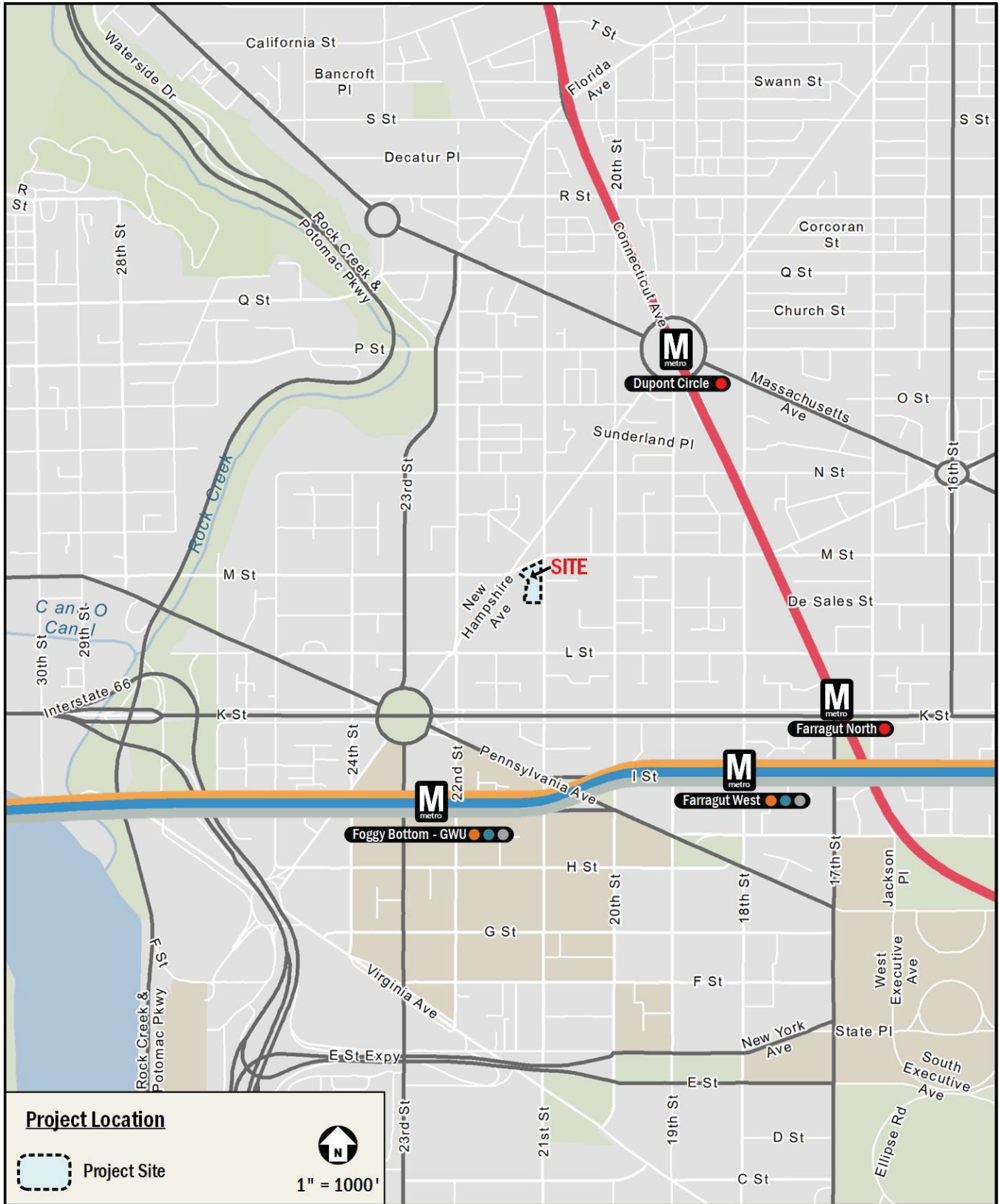


Figure 2: Project Location



Figure 3: Site Aerial

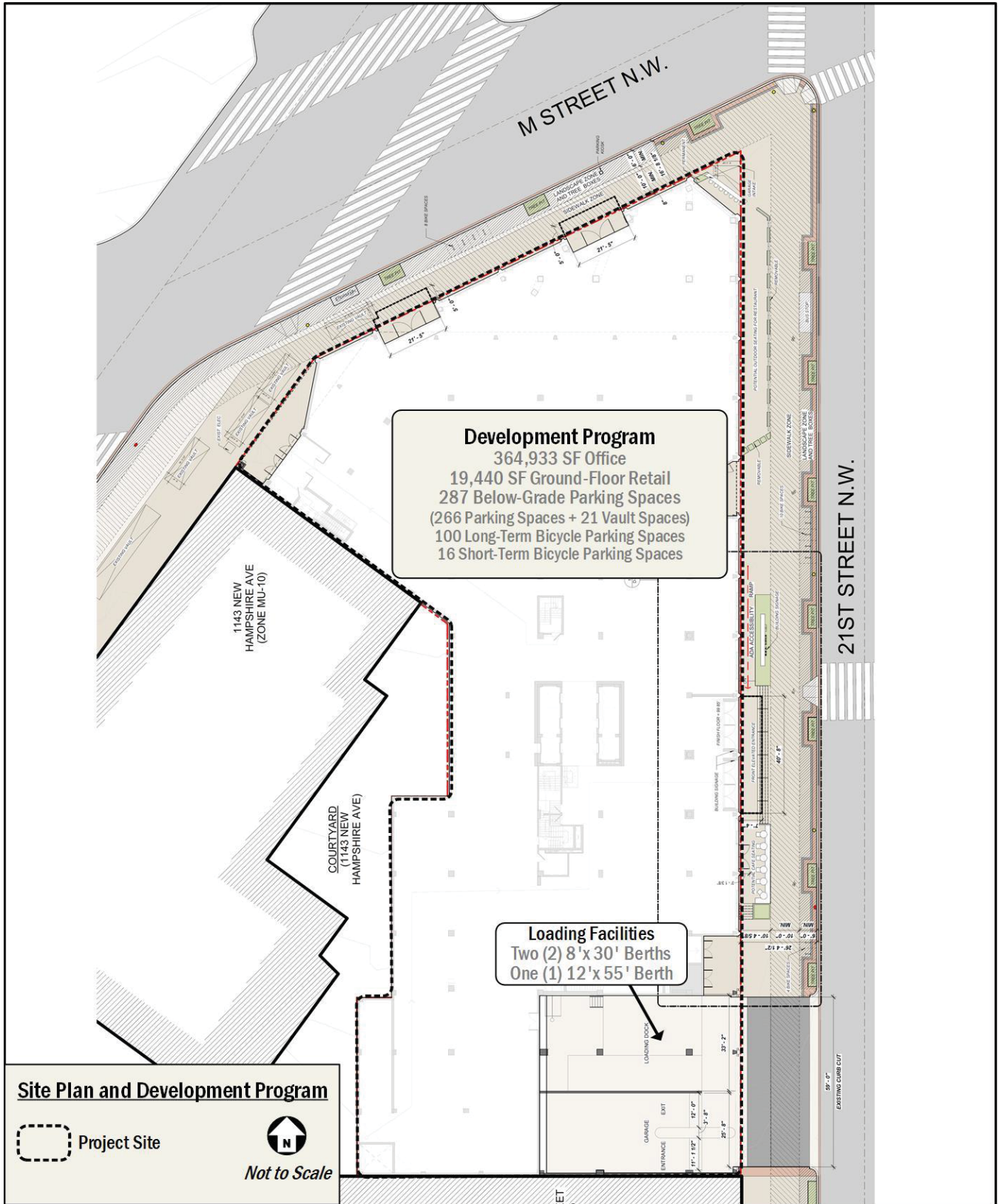


Figure 4: Site Plan and Development Program

Existing Transportation Network Review

This section reviews the existing vehicular, transit, and pedestrian facilities in the vicinity of the site.

The site is easily accessible by vehicles through a highly connected roadway network. The site is surrounded by a robust pedestrian and bicycle network that consists of well-connected sidewalks, crosswalks, and cycle tracks along the roadways around the site. The site also has excellent access to transit and is served by over 20 Metrobus routes, two (2) DC Circulator routes, and many commuter bus routes. Four (4) Metrorail stations, Dupont Circle, Farragut North, Farragut West, and Foggy Bottom-GWU, are located within an approximately 10-minute walk and serve the Red, Blue, Orange, and Silver Lines.

Vehicular

The site is accessible from several principal arterials such as 23rd Street NW to the west, K Street NW and Pennsylvania Avenue NW to the south, Connecticut Avenue NW to the east, and Massachusetts Avenue NW to the north. K Street NW provides direct access to I-66 and the Rock Creek Parkway, allowing for convenient access to regional destinations north and west of the site.

The site is located on M Street NW, a minor arterial, and is served by a local vehicular network that includes other minor arterials such as New Hampshire Avenue NW, L Street NW, and 22nd Street NW. These minor arterials are supplemented by a network of connector and local roadways.

Pedestrian Facilities

Overall, the pedestrian facilities within the study area provide excellent connectivity to major local destinations. A summary of the pedestrian facilities within a 0.25-mile area, as well as along walking routes to the nearby Dupont Circle, Farragut North, Farragut West, and Foggy Bottom-GWU Metrorail stations, is shown in Figure 5, with a summary of sidewalk width and buffer requirements provided in Table 1.

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 (2) crosswalks are not desired. As shown in Figure 5, under existing conditions there are some shared curb ramps that do not meet DDOT and/or ADA standards.

Within the study area shown, all roadways are considered part of the Central Business District. The sidewalks that do not meet DDOT standards are typically along commercial streets that do not maintain the minimum sidewalk width of 16 feet but do provide a minimum unobstructed width of 10 feet. As such, while there are minor areas of concern within the study area that may impact the quality of the pedestrian environment, such as sidewalks that do not meet DDOT's minimum width requirements and shared curb ramps between crosswalks, there is a continuous network of sidewalks, crosswalks, and curb ramps in the vicinity of the site which provide a quality walking environment. Along major pedestrian routes near the site, most sidewalks, crosswalks, and curb ramps meet DDOT and/or ADA standards.

Table 1: Sidewalk Requirements

Street Type	Minimum Buffer Width	Minimum Sidewalk Unobstructed Width	Total Minimum Sidewalk Width
Residential (Low to Moderate Density)	4-6 feet	6 feet	10 feet
Residential (High Density)	4-8 feet	8 feet	13 feet
Central DC and Commercial Areas	4-10 feet	10 feet	16 feet

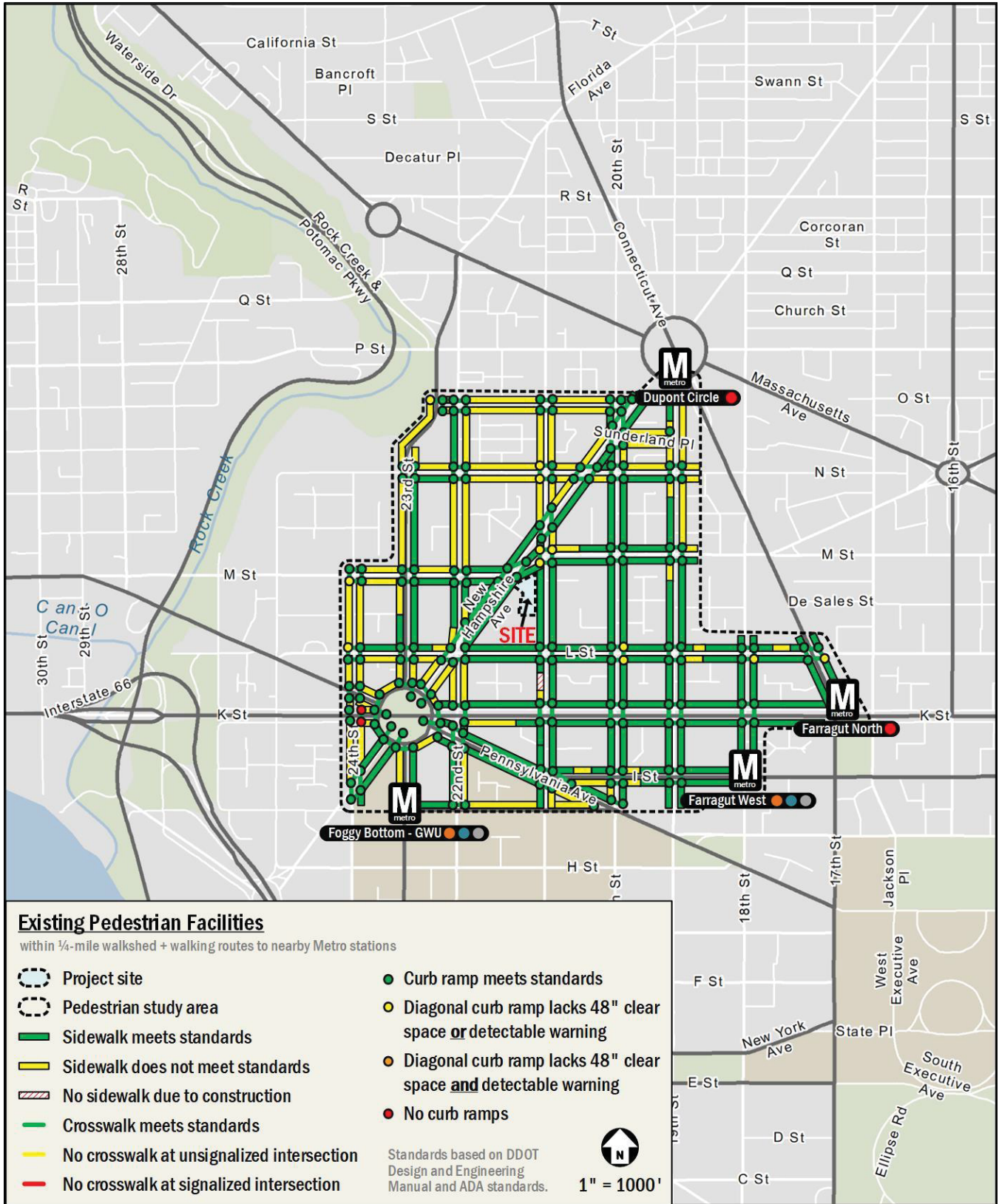


Figure 5: Existing Pedestrian Facilities

Bicycle Facilities

The project site is surrounded by a highly connected network of on-street bicycle facilities. Existing on-street facilities consist of cycle tracks directly adjacent to the site along M Street NW (westbound) and L Street NW (eastbound). These facilities connect to the Rock Creek Trail to the west and the 15th Street NW cycle track to the east. The Rock Creek Trail provides cyclists with a continuous path between the Tidal Basin and Montgomery County, Maryland. Additional trail connections are available along the Georgetown Waterfront, connecting to the Capital Crescent Trail.

Bike lanes are also available adjacent to the site along New Hampshire Avenue NW providing access to additional on-street facilities north of the site that include the bike lanes on Q Street NW, R Street NW, and T Street NW. Figure 6 illustrates the existing and planned bicycle facilities in the area.

As shown in Figure 6, further additions to the bicycle infrastructure are planned in the vicinity of the site that will significantly enhance the area's bicycle network. DDOT is currently evaluating a protected north-south cycle track connecting Dupont Circle to the National Mall. The recommended alternative will provide a protected two-way cycle track along 20th Street between Connecticut Avenue NW and F Street NW, a protected two-way cycle track along 21st Street NW between G Street NW and Constitution Avenue NW, and one-way protected bike lanes on G Street and F Street between 20th and 21st Street NW connecting the two cycle tracks. This proposed facility will be located one (1) block from the site providing employees, visitors, and patrons of the project with additional access to protected bicycle facilities north and south of the site. Final design and construction for the cycle tracks is scheduled for completion in 2021.

Capital Bikeshare

The Capital Bikeshare program provides additional cycle options for patrons and employees of the proposed development. The program has placed over 500 bikeshare stations across the Washington, DC metropolitan area with over 4,500 bicycles in the fleet. An existing 19-dock Capital Bikeshare station is located adjacent to the site on the northwest corner of the intersection of M Street and New Hampshire Avenue NW. Two (2) additional Capital Bikeshare stations are available within a five-minute walk: a 19-dock station located at the southeast corner of 20th and L Streets NW and a 19-dock station located at the northwest corner of 23rd and M Streets NW. Figure 6 shows the locations of Capital Bikeshare stations in the vicinity of the site.

E-Scooters and Dockless E-Bicycles

Five (5) electric-assist scooter (e-scooter) and electric-assist bicycle (e-bike) companies provide Shared Mobility Device (SMD) service in the District: JUMP, Lyft, Skip, Spin, and Helbiz. These SMDs are provided by private companies that give registered users access to a variety of e-scooter and e-bike options. These devices are used through each company-specific mobile phone application. At this time, SMD pilot/demonstration programs are underway in Arlington County, the District, Fairfax County, the City of Alexandria, and Montgomery County.

In January 2020, DDOT announced plans to install 100 off-sidewalk parking corrals throughout the District, with a number of installations complete to date. The parking corrals are installed in the no-parking or no-standing zones approaching intersections in an effort to increase intersection visibility and provide infrastructure to dockless vehicles that reduces sidewalk and crosswalk obstructions. The parking corrals provide a parking area for SMDs and also provide bicycle racks for privately-owned bicycle parking. In areas where no off-sidewalk parking corrals are available, SMDs are to be parked in the "furniture zone" (the portion of sidewalk between where people walk and the curb, often where you'll find other street signs, street furniture, trees, parking meters, etc.). No off-sidewalk parking corrals are planned in the immediate vicinity of the project.

In addition to the existing and planned bicycle facilities, the project is proposing to provide additional accommodations to bicyclists with the addition of 16 short-term bicycle parking spaces (eight (8) on M Street NW and eight (8) on 21st Street NW) along the frontage of the site making bicycle travel a viable option for those traveling to and from the site.

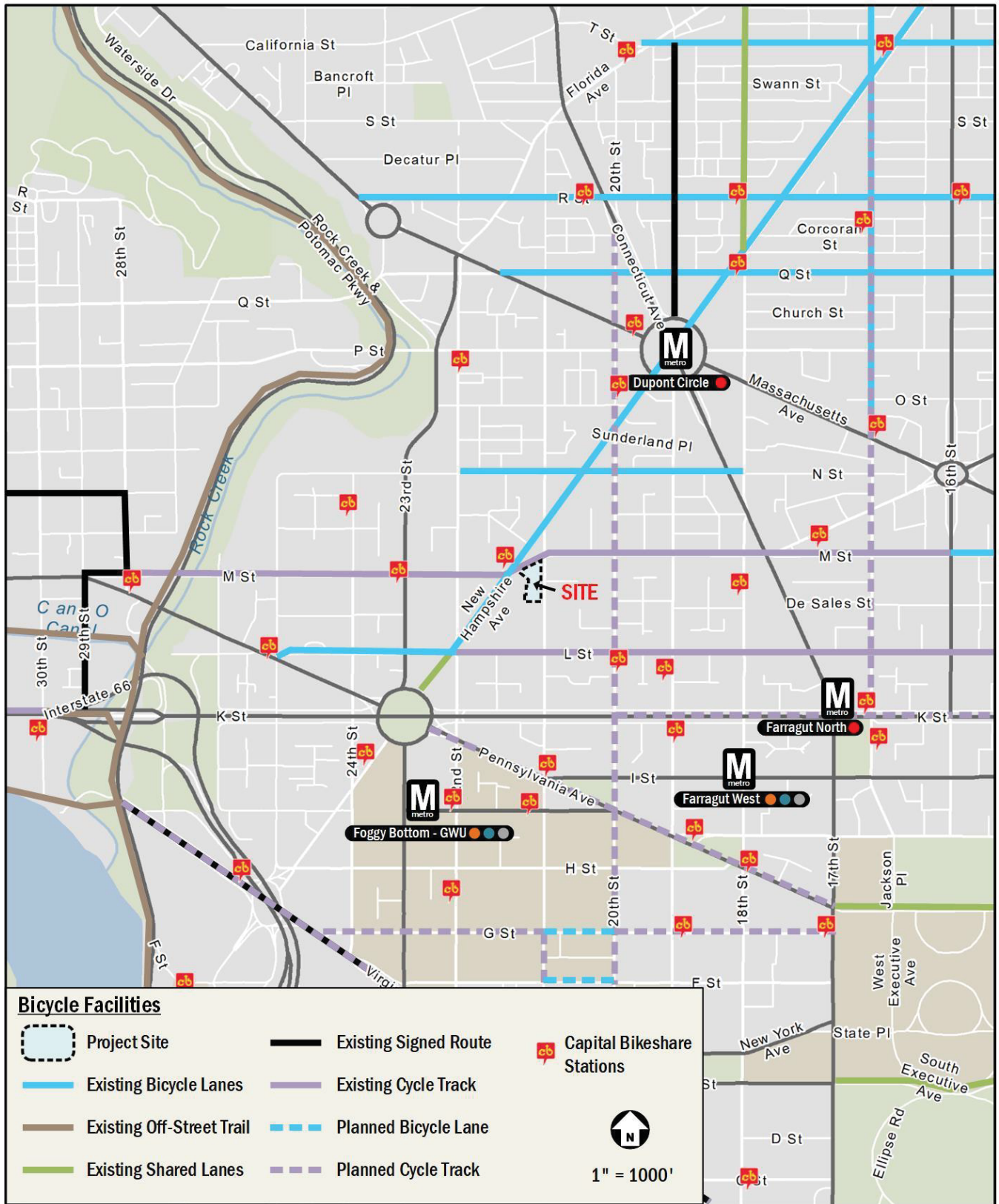


Figure 6: Bicycle Facilities

Transit Facilities

The site is serviced by several local and commuter bus routes along M Street, 21st Street, and New Hampshire Avenue NW with multiple bus stops located within walking distance of the site. These bus lines connect the site to many areas of Washington, DC, and other Metrorail stations where transfers can be made to reach areas in the District, Virginia, and Maryland. As shown in Figure 7, the transit study area for this project is currently served by 22 Metrobus routes and two (2) DC Circulator routes. In addition to the local Metrobus lines servicing the site, several Maryland Transit Administration (MTA) commuter bus lines have designated bus stops adjacent to the site. Table 2 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 site is located within a 10-minute walk from four (4) Metrorail stations. The closest Metrorail station to the site is the Dupont Circle station, located approximately 0.4 miles (an 8-minute walk) north of the site. The Farragut West station, southeast of the site, Farragut North, east of the site, and Foggy Bottom-GWU, southwest of the site, stations are all located within a 0.5-mile walk from the site.

The Dupont Circle station and Farragut North station serve the Red Line. The Red Line provides service from Shady Grove to Glenmont in Montgomery County, Maryland via downtown, Washington DC. Red Line trains run every four (4) minutes during the morning and afternoon peak periods, every six (6) minutes during weekday non-peak periods, every eight (8) to 15 minutes on weekday evenings and late nights, and every six (6) to 15 minutes on weekends.

The Farragut West station and Foggy Bottom-GWU station serve the Blue, Orange, and Silver Lines. The Blue Line provides service from Franconia-Springfield to Largo Town Center, the Orange Line provides service from Vienna to New Carrollton, and the Silver Line provides service from Wiehle-Reston East to Largo Town Center. Each line runs every eight (8) minutes during the morning and afternoon rush hour periods, every 12 minutes during the midday and evening periods, and every 12 to 20 minutes on weekends. Connections to the Red Line may be made at the Metro Center station and connections to the Green and Yellow lines can be made at the L'Enfant Plaza station.

The proximity to nearby bus stops and Metrorail stations allows much of the DC metropolitan area to be accessible from the site. Existing transit facilities surrounding the site are shown on Figure 7.

Table 2: Bus Route Information

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
37	Wisconsin Avenue Limited Line	Weekday Mornings: 6:45 AM-10:03 AM Weekday Afternoons: 4:00 PM-7:47 PM	15-18 min	<0.1 miles, 1 minute
D1	Glover Park - Franklin Square Line	Weekday Mornings: 7:10 AM-9:42 AM Weekday Afternoons: 4:40 PM-7:18 PM	8-12 min	<0.1 miles, 1 minute
D4	Ivy City - Franklin Square Line	Weekdays: 4:10 AM-1:04 AM Saturdays: 4:44 AM-1:05 AM Sundays: 5:18 AM-1:07 AM	17-35 min	<0.1 miles, 1 minute
D6	Sibley Hospital - Stadium-Armory Line	Weekdays: 4:10 AM-2:42 AM Saturdays: 4:45 AM-2:14 AM Sundays: 5:15 AM-1:19 AM	30-40 min	<0.1 miles, 1 minute
H1	Brookland - Potomac Park Line	Weekday Mornings: 6:25 AM-9:56 AM Weekday Afternoons: 4:10 PM-7:04 PM	16-33 min	<0.1 miles, 1 minute
L1, L2	Connecticut Avenue Line	Weekday Mornings: 6:40 AM-9:39 AM Weekday Afternoons: 3:50 PM-7:30 PM	16-24 min	<0.1 miles, 1 minute
RS-DP	Georgetown - Rosslyn	Weekdays: 6:00 AM-9:00 PM Weekends: 7:00 AM-9:00 PM	10 min	<0.1 miles, 1 minute
38B	Ballston - Farragut Square Line	Weekdays: 5:30 AM-2:48 AM Saturdays: 4:45 AM-2:14 AM Sundays: 5:30 AM-12:54 AM	10-30 min	0.2 miles, 3 minutes
D5	MacArthur Boulevard - Georgetown Line	Weekday Mornings: 6:52 AM-9:28 AM Weekday Afternoons: 4:27 PM-7:38 PM	14-30 min	0.2 miles, 3 minutes

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
31, 33	Wisconsin Avenue Line	Weekdays: 5:05 AM-12:08 AM Saturdays: 5:35 AM-1:02 AM Sundays: 5:51 AM-10:02 PM	10-46 min	0.3 miles, 5 minutes
39	Pennsylvania Avenue Limited Line	Eastbound: 3:43 PM-6:58 PM	16-20 min	0.3 miles, 5 minutes
30N, 30S	Friendship Heights - Southeast Line	Weekdays: 4:00 AM-3:49 AM Saturdays: 4:03 AM-3:50 AM Sundays: 4:05 AM-3:15 AM	10-30 min	0.3 miles, 5 minutes
32, 36	Pennsylvania Avenue Line	Weekdays: 5:10 AM-11:29 PM Weekends: 5:34 AM-12:34 AM	10-30 min	0.3 miles, 5 minutes
GT-US	Georgetown-Union Station	Weekdays: 6:00 AM-9:00 PM Weekends: 7:00 AM-9:00 PM	10 min	0.3 miles, 5 minutes
80	North Capitol Street Line	Weekdays: 4:29 AM-2:40 AM Saturdays: 4:40 AM-2:45 AM Sundays: 4:54 AM-1:12 AM	8-15 min	0.4 miles, 9 minutes
3Y	Lee Highway-Farragut Square Line	Weekday Mornings: 6:15 AM-9:36 AM Weekday Afternoons: 3:40 PM-8:06 PM	10-20 min	0.4 miles, 9 minutes
7Y	Lincolnia-North Fairlington Line	Weekday Mornings: 5:09 AM-9:35 AM Weekday Afternoons: 3:33 PM-7:13 PM	5-10 min	0.4 miles, 9 minutes
16Y	Columbia Pike-Farragut Square Line	Weekday Mornings: 5:55 AM-9:47 AM Weekday Afternoons: 3:30 PM-7:52 PM	6-20 min	0.4 miles, 9 minutes
S1	16th Street-Potomac Park Line	Weekday Mornings: 5:50 AM-10:05 AM Weekday Afternoons: 3:54 PM-7:42 PM	5-15 min	0.4 miles, 9 minutes
42, 43	Mount Pleasant Line	Weekdays: 4:20 AM-3:44 AM Saturdays: 4:30 AM-3:49 AM Sundays: 4:30 AM-2:27 AM	3-27 min	0.5 miles, 10 minutes
N2, N4, N6	Massachusetts Ave Line	Weekdays: 5:35 AM-12:51 AM Saturdays: 5:33 AM-12:52 AM Sundays: 6:15 AM-11:22 AM	10-35 min	0.5 miles, 10 minutes
X1	Benning Road Line	Weekday Mornings: 6:04 AM-9:21 AM Weekday Afternoons: 3:39 PM-6:49 PM	16-24 min	0.4 miles, 9 minutes

Table 3: Bus Stop Inventory

Location	Bus Stop ID	Routes Served	Features							
			Sign	ADA Landing Pad	Side walk	Street Lighting	Info Case	Seating	Shelter	Trash Recep.
21 st St & M St NW	1003491	37, D1, D4, D6	●	●	●	●			●	●
New Hampshire Ave & M St NW (NB)	1003794	H1, L1, RS-DP	●	●	●	●			●	●
New Hampshire Ave & M St NW (SB)	1001333	H1, L1, RS-DP	●	●	●	●			●	●
New Hampshire Ave & N St NW (SB)	1001357	D1, D4, D6, H1, L1	●	●	●	●	●			●
New Hampshire Ave & N St NW (NB)	1002971	H1, L1	●		●	●	●			
21 st St & L St NW	1001296	D1, D4, D6	●	●	●	●			●	●
20 th St & L St NW	1001302	D1, D4, D6	●	●	●	●	●		●	●
20 th St & M St NW	1001347	37, D1, D4, D6	●	●	●	●			●	●

Location	Bus Stop ID	Routes Served	Features							
			Sign	ADA Landing Pad	Side walk	Street Lighting	Info Case	Seating	Shelter	Trash Recep.
New Hampshire Ave & 22 nd St NW (NB)	1001298	H1, L1	●	●	●	●				
K St & 22 nd St NW (WB)	1001246	D5	●	●	●	●		●	●	
Pennsylvania Ave & 22 nd St NW (WB)	1001202	30N, 30S, 32, 36, 38B, 39, GT-US	●	●	●	●	●	●	●	●
Pennsylvania Ave & 22 nd St NW (EB)	1001198	30N, 30S, 32, 33, 36, GT-US	●	●	●	●		●	●	
K St & 21 st St NW (WB)	1001247	38B, D5	●	●	●	●	●	●	●	
K St & 21 st St NW (EB)	1001216	38B, D5	●	●	●	●	●	●	●	●
K St & 20 th St NW (EB)	1001213	38B, D1, D4, D5, D6	●	●	●	●	●	●	●	●
20 th St & Sunderland Pl NW	1001386	D1, D4, D6	●	●	●	●	●			
20 th St & New Hampshire Ave NW	1001392	D1, D4, D6, H1, L1	●	●	●	●	●			●
20 th St & O St NW	1001403	D1, D4, D6	●	●	●	●	●	●	●	
19 th St & N St NW	1003826	RS-DP	●	●	●	●		●	●	
23 rd St & L St NW	1001292	H1, L1	●	●	●	●	●			●
L St & 24 th St NW	1003857	RS-DP	●	●	●	●				
Pennsylvania Ave & 24 th St NW	1001270	30N, 30S, 31, 33, 38B, D5	●	●	●	●	●			●
23 rd St & I St NW	1001168	31, 32, 36, 39, H1, L1, X1	●	●	●	●		●	●	
Pennsylvania Ave & 21 st St NW	1001182	30N, 30S, 32, 33, 36, GT-US	●	●	●	●		●	●	●
I St & 20 th St NW	1001179	30N, 30S, 32, 33, 36, 38B	●	●	●	●	●	●	●	
K St & 19 th St NW (WB)	1001233	D1, D4, D5, D6, GT-US	●	●	●	●		●	●	●
K St & 19 th St NW (EB)	1001219	38B, D1, D4,	●	●	●	●		●	●	●

Location	Bus Stop ID	Routes Served	Features							
			Sign	ADA Landing Pad	Side walk	Street Lighting	Info Case	Seating	Shelter	Trash Recep.
		D5, D6, GT-US								
K St & 18 th St NW (EB)	1001214	38B, D1, D4, D5, D6	●	●	●	●		●	●	●
I St & 19 th St NW	1001176	30N, 30S, 32, 33, 36, 37, 38B, 39	●	●	●	●	●	●	●	
K St & 18 th St NW (WB)	1001236	80, 3Y, 16Y, S1, D1, D4, D6	●	●	●	●	●	●	●	●
18 th St & K St NW	1001210	3Y, 7Y, 16Y, 80, S1	●	●	●	●		●	●	●
Connecticut Ave & L St NW (NB)	1001276	42, 43, L2, N2, N4, N6	●	●	●	●	●	●	●	