# TECHNICAL MEMORANDUM

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|---|---|---|
| To: | Kim Vacca | DDOT – PSD |
| Cc: | Stacie Birenbach | Enterprise Community Development, Inc |
| | Cary R. Kadlecek | Goulston & Storrs |
| From: | Drew Ackermann | |
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| | Dan VanPelt, P.E., PTOE | |
| Date: | September 24, 2020 | |
| Subject: | Edgewood V Senior Residential Transportation Statement | |

## Introduction

This memorandum presents the findings of a Transportation Statement for the proposed PUD modification[1] at 611 Edgewood Street NE, located within the Edgewood Commons apartment complex in the Edgewood neighborhood of 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 local neighborhood. The Edgewood Commons apartment complex is bordered by Edgewood Street NE to the north, 4th Street NE to the west, the Rhode Island Avenue Shopping Center/forthcoming Bryant Street development to the south and the DC Prep Edgewood Elementary School to the east.

The development site is currently an open green space within the Edgewood Commons complex. The development calls for a single building that will include:

- 151 affordable senior living units;
- Approximately 9,600 square feet of program space for residents, including regular medical services (a few times per week), personal care services, a café, a library, and a fitness center; and
- A ground floor adult day care of approximately 7,000 square feet.

The project will include the following loading facilities:

- One 30’ x 12’ loading berth on the building’s basement level, accessible from the private drive; and
- One 20’ x 10’ loading/delivery space within the adjacent surface parking lot near the building’s main entrance.

The project will include five (5) new vehicle parking spaces, while 10 existing vehicle spaces on the Edgewood campus will be reserved for the Edgewood V development.

The project will include 28 long-term and 10 short-term bicycle parking spaces. This is fewer than the 52 long-term required by the District’s Zoning Regulations of 2016, though greater than the nine (9) short-term spaces required by the Regulations. The

[1] The associated application is technically for a Modification of Significance of an approved Large Scale Planned Development (LSPD), but it will be referred to in this document as a PUD modification.

Applicant is requesting zoning relief from the long-term bicycle parking requirements as the dwelling units in the project will serve an elderly population who are less likely to use bicycles for transportation.

The purpose of this Transportation Statement is to:

- Review existing site conditions and details on the proposed development plans;
- Review the major transportation elements of the site plan, namely pedestrian, bicycle, and transit facilities in the vicinity of the site;
- Provide a Transportation Demand Management (TDM) plan for the project; and
- Review the transportation elements of the project to determine whether the project will have a detrimental impact on the surrounding transportation network.

The findings of this study conclude that:

- The Edgewood V Senior Residential site is surrounded by an existing network of transit, bicycle, and pedestrian facilities that result in an excellent environment for safe and effective non-vehicular transportation;
- The proposed project will provide sufficient short- and long-term bicycle parking, while limiting the amount of new vehicle parking;
- The proposed project will provide a drop-off area for private vehicles and shuttle buses serviced from an existing private drive, limiting the impacts of pick-up and drop-activity in public space;
- The proposed project will provide loading facilities accessed from an existing private drive, limiting the impacts of loading activity in public space;
- The proposed project will include TDM measures that adequately promote non-vehicular modes of travel; and
- The proposed project will not have a detrimental impact on the surrounding transportation network.

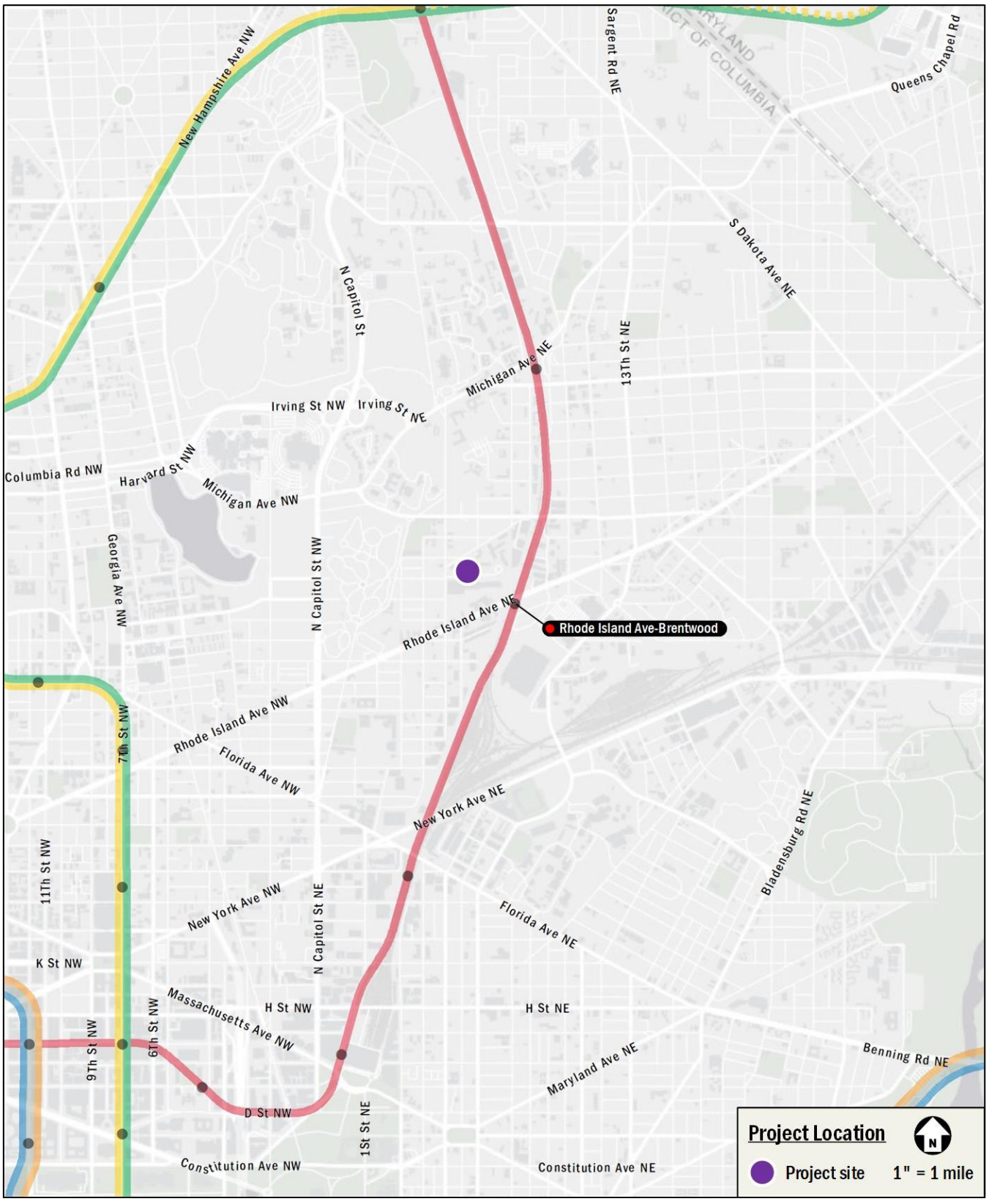


**Figure 1: Project Location (Regional)**


**Figure 2: Project Location (Aerial)**

# Existing Transportation Conditions

This section reviews the existing vehicular, transit, bicycle, and pedestrian facilities in the vicinity of the site. The Edgewood V Senior Residential site is easily accessible by vehicles. It is served by nine (9) Metrobus routes and is within an approximately ten-minute walk of the Rhode Island Avenue-Brentwood Metro station served by the Red Line. The site is also surrounded by a robust pedestrian and bicycle network that consists of well-connected sidewalks, crosswalks, and bicycle facilities.

## *Vehicular Facilities*

The site is accessible from several interstates and principal arterials such as I-395, North Capitol Street, and Rhode Island Avenue. The interstate and arterials create connectivity to 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 arterials and local roads can be used to access the site directly. Primary and minor arterials serving the site include Rhode Island Avenue (US-1), 4th Street, and 3rd Street NE. A network of connector and local roadways also provide access to the site.

Vehicular access to the site will be via the existing curb cut on 4th Street NE and the private driveway along the south side of the Edgewood campus.

## *Transit Facilities*

The site is served by several local bus routes along Rhode Island Avenue, 4th Street, and Edgewood Street NE with multiple bus stops located within a quarter-mile of the site. These bus lines connect the site to many areas of Washington, DC and Maryland, as well as Metro stations where transfers can be made to reach further areas in the District, Virginia, and Maryland. As shown in Figure 3, the transit study area for this project is served by nine (9) Metrobus lines carrying 12 designated routes. Table 1 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. Notes regarding the current reduction in bus service due to COVID-19 are included in Table 1.

The closest Metro station to the site is the Rhode Island Avenue-Brentwood station, which is served by the Red Line and located approximately 0.4 miles (a 9-minute walk) east of the site. The Red Line provides service between Shady Grove and Glenmont and under normal circumstances runs every four (4) minutes during the morning and afternoon rush hour periods, every six (6) to 12 minutes during the midday and evening periods, and every six (6) to 15 minutes on weekends. During the current COVID-19 service reduction, the Red Line is running every 15 minutes between 5:00am and 9:00pm on weekdays, and every 20 minutes between 8:00am and 9:00pm on weekends.

Existing transit facilities surrounding the site are shown on Figure 3.

**Table 1: Local Bus Route Information**

| Route Number | Route Name | Service Hours at Stop Closest to Site [1] | | | Headway (mins) [1] | Walking Distance to Nearest Stop |
|---|---|---|---|---|---|---|
| | | Weekdays | Saturdays | Sundays | | |
| 83, 86 | College Park Line | 4:44am-2:00am | 5:43am-2:00am | 6:45am-12:30am | 10 - 60 | 0.3 mi (7 min) |
| B8, B9 | Fort Lincoln Shuttle Line | 6:18am-7:12pm | - | - | 15 - 70 | 0.3 mi (7 min) |
| D8 | Hospital Center Line | 5:37am-2:23am | 6:22am-12:55am | 6:26am-12:51am | 11 - 30 | 0.1 mi (3 min) |
| G8 | Rhode Island Avenue Line | 5:00am-2:20am | 5:32am-2:19am | 5:18am-12:32am | 6 - 45 | 0.1 mi (3 min) |
| G9 | Rhode Island Avenue Limited Line | 6:12am-9:22am; 3:22pm-7:24pm | - | - | 15 - 22 | 0.3 mi (7 min) |
| H8, H9 | Park Road-Brookland Line | 5:00am-1:51am | 6:00am-1:59am | 6:00am-1:24am | 5 - 35 | 0.3 mi (7 min) |
| P6 | Anacostia-Eckington Line | 5:04am-1:59am | 5:24am-2:00am | 6:24am-12:31am | 8 - 35 | 0.3 mi (7 min) |
| T14 | Rhode Island Avenue-New Carrollton Line | 5:05am-10:23pm | 8:00am-6:55pm | 8:45am-6:35pm | 18 - 64 | 0.3 mi (7 min) |
| T18 | Annapolis Road Line | 5:36am-11:20pm | 7:10am-9:55pm | 7:55am-7:15pm | 12 - 35 | 0.3 mi (7 min) |

[1] Service hours and headways reflect regular pre-COVID-19 bus service. During COVID-19, all routes shown run a Sunday schedule on weekdays with headways of approximately 30 minutes and with the last buses departing starting points at or before 11:00pm. All routes shown operate only on weekdays during COVID-19, except the 83 route which also runs on weekends. The G9 and H9 routes are not operating at all during COVID-19.

**Table 2: WMATA Bus Stop Amenity Guidance**

| Amenity | Basic Stop | | Enhanced Stop | Transit Center Stop |
|---|---|---|---|---|
| | < 50 daily boardings | ≥ 50 daily boardings | | |
| Bus stop flag | ● | ● | ● | ● |
| Route map and schedule | ● | ● | ● | ● |
| 5' x 8' landing pad | ● | ● | ● | ● |
| 40'/60' x 8' landing pad | | | ● | ● |
| 4' sidewalk | ● | ● | ● | ● |
| Bench | | ● | ● | ● |
| Shelter | | ● | ● | ● |
| Lighting (on shelter or within 30' if overhead) | Required for stops with early morning and evening service | | ● | ● |
| Dynamic information signage | Contingent on presence of shelter | | | |
| Trash and recycling receptacles | Recommended where surrounding uses may generate trash | | | |

**Table 3: Local Bus Stop Information**

| Location | Stop ID | Routes Served | Amenities | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Bus stop flag | Rt. map & schedule | Landing pad | Sidewalk | Bench | Shelter | Dynamic info sign | Lighting | Trash Recep. |
| 4th St NE + T St NE (NB) | 1001644 | P6 | ● | | ● | ● | | | | | ● |
| 4th St NE + Todd Pl NE (SB) | 1001649 | P6 | ● | ● | ● | ● | | | | ● | ● |
| 4th St NE + V St NE (SB) | 1001712 | P6 | ● | ● | | ● | | | | | ● |
| Rhode Island Ave NE + V St NE (EB) | 1001713 | G8 | ● | ● | ● | ● | | | | ● | ● |
| Rhode Island Ave NE + V St NE (WB) | 1001715 | G8, P6 | ● | ● | ● | ● | | | | ● | ● |
| Rhode Island Ave NE + 3rd St NE (EB) | 1001732 | G8, G9 | ● | ● | ● | ● | | | | ● | ● |
| Rhode Island Ave NE + 3rd St NE (WB) | 1001736 | G8, G9, P6 | ● | ● | ● | ● | | | | ● | ● |
| 4th St + W St NE (NB) | 1001730 | P6 | ● | | ● | ● | | | | | |
| 4th St + W St NE (SB) | 1001741 | P6 | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Rhode Island Ave NE + 5th St NE (EB) | 1001754 | D8, G8, P6 | ● | | ● | ● | | | | ● | ● |
| Rhode Island Ave NE + 5th St NE (WB) | 1001758 | G8 | ● | | ● | ● | | | | ● | ● |
| Rhode Island Ave NE + #610 (WB) | 1001778 | P6, G8 | ● | | ● | ● | | | | | ● |
| Rhode Island Ave NE + #617 (EB) | 1001781 | D8, P6, G8 | ● | ● | ● | ● | | | | ● | ● |
| Rhode Island Ave NE + 8th Pl NE (EB) | 1001790 | D8, P6, G8 | ● | | ● | ● | | | | ● | |
| 4th St NE + Bryant St NE (SB) | 1001793 | D8, G8 | ● | | ● | ● | | | | | ● |
| Rhode Island Ave NE + 8th Pl NE (WB) | 1001797 | P6, G8, G9 | ● | | ● | ● | | | | | ● |
| Edgewood St NE + Douglas St NE (WB) | 1001833 | D8, G8 | ● | | ● | ● | | | | | ● |
| Edgewood St NE + Douglas St NE (EB) | 1001837 | G8 | ● | | ● | ● | | | | | |
| Edgewood St NE + 6th St NE (EB) | 1001863 | G8 | ● | | ● | ● | ● | ● | | ● | ● |
| Edgewood St NE + 6th St NE (WB) | 1001864 | D8, G8 | ● | ● | ● | ● | ● | ● | | ● | ● |
| Edgewood St NE + 7th St NE (WB) | 1001885 | D8, G8 | ● | | ● | ● | ● | ● | | ● | ● |
| Franklin St NE + 4th St NE (EB) | 1001904 | D8 | ● | | ● | ● | | | | ● | ● |

| Location | Stop ID | Routes Served | Amenities | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Bus stop flag | Rt. map & schedule | Landing pad | Sidewalk | Bench | Shelter | Dynamic info sign | Lighting | Trash Recep. |
| Franklin St NE + Montana Ave NE (EB) | 1001907 | D8 | ● | ● | ● | ● | | | | ● | ● |
| Franklin St NE + Glenwood Cemetery (EB) | 1001923 | D8 | ● | ● | ● | ● | | | | | ● |
| 7th St NE + Franklin St NE (SB) | 1001926 | G8 | ● | ● | ● | ● | | | | ● | ● |
| 7th St NE + Franklin St NE (NB) | 1001928 | G8 | ● | | ● | ● | | | | | ● |
| Franklin St NE + Trinity College (WB) | 1001931 | D8 | ● | ● | ● | ● | | | | ● | ● |
| 7th St NE + Hamlin St NE (NB) | 1001960 | G8 | ● | | | ● | | | | | ● |
| 7th St NE + Hamlin St NE (SB) | 1001966 | G8 | ● | | ● | ● | | | | ● | ● |
| Edgewood St NE + #625 (EB) | 1003009 | G8 | ● | | ● | ● | | | | ● | |
| Franklin St NE + 6th St NE (WB) | 1003210 | G8 | ● | | ● | ● | | | | ● | ● |
| 4th St NE + V St NE (NB) | 1003278 | P6 | ● | | ● | ● | | | | | ● |
| Franklin St NE + 4th St NE (WB) | 1003926 | D8 | ● | | ● | ● | | | | ● | ● |
| Rhode Island Ave NE + 4th St NE (WB) | 1003928 | G8 | ● | | ● | ● | | | | | ● |

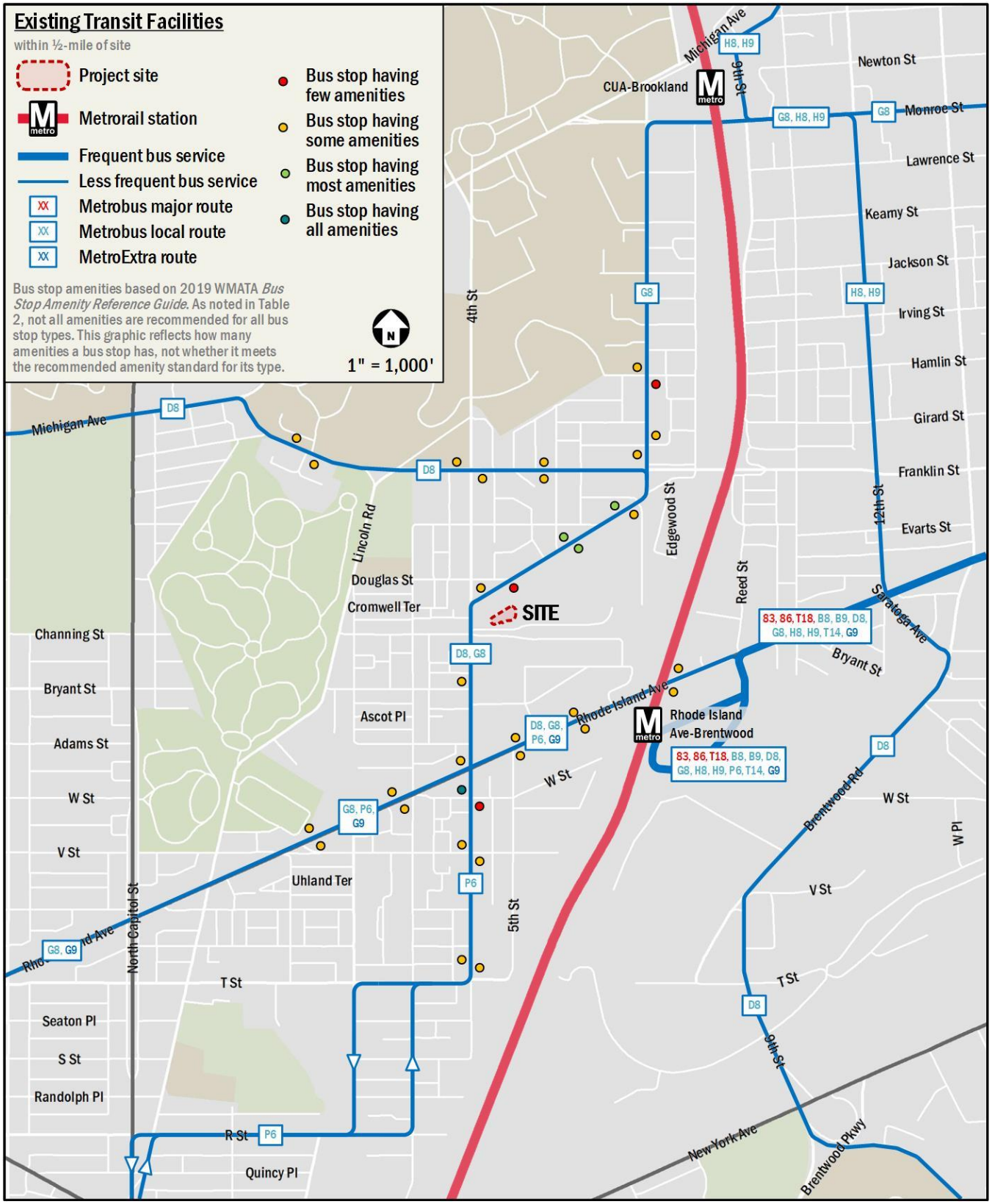


**Figure 3: Existing Transit Facilities**

## *Bicycle Facilities*

### *Existing Bicycle Facilities*

The Edgewood V Senior Residential site will have access to existing on- and off-street bicycle facilities. The site is located alongside bicycle lanes on 4th Street NE, as well as the Metropolitan Branch Trail which connects downtown Washington, DC with the Washington, DC's Michigan Park neighborhood.

Figure 4 illustrates the existing bicycle facilities near the site.

### *Future Bicycle Facilities*

The Bryant Street development immediately to the south of the Edgewood V Senior Residential site will include a new east-west cycle track connecting the existing 4th Street bicycle lanes with the Metropolitan Branch Trail. An interim version of this cycle track is scheduled to open in 2021, while the ultimate version is scheduled to open in 2026.

*MoveDC*, the District's long-range multimodal transportation plan, also proposes a cycle track along the segment of Rhode Island Avenue near the Edgewood V Senior Residential site. The implementation timeline for this project is unknown.

Figure 5 shows the existing and future bicycle facilities near the site.

### *Capital Bikeshare*

The Capital Bikeshare program provides additional cycle options for students and employees of the proposed development. The program has placed over 500 bikeshare stations across the Washington, DC metropolitan area with over 4,300 bicycles in the fleet. There is one 15-dock Capital Bikeshare station within a quarter-mile of the site, located at the Edgewood Recreation Center at the corner of 3rd Street and Evarts Street NE.

There is a planned station 0.2 miles away from the site at Evarts Street and Edgewood Street NE, which appears in the 2019 update of the Capital Bikeshare Development Plan. The Expansion Plan assumes the average size of a new station is 19 docks.

Existing and planned Capital Bikeshare station locations are shown on Figure 4 and Figure 5, respectively.

### *Dockless E-Scooters and E-Bicycles*

Personal Mobility Device (PMD) service in the District is provided by nine (9) electric-assist scooter (e-scooter) and electric-assist bicycle (e-bike) companies including Bird, Bolt, Helbiz, Jump, Lime, Lyft, Razor, Skip, and Spin. These PMDs 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. Many PMDs do not have designated stations where pick-up/drop-off activities occur like with Capital Bikeshare; instead, they are parked in public space, most commonly in the "furniture zone" (the portion of sidewalk between where people walk and the curb, often where other street signs, street furniture, trees, parking meters, etc. are found). At this time, PMD pilot/demonstration programs are underway in Arlington County, the District, Fairfax County, the City of Fairfax, the City of Alexandria, and Montgomery County.

In addition to existing bicycle facilities, the project is proposing to provide short-term and long-term bicycle parking spaces on site, making bicycle and scooter travel a more attractive option for those traveling to and from the site.


**Figure 4: Existing Bicycle Facilities**


**Figure 5: Existing and Future Bicycle Facilities**

## *Pedestrian Facilities*

### *Existing Pedestrian Facilities*

Overall, the pedestrian facilities within the study area provide excellent connectivity to major local destinations. A summary of pedestrian facilities within a quarter-mile area is shown on Figure 6, with a summary of sidewalk width requirements shown in Table 4.

There are minor areas of concern within the study area that may impact the quality and attractiveness of walking, such as sidewalks along Edgewood Street that do not meet DDOT's minimum width requirements.

Within the study area, all roadways fall under the Low to Moderate Density Residential category in Table 4. The sidewalks in the study area that do not meet DDOT standards typically do not maintain the total minimum sidewalk width of 10 feet but do provide a minimum unobstructed clear width of 6 feet.

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 are not desired. As shown in Figure 6, under existing conditions, there are some crosswalks and curb ramps near the site that do not meet DDOT and/or ADA standards.

Along major pedestrian routes near the site, most sidewalks, crosswalks, and curb ramps meet DDOT and/or ADA standards. Pedestrian facilities immediately adjacent to the site meet DDOT and ADA standards, providing a quality walking environment.

### *Future Pedestrian Facilities*

The Bryant Street development immediately to the south of the Edgewood V Senior Residential site will include two (2) new pedestrian access stairs connecting to the Edgewood Commons complex and facilitating a direction connection to the both the Bryant Street development and the Metro station. These stair locations are shown on Figure 6.

**Table 4: Minimum Sidewalk Requirements**

| Street Type | Tree/Furnishing Zone | Unobstructed Clear Width | Total Minimum Sidewalk Width |
|---|---|---|---|
| Low to Moderate Density Residential | 4-6 feet | 6 feet | 10 feet |
| High Density Residential | 4-8 feet | 8 feet | 13 feet |
| Central DC and Commercial Areas | 4-10 feet | 10 feet | 16 feet |

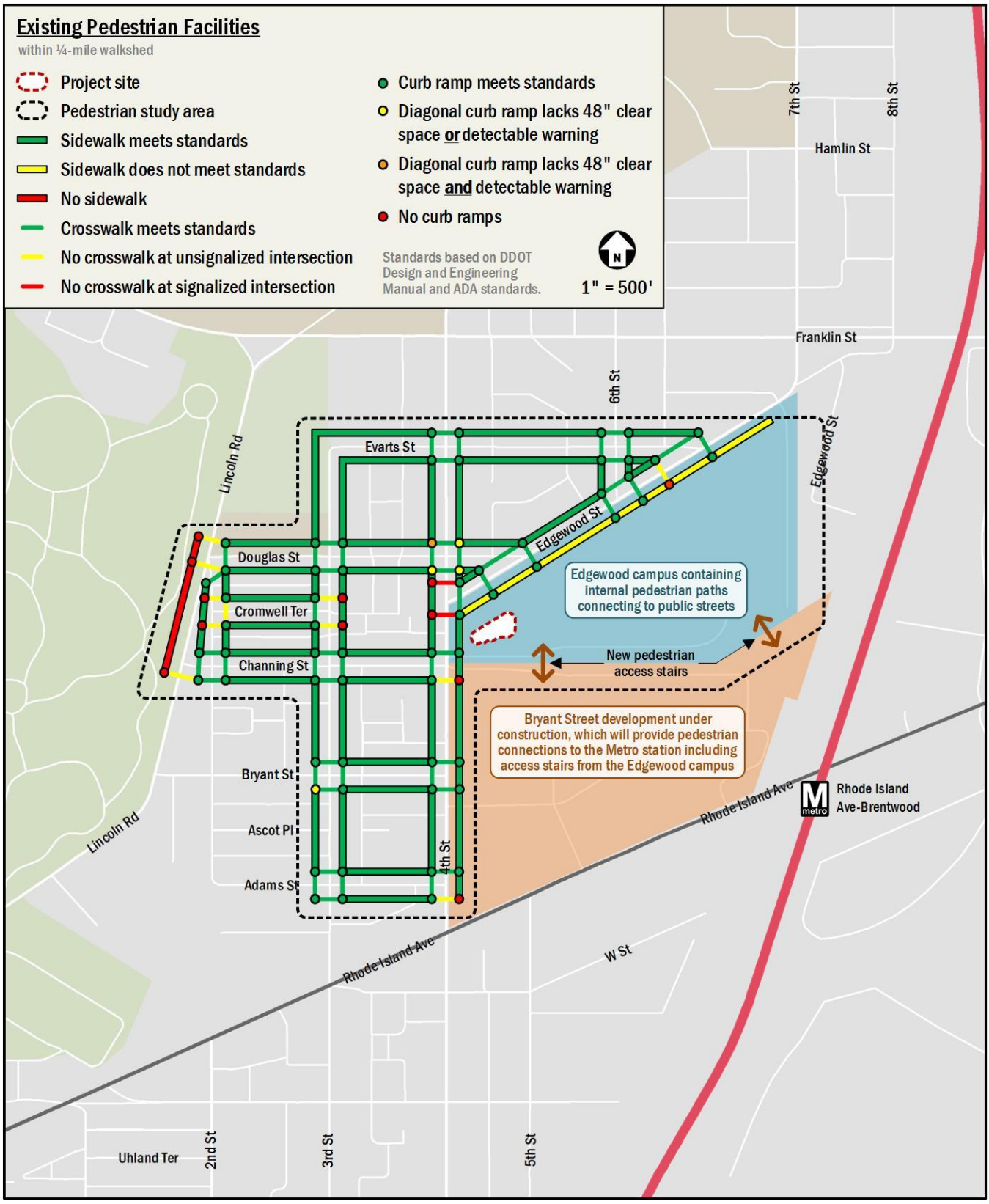


**Figure 6: Existing Pedestrian Facilities**

# Future Projects

There are several District initiatives located in the vicinity of the site. These planned and proposed projects are summarized below.

## *MoveDC*

*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);
- 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; and
- Water taxis.

In direct relation to the proposed development, the *MoveDC* plan recommends the following:

- A bicycle lane along Rhode Island Avenue from Reed Street NE to the Maryland/District of Columbia border;
- A cycle track along Rhode Island Avenue from Connecticut Avenue NW to Reed Street NE;
- Completion of the Metropolitan Branch Trail to Silver Spring, Maryland; and
- High-capacity transit along Rhode Island Avenue from Reed Street NE to the Maryland/District of Columbia border.

## *DC Comprehensive Plan*

The *DC Comprehensive Plan* is a high-level guiding document that sets a positive, long-term vision for the District through the lens of its physical growth and change. The existing Comprehensive Plan was enacted in 2006, updated in 2011, and as of May 2020 is currently being updated.

The April 2020 proposed amendments to the Comprehensive Plan's Upper Northeast Element, which includes the Edgewood Commons area, contains the following policy which is supported by the proposed development:

- "*Policy UNE-1.1.3: Metro Station Development*. Capitalize on the presence of the Metro stations at Rhode Island Avenue, Brookland/CUA, and Fort Totten, to provide new transit-oriented housing, community services, and jobs. New development around each of these three stations is strongly supported. Locating higher-density housing near stations minimizes the impact of cars and traffic that would be expected if the residents lived farther from high-capacity transit. The District will coordinate with WMATA to make the design, density, and type of housing or other proposed development at these stations compatible with surrounding neighborhoods, respects community concerns and feedback, and serves a variety of household incomes. Development shall comply with other provisions of the Comprehensive Plan regarding the compatibility of new land uses with established development, such as existing

production, distribution, and repair (PDR) uses. Development shall also comply with other Comprehensive Plan guidance regarding the provision of appropriate open space, management of mobility, and public services."

- The proposed development supports this policy by being located near the Rhode Island Avenue-Brentwood Metro station, encouraging non-vehicular travel by providing bicycle parking, and serving a variety of incomes by providing affordable housing units.

### *Sustainable DC 2.0 Plan*

*Sustainable DC* is the District of Columbia's major planning effort to make DC the most sustainable city in the nation. It proposes a variety of sustainability goals, targets, and actions related to the built environment, transportation, and other topics.

The 2019 iteration of the plan, the *Sustainable DC 2.0 Plan*, includes the following proposed action which is supported by the Edgewood V Senior Residential development:

- "BE2.3 Locate affordable, high-density housing close to commercial zones and high capacity transit."
    - The proposed development supports this action by being located near the Rhode Island Avenue-Brentwood Metro station, and by being located conveniently to new pedestrian connections to the Metro station through the adjacent Bryant Street development.

### *Brookland-Edgewood Livability Study*

This six-month study was undertaken by DDOT in order to improve the daily quality of life of residents, patrons, and employees that commute to, from, or through the study area. To meet this goal, DDOT analyzed the local street network and identified actions which could be taken to increase safety and improve connectivity and accessibility. The study goals included:

- Development of a comprehensive approach to traffic calming and operational improvements for all users living in and visiting the area;
- Identifying specific issues that impact safety and comfort of multimodal users while also accommodating freight and delivery needs;
- Designing cost-effective and measurable improvements that benefit all users;
- Investigating and mitigating freight impacts on the area;
- Emphasizing safety and access improvements around neighborhood facilities including, but not limited to: schools, churches, parks recreation centers, and other key community facilities; and
- Enhancing comfort and livability for residents and visitors to the project areas.

The study recommends improvements for pedestrians (visibility, sidewalks), bicyclists (additional facilities and bikeshare locations), and overall safety (signal optimization reviews).

### *Traffic Safety Study for Franklin Street NE Corridor*

A Traffic Safety Study (TSS) was conducted on Franklin Street NE in 2015 due to several complaints related to vehicular speeding, red light running, damaged street lighting, poor pavement conditions, improperly timed traffic signals, and truck traffic issues from local residents and Advisory Neighborhood Commission (ANC) members along the Franklin Street corridor. The TSS analyzed traffic data, crash data, and signal operations and developed countermeasures for traffic safety improvements along the corridor. These improvements include upgrading street lighting, installation of ADA-compliant curb ramps, restriping and resurfacing of intersections, and installation of new traffic signal equipment.

Bicycle lanes and traffic calming measures including lane narrowing and elimination were installed in 2019 on Franklin Street NE between 7th Street and 12th Street NE.

## Site Trip Generation

Weekday peak hour trip generation was calculated based on the methodology outlined in ITE *Trip Generation*, 10th Edition. This methodology was supplemented to account for the urban nature of the site (ITE *Trip Generation* provides data for non-urban, low transit use sites) and to generate trips for multiple modes.

Trip generation for the residential portion of the proposed development was calculated based on ITE land use 252 (Senior Adult Housing – Attached in a General Urban/Suburban setting).

Trip generation for the adult day care portion of the proposed development was calculated based on ITE land use 495 (Recreational Community Center in a General Urban/Suburban setting).

Table 5 shows mode split assumptions based on census (Traffic Analysis Zone) data for people who live and work near the site, as well as survey data from the National Capital Region Transportation Planning Board's (TPB) State of the Commute survey and the WMATA Ridership Survey. Detailed mode split information is provided in the Technical Attachments.

Table 6 shows a multimodal trip generation summary for the proposed development. Detailed trip generation information is provided in the Technical Attachments. As seen on Table 6, the project will generate fewer than 25 net new peak hour vehicle trips in the peak direction in any study period. Based on this a vehicular capacity analysis is not required.

**Table 5: Summary of Mode Split Assumptions**

| Land Use | Mode | | | |
|---|---|---|---|---|
| | Auto | Transit | Bike | Walk |
| Senior Housing | 25% | 50% | 2% | 23% |
| Adult Day Care | 60% | 25% | 2% | 13% |

**Table 6: Multimodal Trip Generation Summary**

| Mode | Land Use | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|
| | | In | Out | Total | In | Out | Total |
| **Auto (veh/hr)** | Senior Housing | 3 | 5 | 8 | 5 | 4 | 9 |
| | Adult Day Care | 6 | 2 | 8 | 4 | 6 | 10 |
| | **Total** | **9** | **7** | **16** | **9** | **10** | **19** |
| **Transit (ppl/hr)** | Senior Housing | 6 | 12 | 18 | 13 | 10 | 23 |
| | Adult Day Care | 3 | 1 | 4 | 2 | 3 | 5 |
| | **Total** | **9** | **13** | **22** | **15** | **13** | **28** |
| **Bike (ppl/hr)** | Senior Housing | 0 | 1 | 1 | 1 | 0 | 1 |
| | Adult Day Care | 0 | 0 | 0 | 0 | 0 | 0 |
| | **Total** | **0** | **1** | **1** | **1** | **0** | **1** |
| **Walk (ppl/hr)** | Senior Housing | 3 | 5 | 8 | 6 | 4 | 10 |
| | Adult Day Care | 1 | 1 | 2 | 1 | 2 | 3 |
| | **Total** | **4** | **6** | **10** | **7** | **6** | **13** |

# Project Design

This section provides an overview of the on-site transportation features of the proposed development, including an overview of site access by pedestrians, bicycles, private vehicles, and loading vehicles.

The proposed development is located within the Edgewood Commons apartment complex in the Edgewood neighborhood of Washington, DC. Edgewood Commons is bordered by Edgewood Street NE to the north, 4th Street NE to the west, the Rhode Island Avenue Shopping Center/forthcoming Bryant Street development to the south and the DC Prep Edgewood Elementary School to the east.

The development site is currently an open green space within the Edgewood Commons complex. The development calls for a single building that will include:

- 151 affordable senior living units;
- Approximately 9,600 square feet of program space for residents, including regular medical services (a few times per week), personal care services, a café, a library, and a fitness center; and
- A ground floor adult day care of approximately 7,000 square feet.

The site will include the following loading facilities:

- One 30’ x 12’ loading berth on the building’s basement level, accessible from the private drive; and
- One 20’ x 10’ loading/delivery space within the adjacent surface parking lot near the building’s main entrance.

The site will include five (5) new vehicle parking spaces, while 10 existing vehicle spaces on the Edgewood campus will be reserved for the Edgewood V development.

The site will include 28 long-term and 10 short-term bicycle parking spaces. This is fewer than the 52 long-term spaces required by the District’s Zoning Regulations of 2016, though it exceeds the nine (9) short-term spaces required by the Regulations. The Applicant is requesting zoning relief from the long-term bicycle parking requirements as the dwelling units in the project will serve an elderly population who are less likely to use bicycles for transportation.

A site plan is presented on Figure 7.

## *Site Access and Circulation*

### *Pedestrian Access*

Pedestrian access to the site is proposed to remain from the driveway on the southern edge of the Edgewood Commons complex, as well as from the internal pedestrian paths within the complex, many of which are ADA accessible. Pedestrian access to the Edgewood Commons complex is provided from various points along 4th Street and Edgewood Street NE.

Two (2) new pedestrian access stairs are proposed from the Edgewood Commons complex to the Bryant Street development directly to the south, which is currently under construction. These stairs, which the Bryant Street project developer is constructing, will provide a direct pedestrian path to the Rhode Island Avenue-Brentwood Metro station and the Metropolitan Branch Trail.

A circulation plan including expected pedestrian routes is shown in Figure 8.

### *Bicycle Access*

Bicycle access will be provided via internal paths within the Edgewood Commons complex from the 4th Street bicycle lanes to the west and the Metropolitan Branch Trail to the east. 10 short-term and 28 long-term bicycle parking spaces are proposed on site.

A circulation plan including expected bicycle routes and proposed bicycle parking locations is shown in Figure 8.

### *Vehicle Access*

Vehicular access will be via the existing curb cut on 4th Street and the private drive along the southern edge of the Edgewood Commons complex. A pick-up/drop-off area will be provided from the private drive.

Vehicle parking will be accommodated using a mixture of new parking spaces and existing parking spaces on the Edgewood Commons complex. The zoning requirements for off-street parking for a daytime care facility is 0.5 space for every 1,000 square feet, and one space for every six (6) units for publicly assisted housing, reserved for the elderly and/or handicapped, totaling 29 off-street parking spaces. In addition, the project site lies within 0.5 miles of the Rhode Island Avenue Metro station, reducing the minimum required parking by 50%. Thus, the minimum vehicle parking requirement for the development is reduced to 15 parking spaces.

A parking study of the entire Edgewood Commons complex was conducted in 2018, finding that the peak parking demand was 320 occupied spaces out of the 423 off-street spaces available on site, leaving an unused supply of 103 spaces. This parking study is included in the Technical Attachments.

Due to the 103-space surplus of parking on the Edgewood Commons complex, 10 of the Edgewood V development's 15 required parking spaces will be accommodated by existing spaces on the complex, while five (5) new spaces will be provided adjacent to the new building.

A circulation plan including expected vehicle routes is shown in Figure 8.

### *Loading Access*

Loading and deliveries will occur at two (2) loading/delivery areas. One is a 30' x 12' loading berth on the building's basement level, accessible from the private drive. The other is a 20' x 10' surface loading area near the building's main entrance, also accessed from the private drive on the southern edge of the Edgewood campus. All loading vehicle backing maneuvers will take place outside of public space.

The 30' x 12' loading berth will be used for moving trucks and other larger delivery vehicles. The 20' x 10' surface loading area will be used for smaller delivery vehicles. Trash pick-up will be incorporated into the existing trash pick-up scheme of the Edgewood campus in which maintenance staff moves trash containers out of the buildings to designated exterior locations and a single trash vendor with a 30-foot truck stops to collect from the containers. The trash pick-up operations will not use internal loading areas.

A circulation plan including expected loading vehicle routes and loading/delivery area locations is shown in Figure 8.

Thirty-foot trucks are the largest vehicles that will use the loading/delivery areas. SU-30 turning maneuvers between 4th Street (the nearest public street) and the 30' x 12' loading berth are presented in Figure 9 and Figure 10. SU-30 truck turning maneuvers between Rhode Island Avenue (the nearest truck and bus through route) and the 30' x 12' loading berth are presented in Figure 11 and Figure 12.

Twenty-two-foot transit van (MetroAccess and Seabury Connector shuttles) turning maneuvers between 4th Street (the nearest public street) and the drop-off area are presented in Figure 13. The 22-foot transit van turning maneuvers between Rhode Island Avenue (the nearest truck and bus through route) and the drop-off area are presented in Figure 14.

## ***Pick-up and Drop-off Operations***

The development will include a drop-off area at the building's main entrance, serviced by a circular driveway from the private drive along the southern edge of the Edgewood Commons complex. The pick-up area will be used by private vehicles, Seabury

Connector bus service, and MetroAccess van service. No more than two (2) vehicles are expected to use the area at once. Approximately 30 Seabury Connector buses and MetroAccess vans are expected per day.

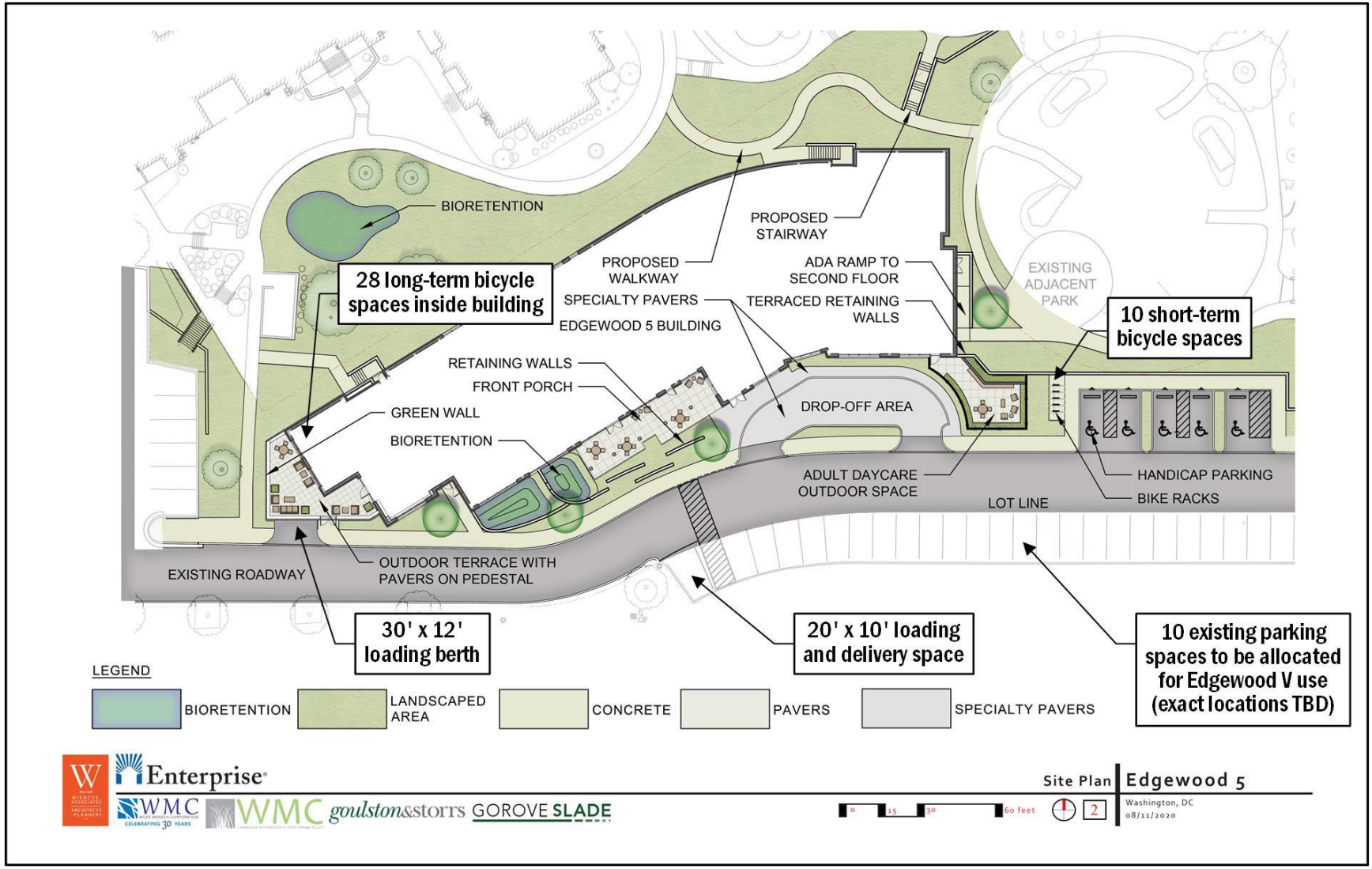


**Figure 7: Site Plan**

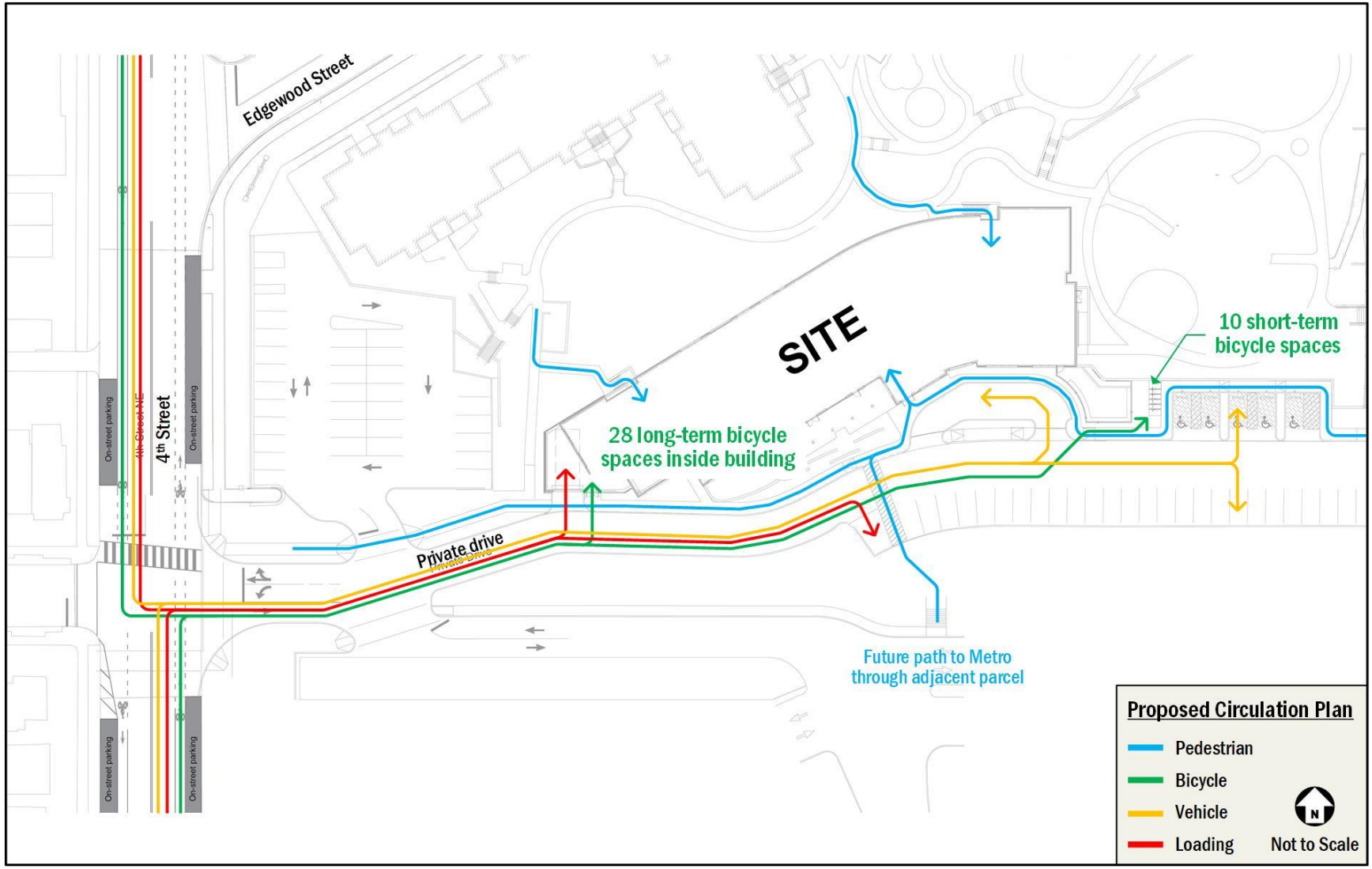


**Figure 8: Site Circulation**

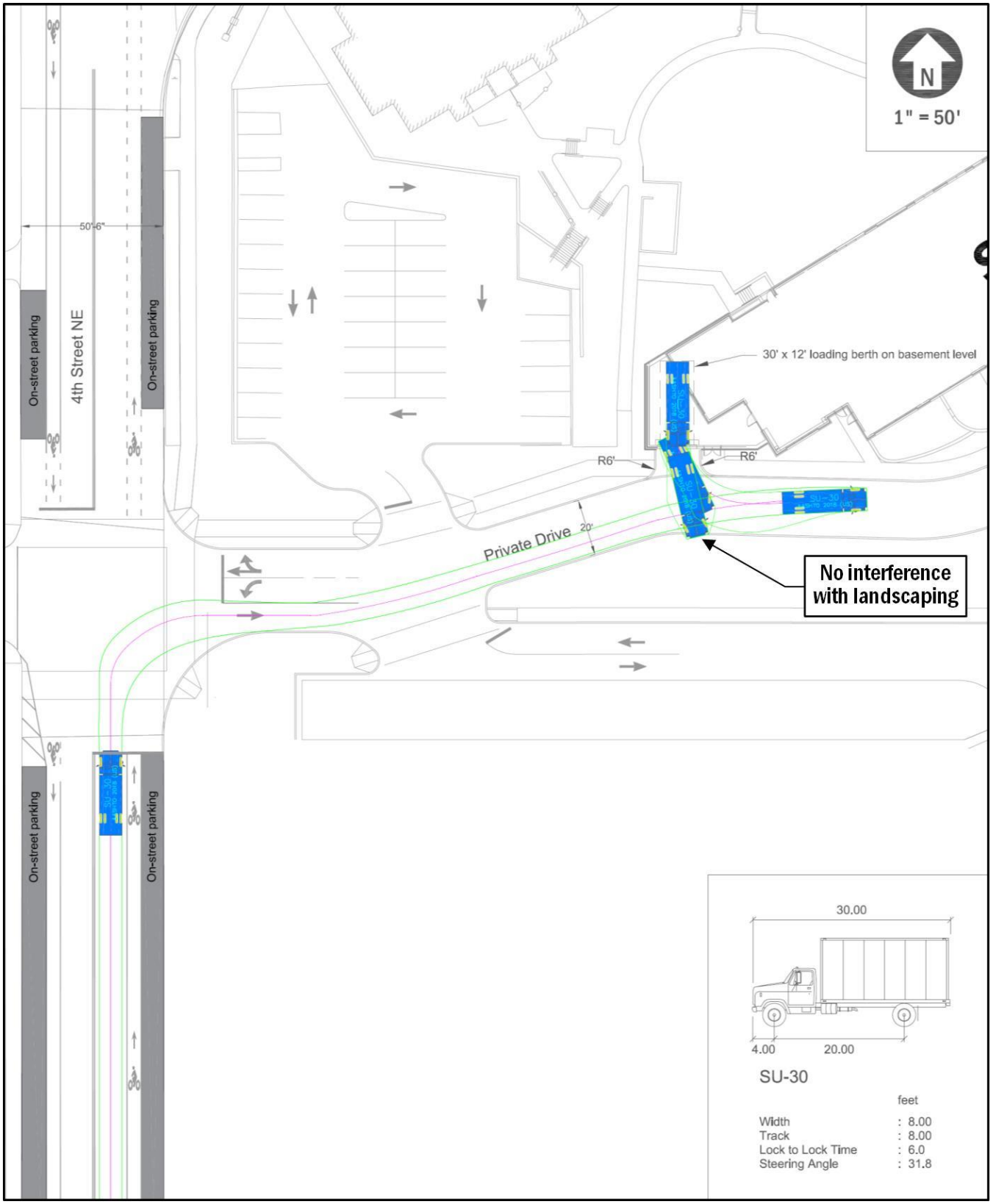


**Figure 9: SU-30 Inbound Turning Maneuver from 4th Street to Loading Berth**

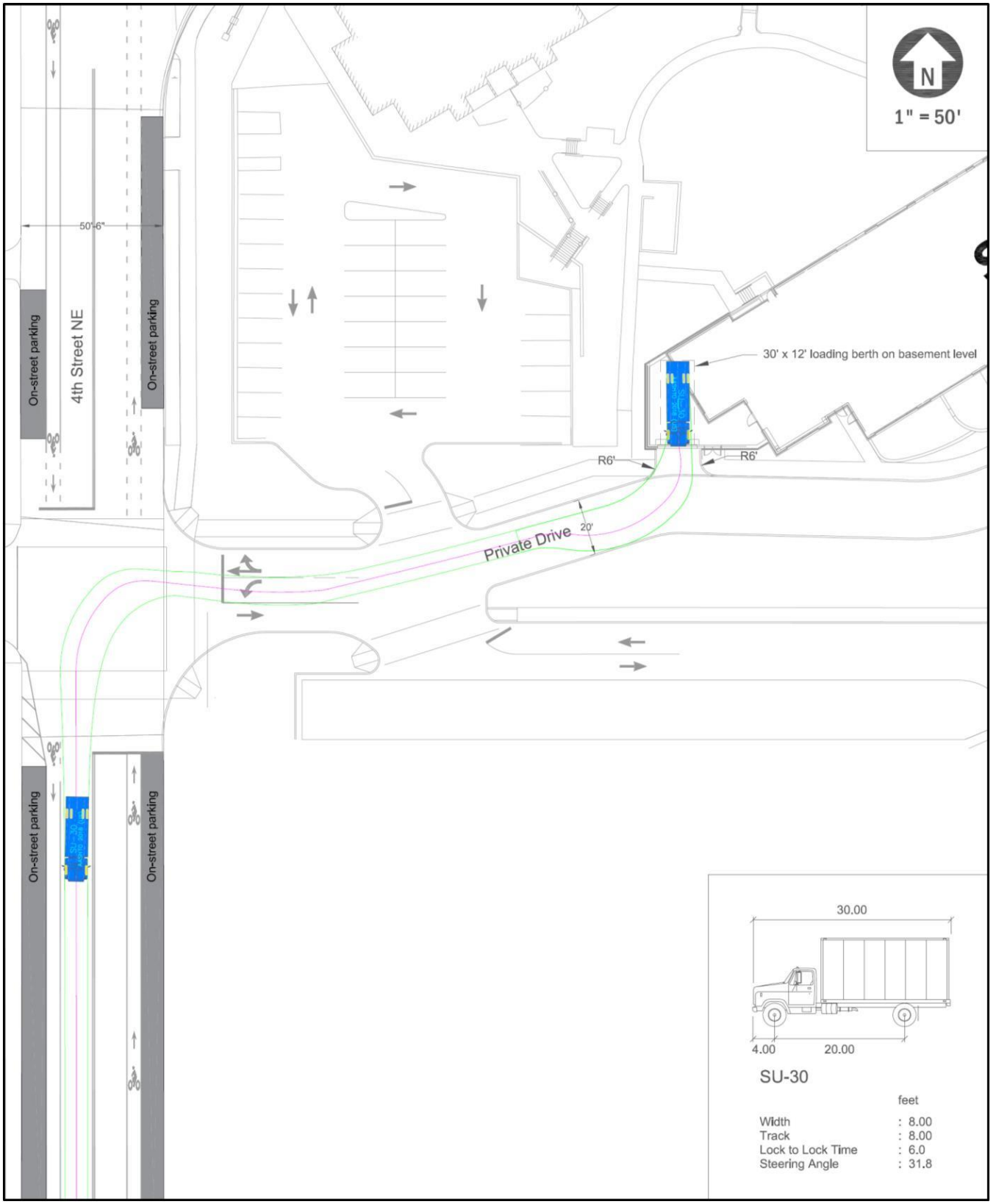


**Figure 10: SU-30 Outbound Turning Maneuver from Loading Berth to 4th Street**

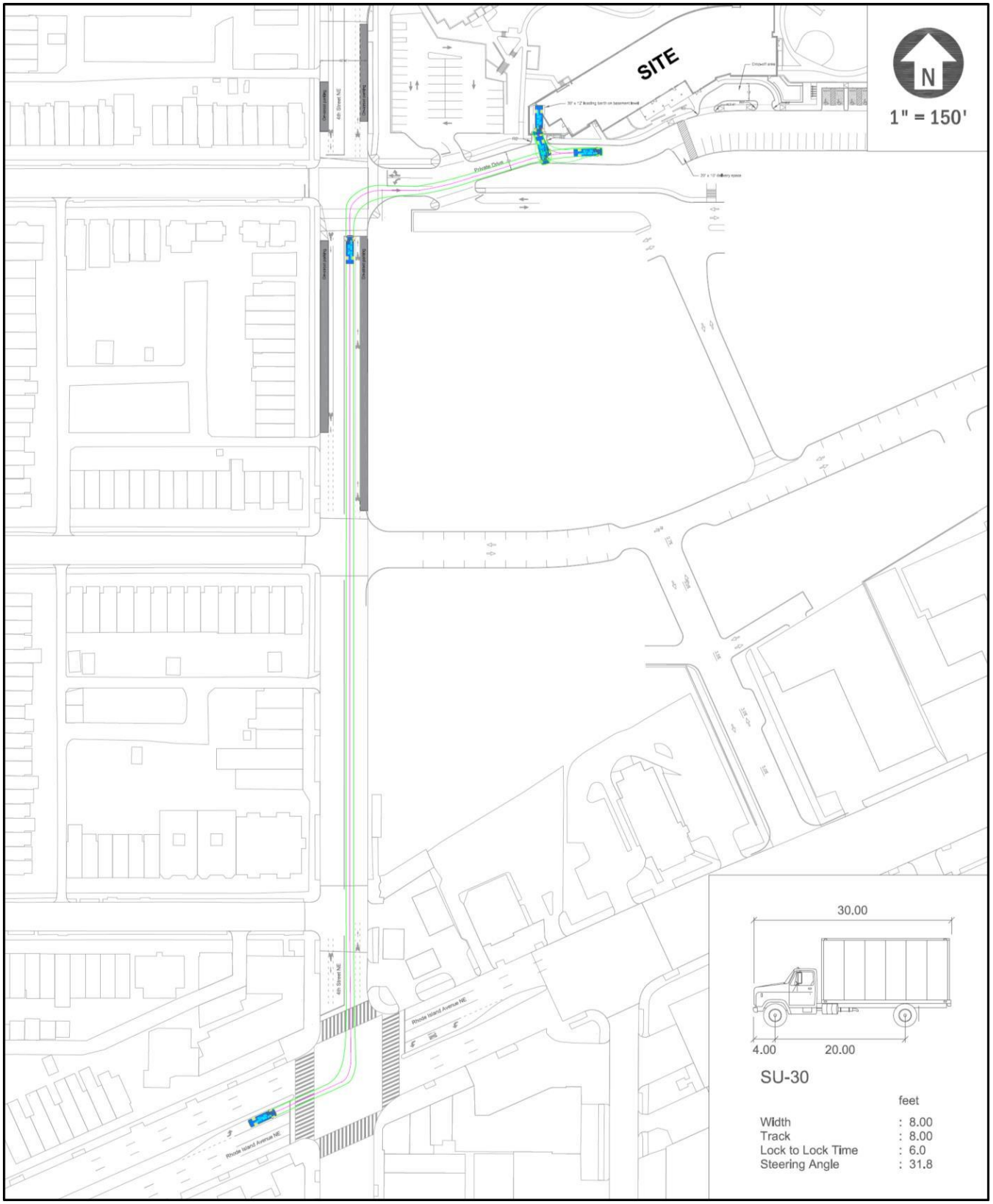


**Figure 11: SU-30 Inbound Turning Maneuver from Rhode Island Avenue to Loading Berth**


**Figure 12: SU-30 Outbound Turning Maneuver from Loading Berth to Rhode Island Avenue**

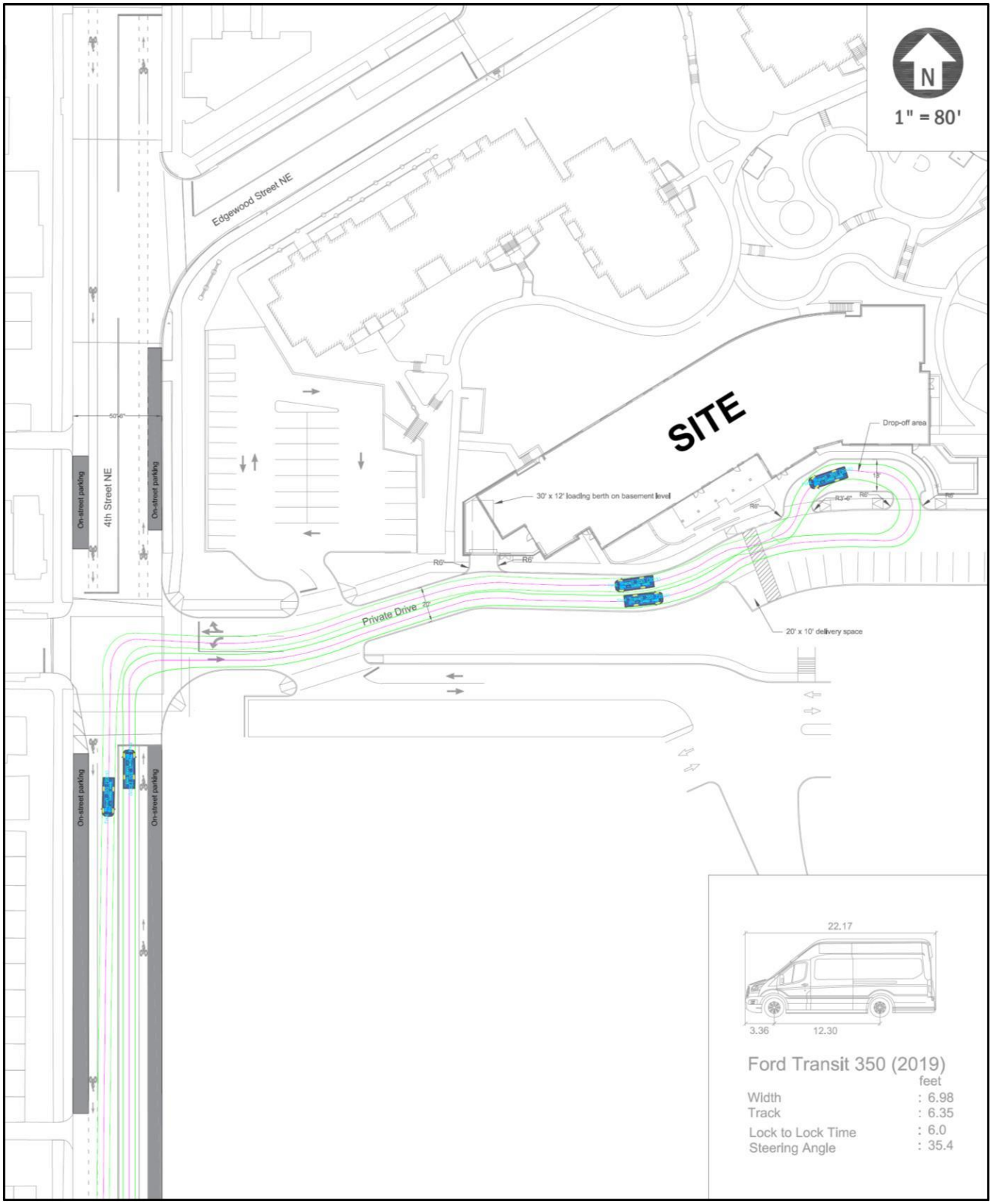


**Figure 13: 22' Transit Van Inbound and Outbound Turning Maneuvers between 4th Street and Drop-off Area**


**Figure 14: 22' Transit Van Inbound and Outbound Turning Maneuvers between Rhode Island Avenue and Drop-off Area**

## Transportation Demand Management

Transportation Demand Management (TDM) is the application of policies and strategies used to reduce travel demand or redistribute demand to other times or spaces. TDM 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.

The following is a list of TDM strategies the Applicant proposes for the Edgewood V Senior Residential development. For the overall project, the Applicant proposes the following:

- The Applicant will identify Transportation Coordinators for the planning, construction, and operations phases of development, who will act as points of contact with DDOT, goDCgo, and Zoning Enforcement;
- The Applicant will provide Transportation Coordinators' contact information to goDCgo, conduct an annual commuter survey of employees on-site, and report TDM activities and data collection efforts to goDCgo once per year;
- The Applicant will ensure Transportation Coordinators develop, distribute, and market various transportation alternatives and options to the residents, including promoting transportation events (i.e., Bike to Work Day, National Walking Day, Car Free Day) on the property website and in any internal building newsletters or communications;
- The Applicant will ensure Transportation Coordinators receive TDM training from goDCgo to learn about the TDM conditions for this project and available options for implementing the TDM Plan;
- The Applicant will provide welcome packets to all new residents and staff that, at a minimum, include the Metrorail pocket guide, brochures of local bus lines (Circulator and Metrobus), carpool and vanpool information, CaBi coupon or rack card, Guaranteed Ride Home (GRH) brochure, and the most recent DC Bike Map;
- The Applicant will ensure the Transportation Coordinator subscribes to goDCgo's residential newsletter;
- The Applicant will post all TDM commitments on the development's website, publicize availability, and allow the public to see what commitments have been promised; and
- The Applicant will install a Transportation Information Center Display within the lobby of the facility that contains information related to local transportation alternatives.
- The Applicant will provide links to CommuterConnections.com and goDCgo.com on property websites; and
- The Applicant will distribute information to employees on the Commuter Connections Guaranteed Ride Home (GRH) program, which provides commuters who regularly carpool, vanpool, bike, walk, or take transit to work with a free and reliable ride home in an emergency.

## Summary and Conclusions

The findings of this study conclude the following:

- The Edgewood V Senior Residential site is surrounded by an existing network of transit, bicycle, and pedestrian facilities that result in an excellent environment for safe and effective non-vehicular transportation;
- The proposed project will provide short- and long-term bicycle parking, while limiting the amount of new vehicle parking;
- The proposed project will provide a drop-off area for private vehicles and shuttle buses serviced from an existing private drive, limiting the impacts of pick-up and drop-activity on public space;
- The proposed project will provide loading facilities accessed from an existing private drive, limiting the impacts of loading activity on public space; and
- The proposed project will not have a detrimental impact on the surrounding transportation network.