

TECHNICAL MEMORANDUM

To: Dan Roth
Ditto DC

From: Jim Watson, PTP
Maris Fry, EIT
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Date: May 12, 2014

Subject: 1326 Florida Avenue NE Parking and Loading Statement

INTRODUCTION

This memorandum outlines the parking and loading aspects of the 1326 Florida Avenue NE development located in the northeast quadrant of Washington, DC in Ward 5. Figure 1 identifies the regional site location within the District. The site is currently occupied by a vacant retail building and will be redeveloped into a residential development comprising of 45 dwelling units. Sixteen (16) parking spaces will be supplied on-site in a below grade parking garage accessible from the alley connecting Trinidad Avenue and Orren Street. All residential loading will take place along the alley adjacent to the north of the site. This parking and loading statement has been developed to address the needs of the site. This includes an analysis of comparable development in addition to an on-street parking analysis to determine the existing parking utilization in the neighborhood. This was augmented by an aggressive Transportation Demand Management (TDM) plan to promote the use of non-vehicular travel modes to and from the site.

The following conclusions were made regarding the 1326 Florida Avenue NE development:

- The proposed parking supplied by the development will be adequate to serve the needs of residents, based on the site location near good transit services (including Metrobus, Streetcar, and connections to Metrorail) and the implementation of an aggressive TDM plan.
- The site is surrounded by an existing network of transit, bicycle, and pedestrian facilities that result in an adequate environment for safe and effective non-auto transportation;
- There is an adequate supply of on-street parking. On-street parking is moderately utilized in the vicinity of the site with a peak of 71 percent utilization during the weekday parking peak (7:00- 8:00 PM) and 88 percent utilization during the weekend parking peak (9:00 – 10:00 PM). It is not likely that the development will cause any detrimental impacts to on-street parking conditions.
- The amount of loading activity expected to take place at the site will be adequately served by a loading area along the alley.
- An aggressive TDM plan for the development will include the implementation of a TDM coordinator, on-site information, a marketing program, transportation incentives, bicycle amenities, and ride-matching/ridesharing programs.

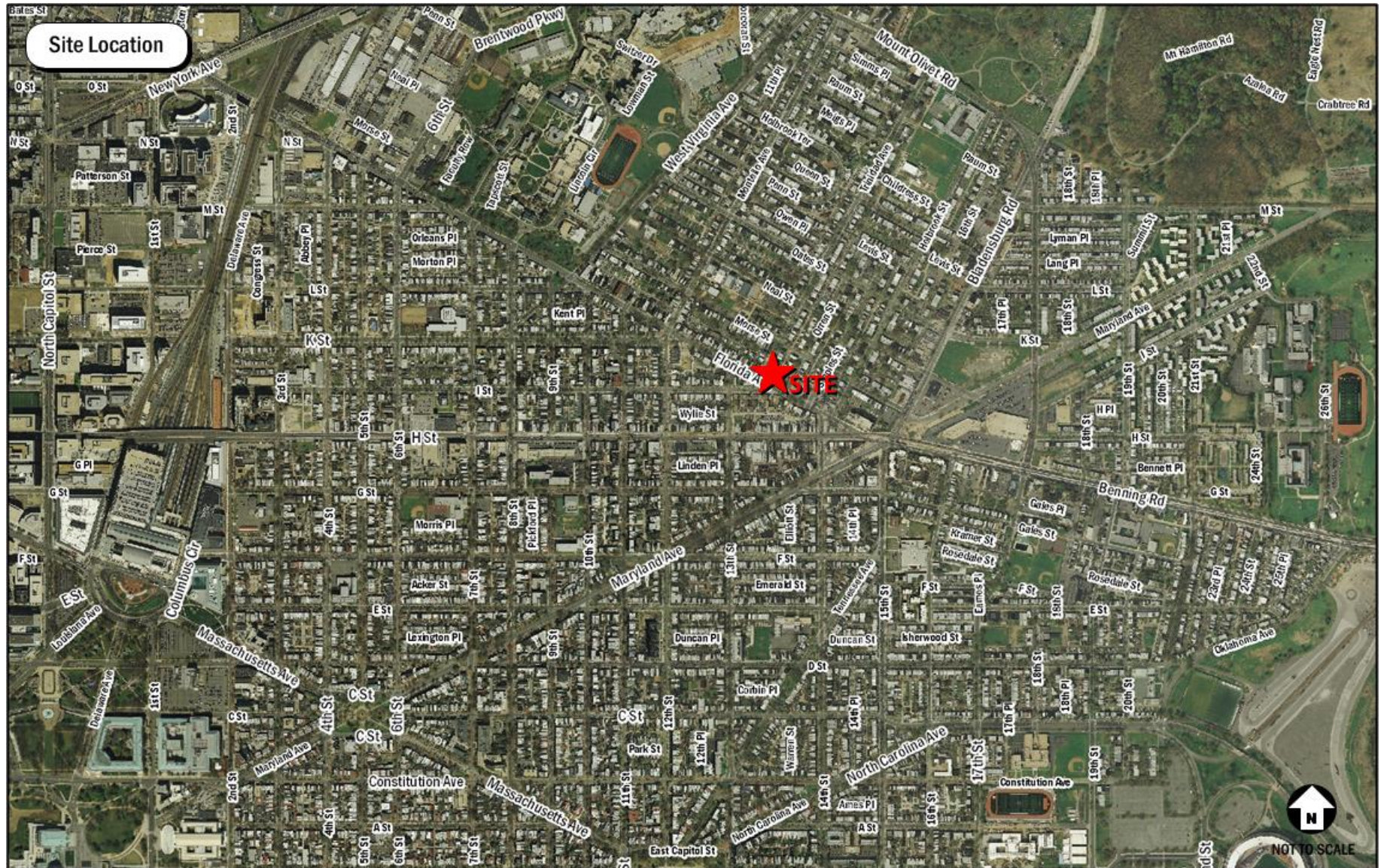


Figure 1: Site Location

EXISTING CONDITIONS

This section provides a review of the existing transit, bicycle, and pedestrian facilities in the vicinity of the site. The site is served by public transportation, primarily consisting of Metrobus. The project site is also served by a pedestrian network consisting of sidewalks and crosswalks along the streets surrounding the project site. Additionally, the site is served by an on-street bicycle network, consisting of bike lanes, cycle tracks, and signed bicycle routes.

Transit

Local transit services that provide access to and from the 1326 Florida Avenue NE development site primarily include Metrobus and MetroExpress routes. Metrobus service is operated by the Washington Metropolitan Area Transit Authority (WMATA) and is currently the fifth largest bus network in the nation. Figure 2 illustrates the existing Metrobus and MetroExpress routes.

Numerous Metrobus and MetroExpress routes operate along Florida Avenue, H Street, Maryland Avenue, 14th Street, Bladensburg Road, Benning Road, and Trinidad Avenue NE within walking distance of the site. Table 1 shows a summary of the bus route information for the lines that serve the study area, including service hours and the headways. There are two Metrobus stops adjacent to the property. One Metrobus stop is located at the intersection of Florida Avenue and Trinidad Avenue NE, directly adjacent to the site and serves the X3 line. A second Metrobus stop is located on Trinidad Avenue NE near the entrance to the alley and serves the D3, D4, and D8 lines. Additionally, there is at least one stop within 1,000 feet of the site for every bus route listed below.

Table 1: Bus Route Information

Route Number	Route Name	Service Hours	Headway
B2	Bladensburg Road-Anacostia Line	Weekdays: 4:25 am – 3:15 am Saturdays: 4:30 am – 2:35 am Sundays: 5:15 am – 1:30 am	Peak Hours: 10-12 minutes Off-Peak Hours: 15-30 minutes Weekends: 20-30 minutes
D3	Ivy City-Dupont Circle Line	Weekdays: WB 6:05 am – 9:15 am EB 3:00 pm – 5:50 pm Saturdays: WB 6:25 am – 8:30 am EB 4:00 pm – 5:50 pm	20-30 minutes
D4	Ivy City-Franklin Square Line	Weekdays: 4:15 am – 1:05 am Saturdays: 4:45 am – 1:05 am Sundays: 5:15 am – 1:05 am	Peak Hours: 15-20 minutes Off-Peak Hours: 30 minutes Weekends: 30 minutes
D8	Hospital Center Line	Weekdays: 5:15 am – 1:00 am Weekends: 6:15 am – 1:05 am	Peak Hours: 10-15 minutes Off-Peak Hours: 15-30 minutes Weekends: 15-30 minutes
X1, X3	Benning Road Line	Weekdays: WB 6:00 am – 8:40 am EB 3:40 pm – 6:10 pm	AM Peak Hour: 7-15 minutes PM Peak Hour: 20-30 minutes
X2	Benning Road-H Street Line	Monday - Saturday: 4:05 am – 3:00 am Sundays: 4:10 am – 2:00 am	Peak Hours: 6-10 minutes Off-Peak Hours: 10-20 minutes Weekends: 10-20 minutes
X8	Maryland Ave Line	Weekdays: 6:00 am – 10:30 pm Weekends: 6:40 am – 9:45 pm	Weekdays: 15-20 minutes Weekends: 20-40 minutes
X9	Benning Road-H Street Limited	Weekdays: 6:15 am – 9:00 am 3:30 pm – 6:30 pm	15 minutes

Due to growth of population, jobs, and retail in several neighborhoods in the District and the potential for growth in other neighborhoods, the District's transportation infrastructure is planned to be augmented by the reestablishment of streetcar service in the District and the implementation of limited-stop bus service along major corridors in the vicinity of the proposed development, including the H Street corridor as is outlined in the *DC's Transit Future System Plan* report published by DDOT in April 2010.

The streetcar system element of the plan includes one route that travels near the project site. The streetcar system will consist of modern low-floor vehicles that operate on surface tracks embedded in the roadways, which will mostly operate in travel lanes that are shared with automobiles. Stops will generally be located every ¼- to ½-mile along the routes, including a stop at the intersection of 13th and H Streets NE, approximately 500 feet from the site. The future planned route serving the study area will initially connect the site with Union Station prior to the completion of the development, and eventually travel between the Benning Road Metro Station and Georgetown.

Bicycle Facilities

DDOT's April 2012 Bicycle Map classifies the bicycling conditions around the proposed development as good, fair, or poor. An inventory of the bicycle facilities found throughout the study area is provided in Figure 3. Although there are some roadways with poor conditions such as H Street/Benning Road, there are several existing bike facilities, planned bike facilities, and local streets with safe conditions surrounding the site. Safe north-south connectivity is provided by the one-way bike lanes along 14th Street and 15th Street NE. Further from the site, there is also the one-way pair of bike lanes along 4th and 5th Street NE and the Metropolitan Branch Trail that travels adjacent to the Red Line tracks. East-west connectivity is best served along I Street and G Street. These roadways are low-speed, low-volume, one-way roadways that currently provide safe cycling conditions. Additionally, future plans call for contraflow bike lanes to allow for two-way bicycle traffic along both roadways.

In addition, the Capital Bikeshare program has placed over 200 bike share stations across Washington, DC, Arlington and Alexandria, VA, and most recently Montgomery County, MD with more than 1,800 bicycles provided. Capitol Bikeshare has plans to expand the system and potential new station locations have been identified throughout the study area. Figure 3 identifies existing station locations in the study area. Capitol Bikeshare currently has three existing bike share locations within a quarter-mile walk of the site. The nearest station is located at the northeast corner of H Street and 13th Street NE about 800 feet from the site. The two other stations are located at the Starburst Intersection Plaza at Maryland Avenue and Bladensburg Road NE and along Neal Street NE between Trinidad Avenue and Montello Avenue.

Pedestrian Facilities

The roadways in the immediate vicinity of the proposed development provide satisfactory pedestrian facilities and connectivity throughout the area. Wide, continuous sidewalks line all of the study area's roadways with crosswalks linking segments at intersections within the study area. Adequate crosswalks with ladder striping and pedestrian countdown signals are present at the study area's signalized intersections for all crossing movements.

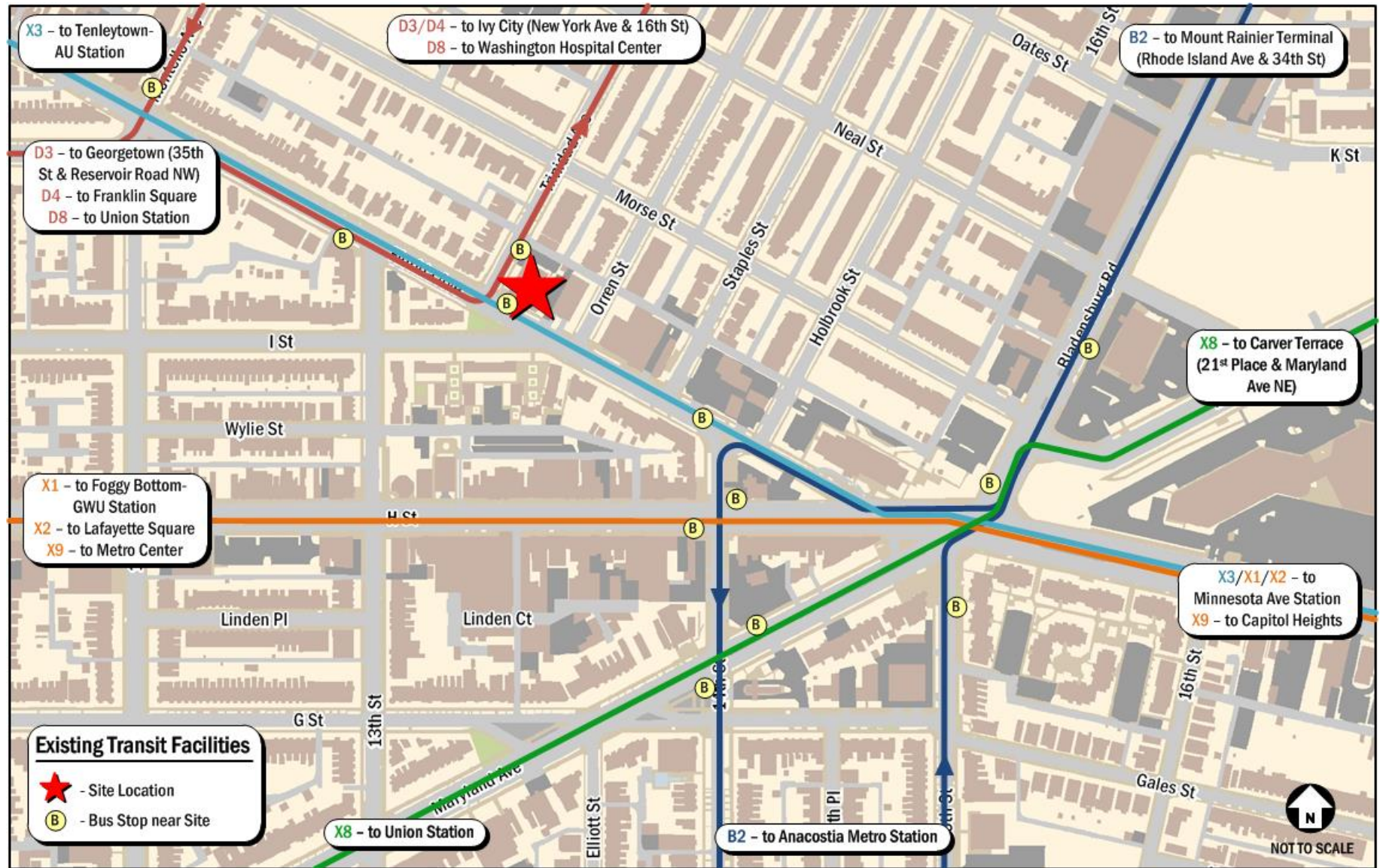


Figure 2: Existing Transit Service

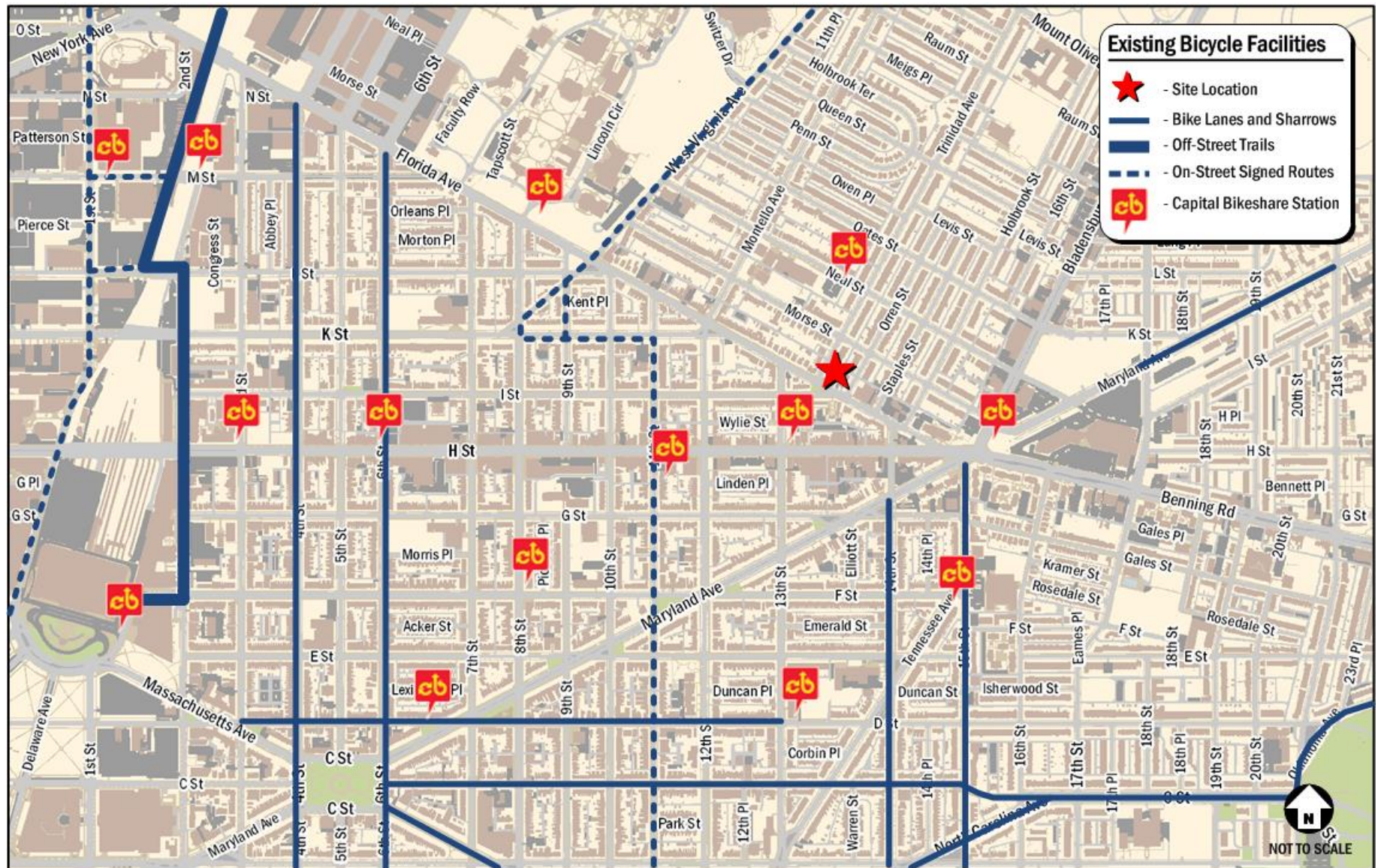


Figure 3: Existing Bicycle Facilities

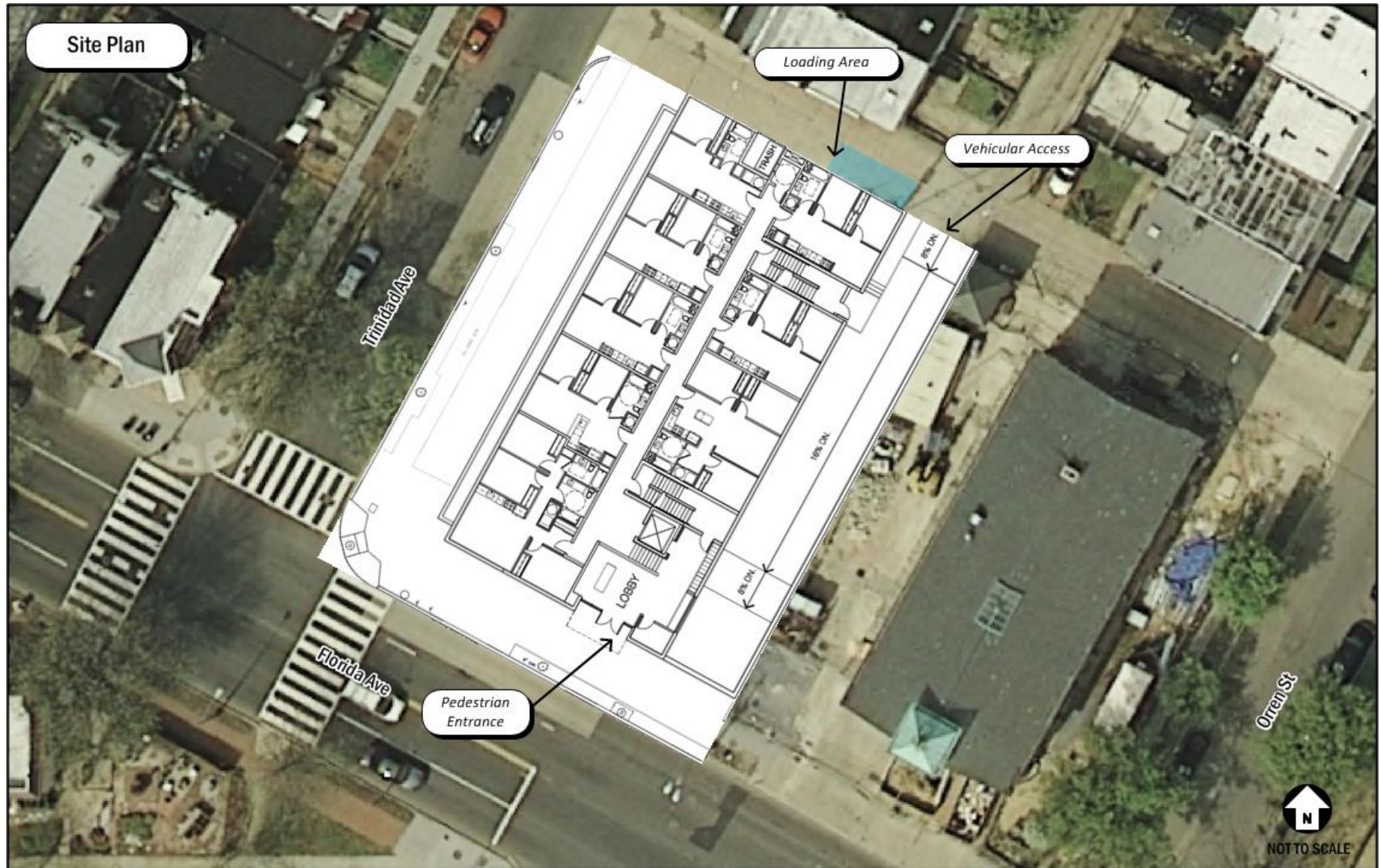


Figure 4: Site Plan

DESIGN REVIEW

This section provides an overview of the transportation features of the proposed 1326 Florida Avenue NE development. The development program consists of a residential development including 45 dwelling units. Sixteen (16) parking spaces will be provided in a below grade parking garage, accessible from the alley connecting Trinidad Avenue and Orren Street. Figure 4 displays the access strategies for the site including parking access, pedestrian access, and loading areas.

Site Access and Internal Circulation

Site Access

The primary pedestrian access for residents will be located along Florida Avenue near its intersection with Trinidad Avenue. The sixteen-space below grade parking garage will be accessible from Trinidad Avenue or Orren Street via the alley. Loading will take place along the alley.

Parking

As mentioned previously, the project will provide sixteen (16) parking spaces on-site in a below grade parking garage. According to the current zoning regulations and based upon the existing zoning of the site location, the development is required to provide one parking space for each two dwelling units. Based on these requirements, the site would be required to provide 23 parking spaces for residents.

Under section 1901.5 of the new zoning regulations, the parking requirement would ordinarily be 14 spaces based on the proposed new one space for three dwelling units in excess of four units. However, under the new section 1902.1, this parking requirement would be further reduced to seven (7) spaces. Under 1902.1, the parking requirement of 14 spaces is reduced by 50% for any site located within $\frac{1}{4}$ mile (1312.5 feet) of a streetcar line that is in operation or for which a construction contract has been awarded. Given that the site is approximately 500 feet from H Street and approximately 600 feet from the nearest proposed street car stop, the site is located within $\frac{1}{4}$ mile of the proposed street car. As a result, the parking requirement would be seven (7) spaces, well below the number of spaces proposed for this development.

Although the development does not meet current zoning requirements, the development will meet the proposed zoning requirements. In addition, the sixteen (16) parking spaces are projected to adequately serve the demands of the site due to the following various considerations:

- Five bus lines serve the two bus stops directly adjacent to the site. An additional four bus lines serve stops within a quarter-mile walking distance of the site.
- The H Street/Benning Road Streetcar line will serve the development allowing quick and efficient transportation between the site and Union Station. The site's location in relation to the Streetcar line also contributes to the site's fulfillment of the proposed zoning requirements as discussed above.
- Capital Bikeshare has three existing bike share locations near the site. One is approximately 800 feet from the site at the northeast corner of H Street and 13th Street NE. The additional stations are located at the Starburst Intersection Plaza at Maryland Avenue and Bladensburg Road NE and along Neal Street NE between Trinidad and Montello Avenue.

- The applicant will incorporate 18 bicycle parking spaces into the site. The design of these spaces will reflect similar dimensions as currently incorporated in other development throughout the District. The number of long-term spaces provided will exceed the bicycle parking requirements as stated within the DC zoning ordinance.
- The site area has a walkability score of between 84 and 92 as calculated by WalkScore.com. This categorizes the site and the surrounding areas as “very walkable” to the north and “walker’s paradise” to the south.

Given the urban nature of the site and its proximity to many non-auto modes of transportation, the site will adequately serve the vehicular needs of the development.

Additional supporting data has been obtained through a review of parking supply and demand at four other comparable properties, which contain a significant mix of studios and small one-bedrooms. Data collected from these transit-oriented properties, demonstrate that on-site parking is utilized at a ratio of 0.16 spaces per unit for the 322 studio units in the study. The 1326 Florida Avenue NE property will be comprised of similar size and type units with some additional two bedroom units, thus a ratio similar to these would be realized.

Given these ratios, it is anticipated that the Applicant’s proposed off-street parking of sixteen (16) residential parking spaces (0.36 spaces per unit) for the 45-unit development will adequately support the demands of the site.

Table 2: Comparable Site Parking Supply

Property	STUDIO UNITS			SMALL 1 BEDROOM UNITS		
	Units	Rented Spaces	Spaces per Unit Ratio	Units	Rented Spaces	Spaces per Unit Ratio
Hamilton House, 1255 New Hampshire Ave, NW	210.00	30.00	0.14	N/A	N/A	N/A
M Street. 1112 M Street, NW	84.00	17.00	0.20	N/A	N/A	N/A
Preston, 1743 P Street, NW	9.00	0.00	0.00	4.00	0.00	0.00
Sutton Plaza, 1230 13th Street, NW	19.00	3.00	0.16	137.00	27.00	0.20
Total	322.00	50.00		141.00	27.00	
Average Spaces per Unit Ratio		0.16			0.19	

1326 Florida Avenue	Total Units:	45
	Spaces:	16
	Spaces per Unit Ratio:	0.36

On-Street Parking

This section presents the findings of an on-street parking study, including full inventory of available parking spaces and a parking occupancy count within walking distance of the proposed development. The purpose of these counts was to determine the amount of parking supply and demand on streets within a walking distance of the site and to identify and trends or patterns associated with this parking demand.

Parking Inventory and Occupancy Counts

The on-street parking study was conducted across an area considered to be within walking distance of 1326 Florida Avenue NE. A map showing the study area block faces is shown in Figure 5. An inventory of available on-street parking facilities was conducted that included tabulating the number of parking spaces by block face and identifying any relevant parking restrictions. A total of 127 parking spaces were inventoried within the study area. Of these, 80 are unrestricted spaces and 47 are Residential Permit Parking (RPP) spaces. Figure 6 shows a breakdown of the most predominant parking type by block face for the study area.

Parking occupancy data was collected on Tuesday, November 12, 2013 from 8:00 AM to 8:00 PM and on Saturday, May 3, 2014 from 9:00 PM to 12:00 AM. Table 3 gives a summary of the hourly utilization percentages for the weekday study period and Table 4 gives a summary of the hourly utilization percentages for the weekend PM study period. The number of available spaces decreases slightly at 9:00 AM because there are two spaces with restricted parking between 9:00 AM and 10:00 PM. It was determined that the weekday parking peak occurs from 7:00 to 8:00 PM with a parking utilization of 71 percent and the weekend PM parking peak occurs from 9:00 to 10:00 PM with a parking utilization of 88 percent. Table 5 gives a summary of the inventory and occupancy results for the peak hour. Figure 7 shows the parking utilization during the weekday evening peak and Figure 8 shows the parking utilization during the PM weekend peak.

Table 3: Weekday Hourly Utilization Percentages

	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM
Occupancy	73	69	76	80	75	81	76	70	68	66	81	89
Total Spaces	127	125	125	125	125	125	125	125	125	125	125	125
Utilization	57%	55%	61%	64%	60%	65%	61%	56%	54%	53%	65%	71%

Table 4: Weekend PM Hourly Utilization Percentages

	9PM	10PM	11PM	12AM
Occupancy	110	106	107	99
Total Spaces	125	125	125	125
Utilization	88%	85%	86%	79%

Table 5: Peak Hour Inventory and Occupancy Summary

Space Type	Spaces Available	Weekday Peak Period (7-8 PM)		Weekend Peak Period (9-10 PM)	
		Occupancy	Utilization	Occupancy	Utilization
RPP	47	45	96%	46	98%
Unrestricted	78	44	56%	64	82%
All On-Street Spaces	125	89	71%	110	88%

Generally, parking utilization is relatively stable during the majority of the weekday with utilization percentages consistently around 60 percent for the entirety of the study period. There is a slight spike at the end of the day to 71 percent in which more of the RPP parking spaces are filled, indicating that people are coming home and parking for the night. Particularly during the weekday parking peak, the utilization percentage elevates to 96 percent occupied at RPP spaces with just 56 percent of the unrestricted areas occupied. Conversely, while the weekend occupancy is higher on weekend evenings due to the nearby nightlife along H Street, the parking occupancy of these spaces declines as the evening progresses. The weekend peak period shows high utilization of both the RPP and unrestricted spaces at 98 percent and 82 percent respectively. However, it should be noted that RPP restrictions are not in effect later in the evening, reducing the restrictions on parking that some drivers to the area for off-site uses may encounter.

Therefore, the RPP parking spaces surrounding the area are highly utilized; however, there is still a large amount of unrestricted parking available near the site on weeknights, particularly near the development site along Orren Street and Morse Street. Because there is a relatively large amount of on-street parking available and the development is meeting its parking needs on-site, it is unlikely that the development will cause detrimental impacts to the surrounding neighborhood in regards to parking.

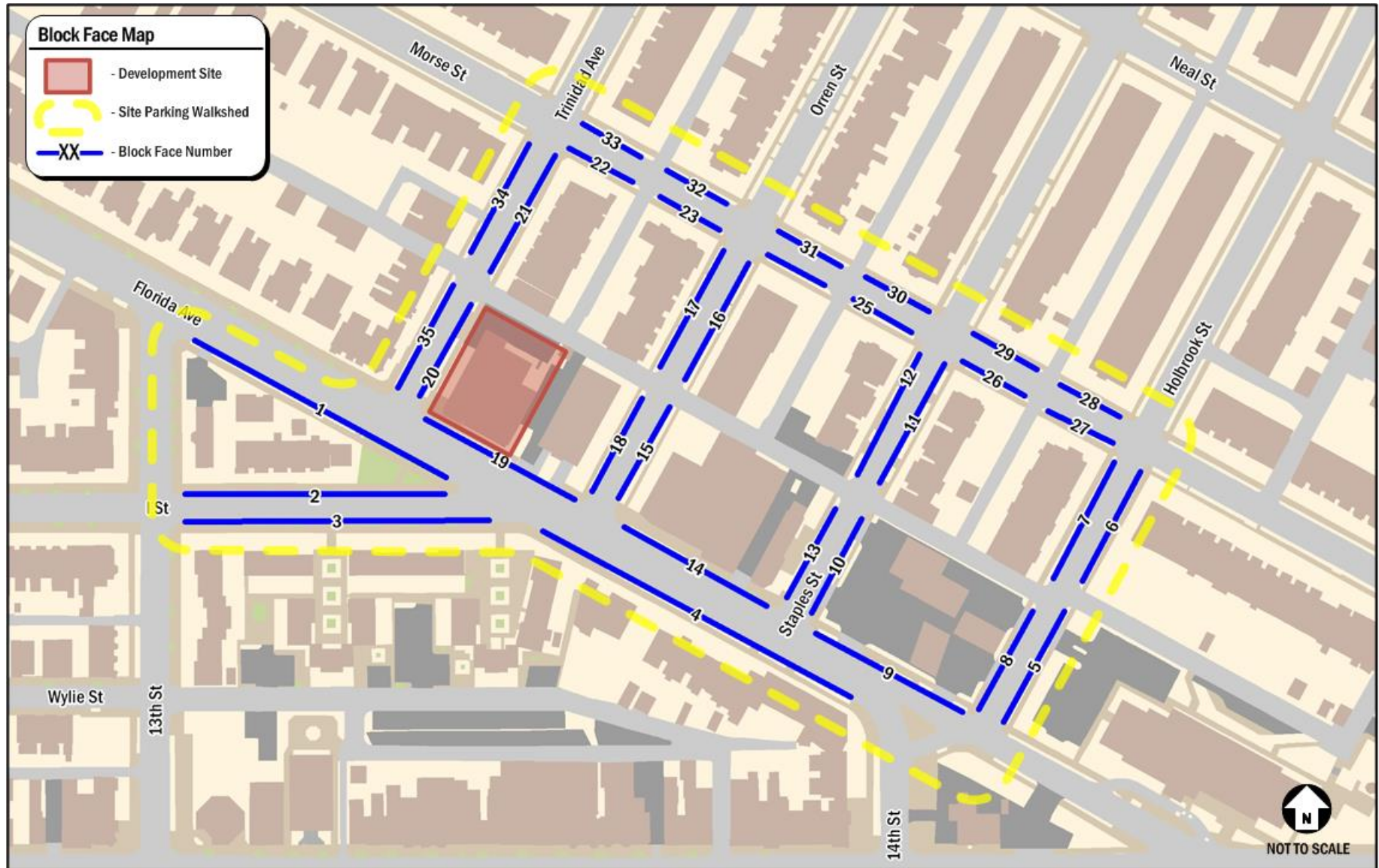


Figure 5: Block Face Map

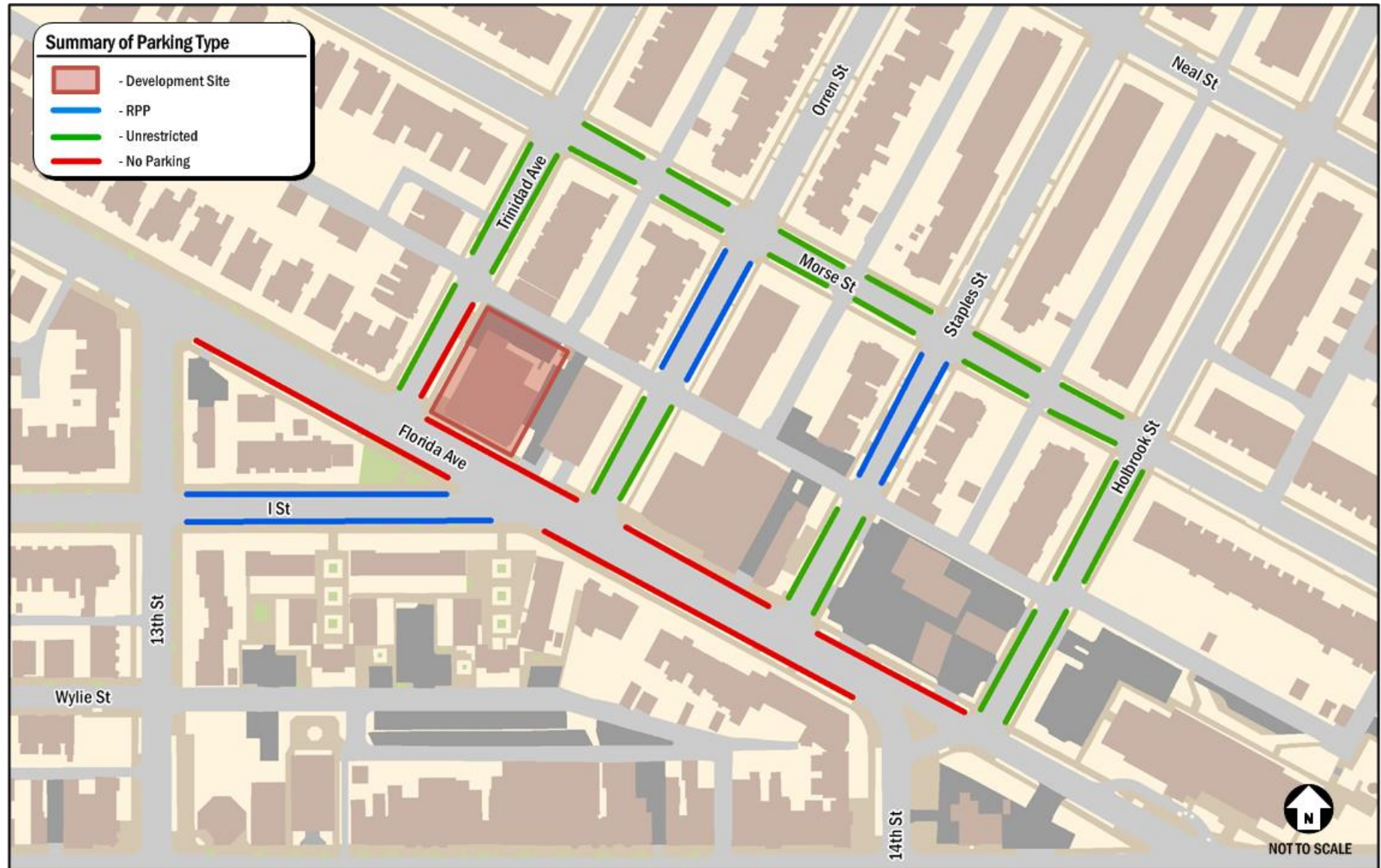


Figure 6: Summary of Parking Type



Figure 7: Weekday Peak Parking Utilization



Figure 8: Weekend PM Peak Parking Utilization

Loading

The site plan indicates that there will be no loading facilities provided on-site and, pursuant to §2201.1, no such facilities are required because the development will not provide 50 or more dwelling units. Additionally, loading cannot be accommodated on-site given the compact nature of the site. Therefore, it will be necessary for loading activity for the site to take place in the alley or on-street. The number of truck trips generated by a project of this scale is relatively low. Based on previous studies, rental apartments have an average turnover of 18 months, with two trucks expected per turnover (one move-out and one move-in). Based on this assumption for a 45-unit apartment building, there will be approximately 65 truck deliveries per year or one delivery every 5 to 6 days.

In addition to compiling parking information for comparable sites to the 1326 Florida Avenue NE development, loading information for these same locations was also compiled, as shown in Table 3. Properties with more total residential units than the 1326 Florida Avenue NE development operate sufficiently utilizing either off-street or on-street loading. Therefore, it can be concluded that for a development of this size, an on-street loading area will be adequate to serve all loading operations.

Table 6: Comparable Site Loading Area Supply

Property	Total Units	Loading Location	Studio Apartment		Small 1 Bedroom Apartment	
			Average Size	Max Size	Average Size	Max Size
Hamilton House, 1255 New Hampshire Ave, NW	304	Off-Street	SU-25 or Less	SU-40 ²	N/A	N/A
M Street. 1112 M Street, NW ¹	124	Off-Street	SU-22 or Van	SU-30 ²	N/A	N/A
Preston, 1743 P Street, NW	27	On-Street	SU-20	SU-30	SU-22	SU-30
Sutton Plaza, 1230 13th Street, NW	176	On-Street	Van	SU-20 ²	SU-20	SU-22 ²

1. Most studio renters move in with personal vehicle.

2. Vehicle size used rarely throughout calendar year (10 times or less per year).

Based on the compiled information, it appears that most move-in and move-outs utilize vehicles 24 feet in length and smaller. Occasionally, vehicles up to 30 feet in length are used. The applicant has committed to encourage the residents to utilize vehicles 24 feet or smaller while also managing the loading operations taking place along the alley and along Trinidad Avenue.

Bicycle Facilities

The site plan specifies that a portion of the parking garage will be utilized for dedicated long-term bike parking, which will include 18 bike storage spaces. According to the Bicycle Commuter and Parking Expansion Act of 2007, a residential building owner shall provide at least one secure bicycle parking space for each 3 residential units for all new residential buildings. Based on these regulations the development would require 16 bicycle parking spaces, which this development exceeds. Short term bicycle parking along the perimeter of the development site will be provided in coordination with DDOT.

Transportation Demand Management

Transportation Demand Management (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. TDM's

importance within the District is highlighted within section T-3.1 of the DC Comprehensive Plan, where it has its own dedicated section including TDM policies and actions.

Proposed TDM Plan

Based on the DDOT expectations for TDM programs, and analyzing the specific attributes of the development site, the following outlines the proposed TDM plan for the 1326 Florida Avenue NE development.

- *Transportation Management Coordinator (TMC)*
Effective Transportation Management Programs (TMPs) require a coordinator to implement and manage TDM strategies. A member of the property management group would be a point of contact and would be responsible for coordinating, implementing and monitoring the TMP strategies. This would include the development and distribution of information and promotional brochures to residents and visitors regarding transit facilities and services, pedestrian and bicycle facilities and linkages, ridesharing (carpool and vanpool) and car sharing. In addition, the TMC would be responsible for ensuring that loading activities are properly coordinated and do not impede the pedestrian, bicycle, or vehicular lanes adjacent to the development. The contact information for the TMC would be provided to DDOT/Zoning Enforcement with annual contact updates.
- *On-Site Transportation Information*
The TMC will make printed materials related to local transportation alternatives available to residents and employees upon request and at move-in for new tenants. Additionally, the TMC will document and make available instructions to residents and visitors of the building describing the numerous available sources of real-time transportation updates and how to access transportation updates via multiple mediums.
- *Marketing Program*
The TMC will establish a TDM marketing program that provides detailed transportation information and promotes walking, cycling, and transit. An effective marketing strategy should consist of a multi-modal access guide that provides comprehensive transportation information. This information can be compiled in a brochure for distribution. The marketing program should also utilize and provide website links to CommuterConnections.com and goDCgo.com, which provide transportation information and options for getting around the District.
- *Transportation Incentives*
To help encourage non-auto transportation uses, the Applicant will provide the first lessee of each residential unit with a \$50 SmartTrip card, Capital Bikeshare membership, or car sharing membership to further alleviate the reliance on personal vehicles. These incentives will be included in a move-in transportation package that includes brochures for transit facilities as well as bicycle and car sharing services for the first lessee of each residential unit.
- *Bicycle Amenities*
The Applicant will encourage all alternative transportation modes including bicycling. Bicycling will be promoted with the provision of on-site bicycle parking spaces as described above. The marketing program will include brochures on bicycling in the District and for Capital Bikeshare. In addition, 18 bicycle spaces will be made available on-site.

- *Ride-matching/Ridesharing Program*

Residents who wish to carpool will be provided detailed carpooling information as part of the marketing effort, and will be referred to other carpool matching services sponsored by the Metropolitan Washington Council of Governments.

Conclusions

This memorandum presents the findings of a parking and loading management plan for the 1326 Florida Avenue NE development. The building will contain approximately 45 residential units. The following conclusions were made regarding the 1326 Florida Avenue NE development:

- The proposed parking supplied by the development will be adequate to serve the needs of residents, based on the site location near good transit services (including Metrobus, Streetcar, and connections to Metrorail) and the implementation of an aggressive TDM plan.
- The site is surrounded by an existing network of transit, bicycle, and pedestrian facilities that result in an adequate environment for safe and effective non-auto transportation;
- There is an adequate supply of on-street parking. On-street parking is moderately utilized in the vicinity of the site with a peak of 71 percent utilization during the weekday parking peak (7:00- 8:00 PM) and 88 percent utilization during the weekend parking peak (9:00 – 10:00 PM). It is not likely that the development will cause any detrimental impacts to on-street parking conditions.
- The amount of loading activity expected to take place at the site will be adequately served by a loading area along the alley.
- An aggressive TDM plan for the development will include the implementation of a TDM coordinator, on-site information, a marketing program, transportation incentives, bicycle amenities, and ride-matching/ridesharing programs.