

TECHNICAL MEMORANDUM

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From: Seth Fisher
Jim Watson, PTP
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Date: March 20, 2015

Subject: 1330 Pennsylvania Avenue SE Comprehensive Transportation Review

INTRODUCTION

This memorandum outlines a Comprehensive Transportation Review (CTR) of the 1330 Pennsylvania Avenue development located in the northeast quadrant of Washington, DC in Ward 6. This CTR reviews the parking and loading aspects of the site as discussed with the District Department of Transportation (DDOT) and submitted via a scoping document on February 23, 2015. Figure 1 identifies the regional site location within the District. The site is currently occupied by an existing restaurant-oriented building and will be redeveloped into a mixed-use development comprising of 10 residential units above 2,600 square feet (sf) of ground floor restaurant space that will serve the existing restaurant tenant. No parking is proposed on-site due to the compact nature of the block in which the development will occupy.

This parking 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. It is noted that planned improvements to the Potomac Square roadway adjacent the site will enhance safety and multi-modal mobility for future residents and patrons.

The following conclusions were made regarding the 1330 Pennsylvania Avenue SE development:

- The site is located near excellent transit services (including Metrobus, DC Circulator, and Metrorail) and includes the implementation of an aggressive TDM plan that will mitigate any vehicular parking needs of the site.
- The site is surrounded by an existing network of transit, bicycle, and pedestrian facilities as well as numerous neighborhood amenities that result in an excellent environment for safe and effective non-auto transportation;
- There is an adequate supply of on-street parking. On-street parking is utilized near the site with a peak of 81 percent utilization during the weekday AM parking peak (8:00 – 9:00 AM) and 81 percent utilization during the weekday PM parking peak (11:00 PM – 12:00 AM). 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 on-street loading adjacent to the site.
- An aggressive TDM plan for the development will include the restriction of owners and tenants from obtaining RPP and VPP parking as well as the implementation of transportation incentives, bicycle amenities, a marketing program, on-site information, and ride-matching/ridesharing programs.

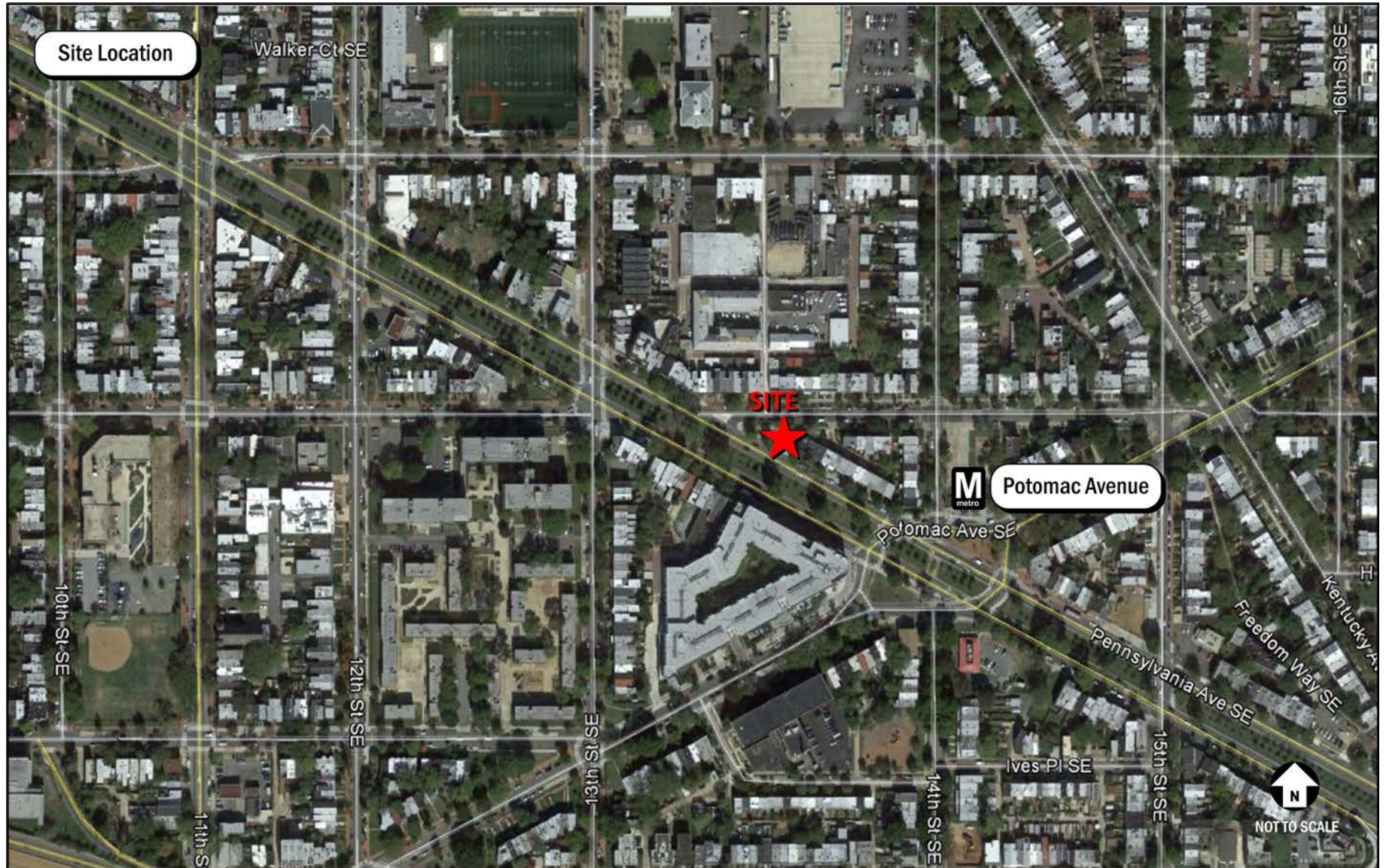


Figure 1: Site Location

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 Metrorail and Metrobus. It is located 350 feet (or two minute walk) from the Potomac Avenue Metro station, which serves the orange, blue, and silver lines. 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 bicycle lanes and signed bicycle routes.

Transit

Local transit services that provide access to and from the 1330 Pennsylvania Avenue development site primarily include Metrorail and Metrobus routes. Metrorail and 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 routes and the site's close proximity to the Potomac Avenue Metro station.

As mentioned previously, the Potomac Avenue Metro station is a two-minute walk from the project site. Numerous Metrobus and MetroExpress routes operate along Pennsylvania Avenue and Potomac Avenue 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 located within 400 feet of the site, one on the north side of Pennsylvania Avenue and 14th Street/Potomac Avenue and a second located on the south side of the same intersection. The northern stop serves the 32, 34, 36, 39, and M6 lines while the southern stop serves these same lines plus the V7, V8, and V9 lines. A circulator stop is located immediately adjacent the Potomac Avenue Metro on 14th Street SE. 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
30N, 30S	Friendship Heights-Southeast Line	Weekdays: 4:24 am – 2:29 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
32, 34, 36	Pennsylvania Avenue 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
39	Pennsylvania Avenue Limited 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
B2	Bladensburg Road – Anacostia 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
Circulator	Potomac Avenue Metro – Skyland 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
M6	Fairfax Village 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
V7, V8, V9	Minnesota Avenue – M Street Line	Weekdays: 6:00 am – 10:30 pm Weekends: 6:40 am – 9:45 pm	Weekdays: 15-20 minutes Weekends: 20-40 minutes

Car Sharing

Three car-sharing companies serve the District: Zipcar, Enterprise CarShare, and Car2Go. All three services are private companies that provide registered users access to a variety of automobiles. Both Zipcar and Enterprise CarShare have locations near the project site. Table 2 lists the car-sharing locations near the project and shows that nine carsharing vehicles are available within a short walk of the site with many others within an additional reasonable walking distance. Carshare locations are also shown on Figure 2.

Table 2: Car Share Locations and Vehicles

Carshare Location	Number of Vehicles
Zipcar	
Potomac Avenue Metro (14 th Street & G Street SE)	4 Vehicles
Behind 735 12 th Street SE (entrance to alley at 727 12 th Street SE)	1 Vehicle
Enterprise CarShare	
14 th Street SE & Potomac Avenue SE	2 Vehicles
Behind 1310 K Street SE in Alley	2 Vehicles
Total Number of Car Share Vehicles in Study Area	9 Vehicles

Car sharing is also provided by Car2Go, which provides point-to-point car sharing. Unlike Zipcar and Enterprise CarShare, which require two-way trips, Car2Go can be used for one-way rentals. Car2Go currently has a fleet of vehicles located throughout the District. Car2Go vehicles may park in any non-restricted metered curbside parking space or Residential Parking Permit location in any zone throughout the defined “Home Area.” Members do not have to pay the meter or pay stations. Car2Go does not have permanent designated spaces for their vehicles; however, availability is tracked through their website and smartphone application, which provides an additional option for car-sharing patrons.

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 Pennsylvania Avenue, 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 dedicated bike lanes along 11th Street, 14th Street, and 15th Street SE. Further from the site, there is the Anacostia River Walk Trail that travels adjacent the Anacostia River. East-west connectivity is best served along local minor streets such as G Street and along the dedicated bike lanes on East Capitol Street a few blocks to the north. These roadways are low-speed, low-volume, roadways that currently provide safe cycling conditions.

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 two existing bike share locations within a quarter-mile walk of the site. The nearest station is located at the Potomac Avenue Metro station approximately 350 feet from the site. The other station is located on the north side of D Street SE near 14th Street and Kentucky Avenue SE.

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.

Neighborhood Amenities

Numerous neighborhood amenities exist within a short walk of the site, which lessens the reliance on personal vehicle trips. While the nearby Eastern Market neighborhood offers many nearby restaurant and nightlife options for visitors and tenants of the site, other neighborhood amenities are a short walk away as shown on Figure 4. These include a Harris Teeter grocery store located immediately across Pennsylvania Avenue from the site, a CVS pharmacy located approximately 1,000 feet north and west of the site on the north side of Pennsylvania Avenue, a Safeway grocery and Pharmacy located two blocks north of the site on the north side of E Street and West Side of 14th Street, and other smaller neighborhood retailers along the Pennsylvania Avenue corridor. In addition, a public parking garage is available in the Harris Teeter building located immediately adjacent the site on the south side of Pennsylvania Avenue.

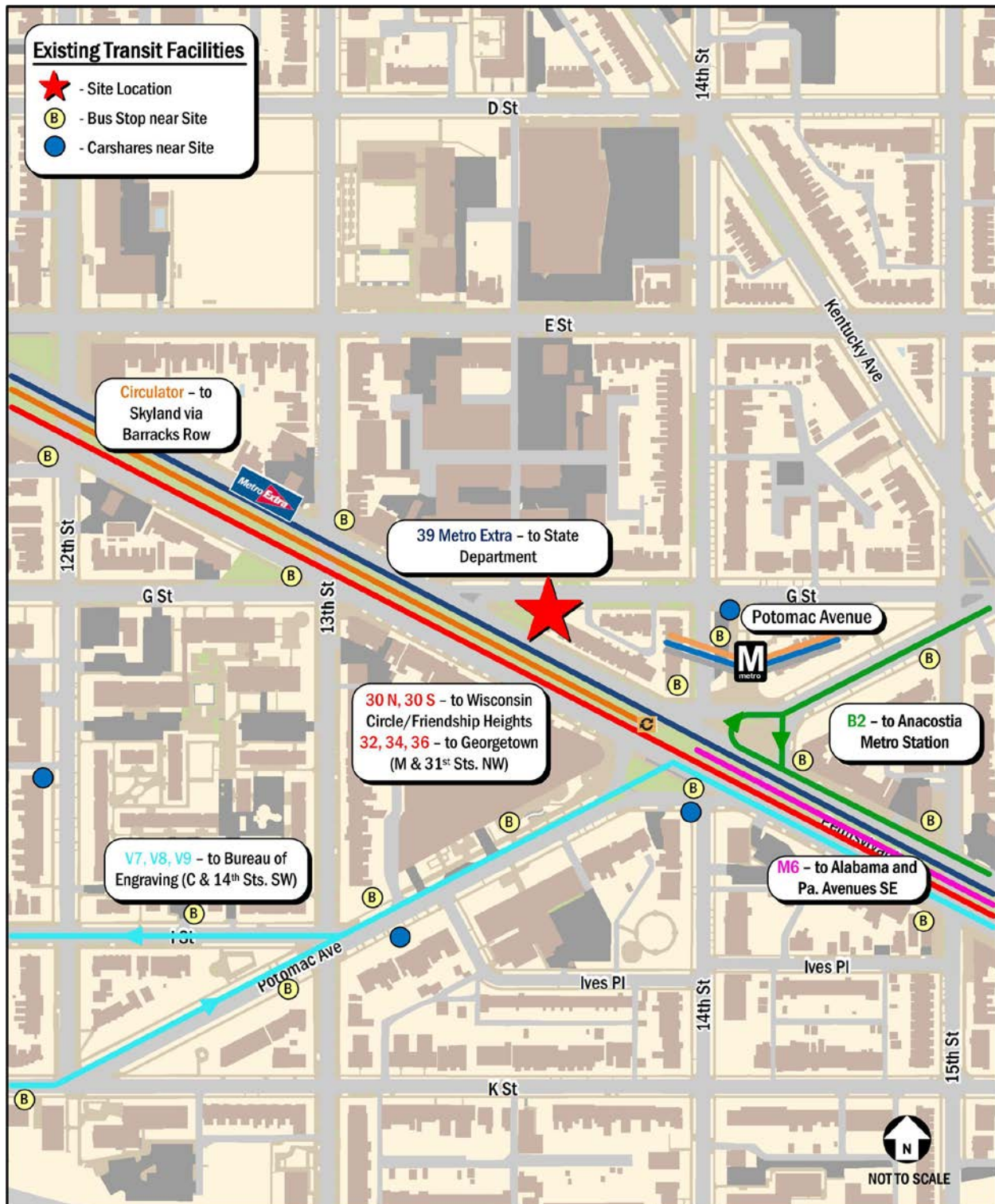


Figure 2: Existing Transit Service

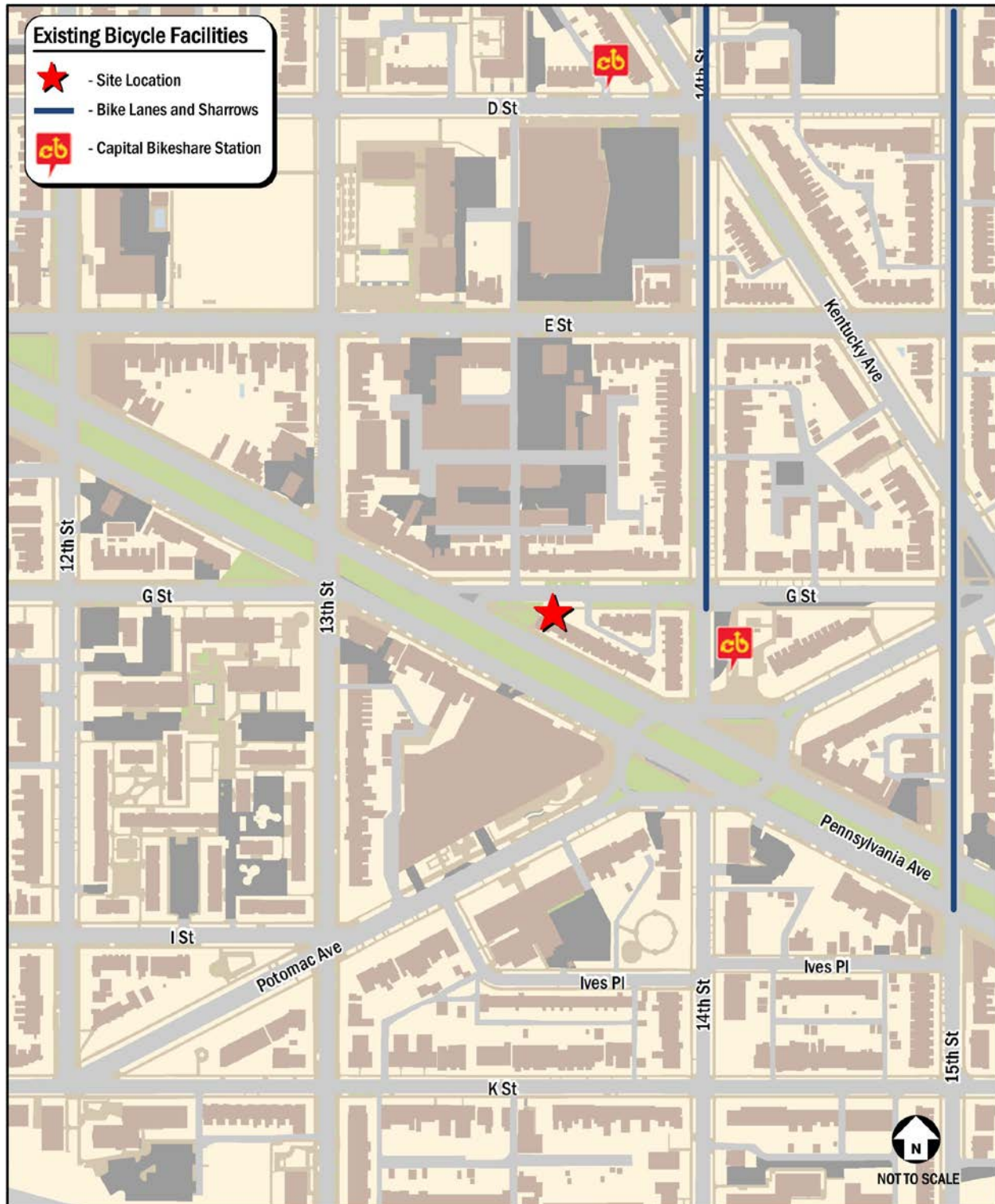


Figure 3: Existing Bicycle Facilities

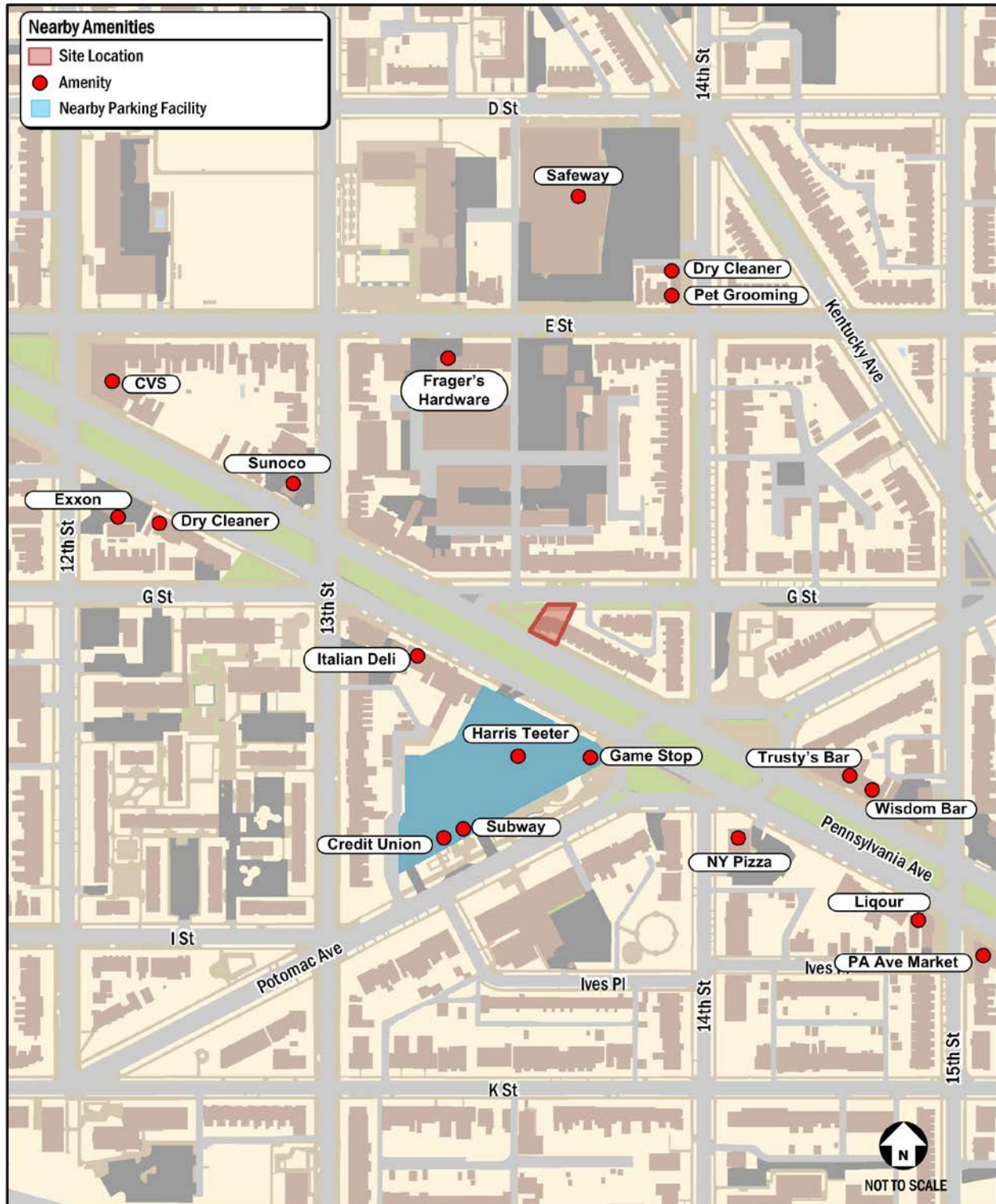


Figure 4: Nearby Amenities

DESIGN REVIEW

This section provides an overview of the transportation features of the proposed 1330 Pennsylvania Avenue SE development. The development program consists of a mixed-use development including 10 residential units above 2,600 sf of ground floor retail space. No on-site parking is proposed for this development. Figure 5 displays the access strategies for the site.

Site Access and Internal Circulation

Site Access

The primary pedestrian access for residents and will be located along Pennsylvania Avenue toward the east side of the site. Two restaurant entrances are proposed along Pennsylvania Avenue and one along G Street toward the western side of the site. Loading for residents and retail will occur from the existing loading zone along Pennsylvania Avenue while trash pick-up will occur from G Street.

Parking

As mentioned previously, the project will provide no on-site parking spaces. The unique triangular shape of the parcel does not allow for below grade parking within the envelope of the building, as such, the development has been designed to minimize any parking requirements. 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 and one parking space for each 300 sf of area above 3,000 sf. Based on these requirements, the site would be required to provide five total parking spaces, five parking spaces for residents and none for the restaurant use.

Under section 1901.5 of the new zoning regulations, the parking requirement would ordinarily be two total parking spaces. This can be broken down into three residential spaces based on the proposed new rate of one space for three dwelling units in excess of four units and no retail spaces based on the proposed new rate of 1.33 spaces per 1,000 sf above 3,000 sf. However, under the new section 1902.1, this parking requirement would be further reduced to one required space. Under 1902.1, the parking requirement of three spaces is reduced by 50% for any site located within ¼ mile (1312.5 feet) of a Metro Station. Given that the site is Pennsylvania Avenue and approximately 350 feet from Potomac Avenue Metro station, the site is located within ¼ mile of a Metro stop. As a result, the parking requirement would be one space.

Although the development does not meet zoning requirements, the parking impacts of the site will be minimal due to the following various considerations:

- Seven bus lines serve stops within a quarter-mile walking distance of the site.
- The Potomac Avenue Metro station is a short two-minute walk from the site.
- Capital Bikeshare has two existing bike share locations near the site. One is located at the Potomac Avenue Metro station and the second is located two blocks north of the site on D Street near 14th Street.
- Nine carshare locations are within a short walk from the site.
- Short-term bicycle parking for at least four bicycles is planned outside of the building along the project's G Street frontage.

- The site area has a walkability score of 90 as calculated by WalkScore.com. This categorizes the site and the surrounding areas as a “walker’s paradise”.
- Numerous neighborhood amenities exist and are planned within a short walk of the site. This includes grocers, restaurants, and other retailers, thereby reducing the need for vehicular travel for day-to-day trips.

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

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 any 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 1330 Pennsylvania Avenue SE. A map showing the study area block faces is shown in Figure . 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 668 parking spaces were inventoried within the study area. Of these, 56 are unrestricted spaces, 62 are metered spaces, and 550 are Residential Permit Parking (RPP) spaces. Figure shows a breakdown of the most predominant parking type by block face for the study area.

Parking occupancy data was collected on Wednesday, February 25, 2015 from 6:00 to 9:00 AM and from 5:00 to 11:00 PM to gather information on the parking occupancies of weekday peak morning and evening conditions. Table 3 gives a summary of the hourly utilization percentages for the weekday AM peak study period and Table 4 gives a summary of the hourly utilization percentages for the weekday PM peak study period. It was determined that the weekday AM parking peak occurs from 8:00 to 9:00 AM with an overall parking utilization of 81 percent and the weekday PM parking peak occurs from 11:00 PM to 12:00 AM with a parking utilization of 81 percent. Table 5 gives a summary of the inventory and occupancy results for the peak hour. Figure shows the parking utilization during the weekday evening peak and Figure shows the parking utilization during the PM weekend peak.

Table 3: Weekday (Wednesday) AM Hourly Utilization Percentages

	6AM	7AM	8AM	9AM
Occupancy	532	534	540	502
Total Spaces	668	668	668	668
Utilization	80%	80%	81%	75%

Table 4: Weekday (Wednesday) PM Hourly Utilization Percentages

	5PM	6PM	7PM	8PM	9PM	10PM	11PM
Occupancy	491	510	507	508	514	521	539
Total Spaces	668	668	668	668	668	668	668
Utilization	74%	76%	76%	76%	77%	78%	81%

Table 5: Peak Hour Inventory and Occupancy Summary

Space Type	Spaces	Weekday AM Peak (8-9 AM)			Weekday PM Peak (11 PM-12 AM)		
		Occupancy	Utilization	Available	Occupancy	Utilization	Available
RPP	550	452	82%	98	479	87%	71
Metered	62	37	60%	25	16	26%	46
Unrestricted	56	51	91%	5	44	79%	12
All On-Street Spaces	668	540	81%	128	539	81%	129

Generally, parking utilization is highest toward the end of the morning study period and at the end of the evening study period, with the latter being likely due to the mostly residential nature of the area whereby most resident permit holders have returned home by 11:00 PM. Both the weekday morning and evening peak periods show high utilization of the RPP spaces at 82 percent and 87 percent respectively. Conversely, the metered spaces see less utilization during the peak hours at 60 percent during the AM peak and 26 percent during the PM peak. Located in the site vicinity, the unrestricted spaces saw the highest occupancy, particularly in the morning when more non-residents are seeking parking near the Metro station. As a result, five to 12 available parking spaces were noted in the study area during the peak hours.

Most of the metered spaces are located along Pennsylvania and Potomac Avenues near the Metro station. Likewise, most unrestricted parking spaces are located along Pennsylvania Avenue as well as 14th Street north of the Metro and some on E Street. However, the majority (82 percent) of spaces is residential permit parking only with restricted time limits for visitors during peak hours, and are scattered evenly throughout the study area as shown on Figure 7.

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 nor will it provide 5,000 sf or more restaurant space. 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 nearby on-street. Restaurant and residential loading will occur from Pennsylvania Avenue via the existing designated loading area in front of the site. Trash pick-up will occur from G Street for both uses. Trash collection will be maintained on-site and will only be wheeled into public space on G Street on pick up days. It is impractical to use the existing alley north and east of the site as any delivery or trash trucks would block the alley while loading.

The number of truck trips generated by a project of this scale is relatively low. Based on previous studies, apartments conservatively 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 10-unit apartment building, there will conservatively be approximately one moving truck delivery every month. Delivery activity for the restaurant space would be based on the 2,600 square feet proposed. If it were estimated that one restaurant occupied the ground floor space in the development, then it could be expected that one to two 30 foot truck deliveries could be expected per day. In addition, three van sized deliveries per day for UPS/FedEx/USPS services can be expected as well to serve the residential and restaurant uses of the property. In total, the project would see occasional move-in/move-out deliveries, up to three daily van sized deliveries, and one to two 30 foot truck delivery per day. In addition, up to two trash pick-ups could be expected per day for retail and restaurant users.

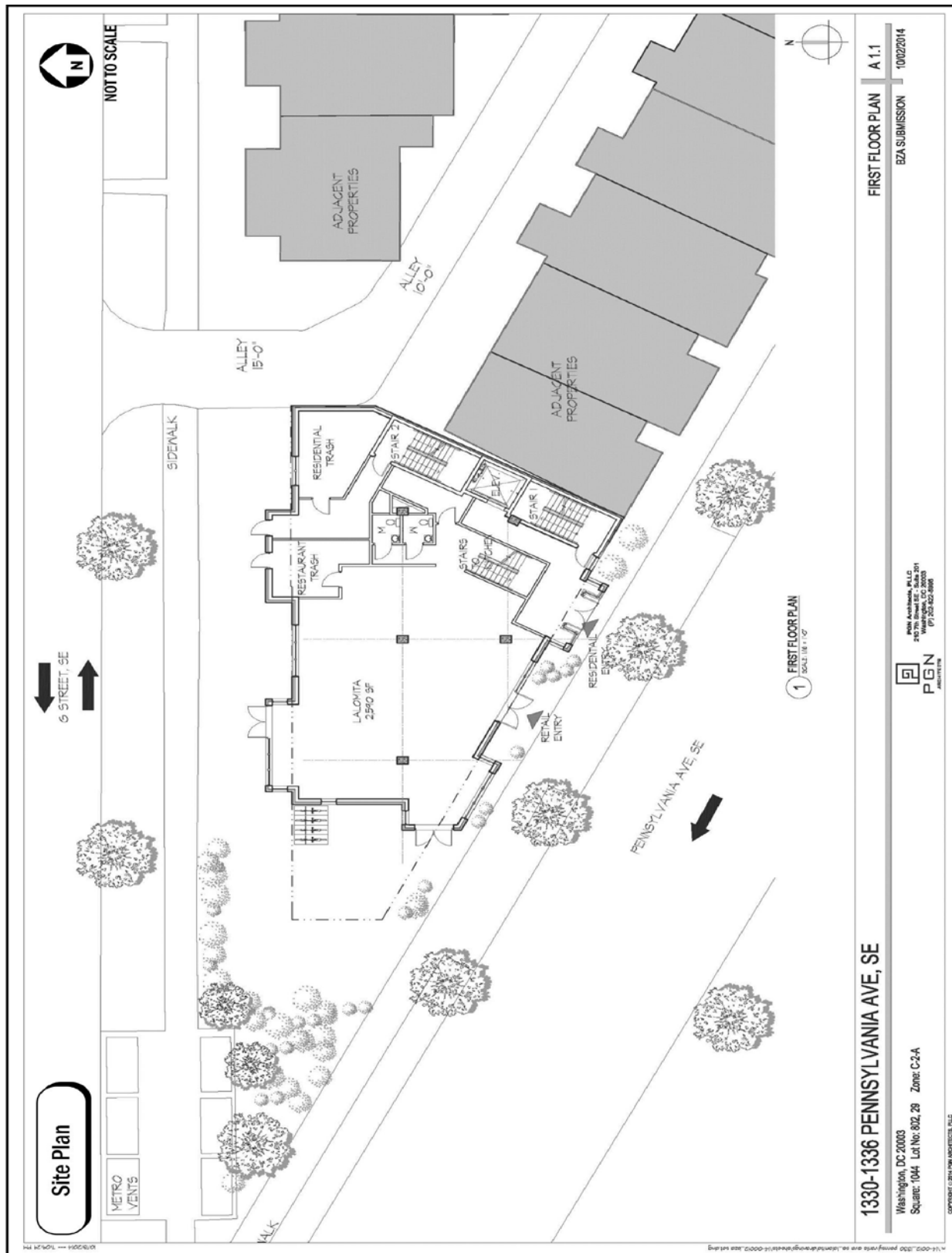


Figure 5: Site Plan

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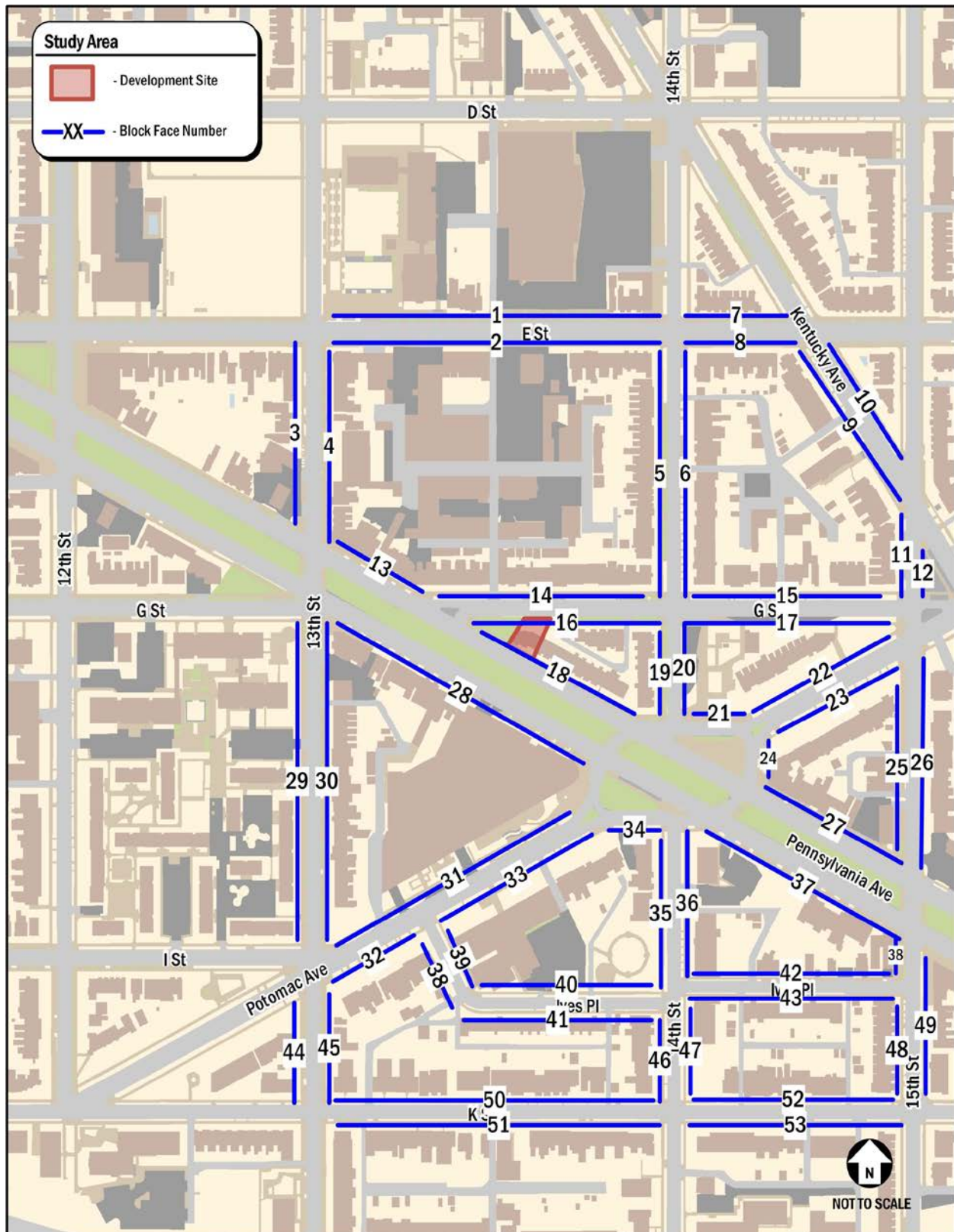


Figure 6: Block Face Map

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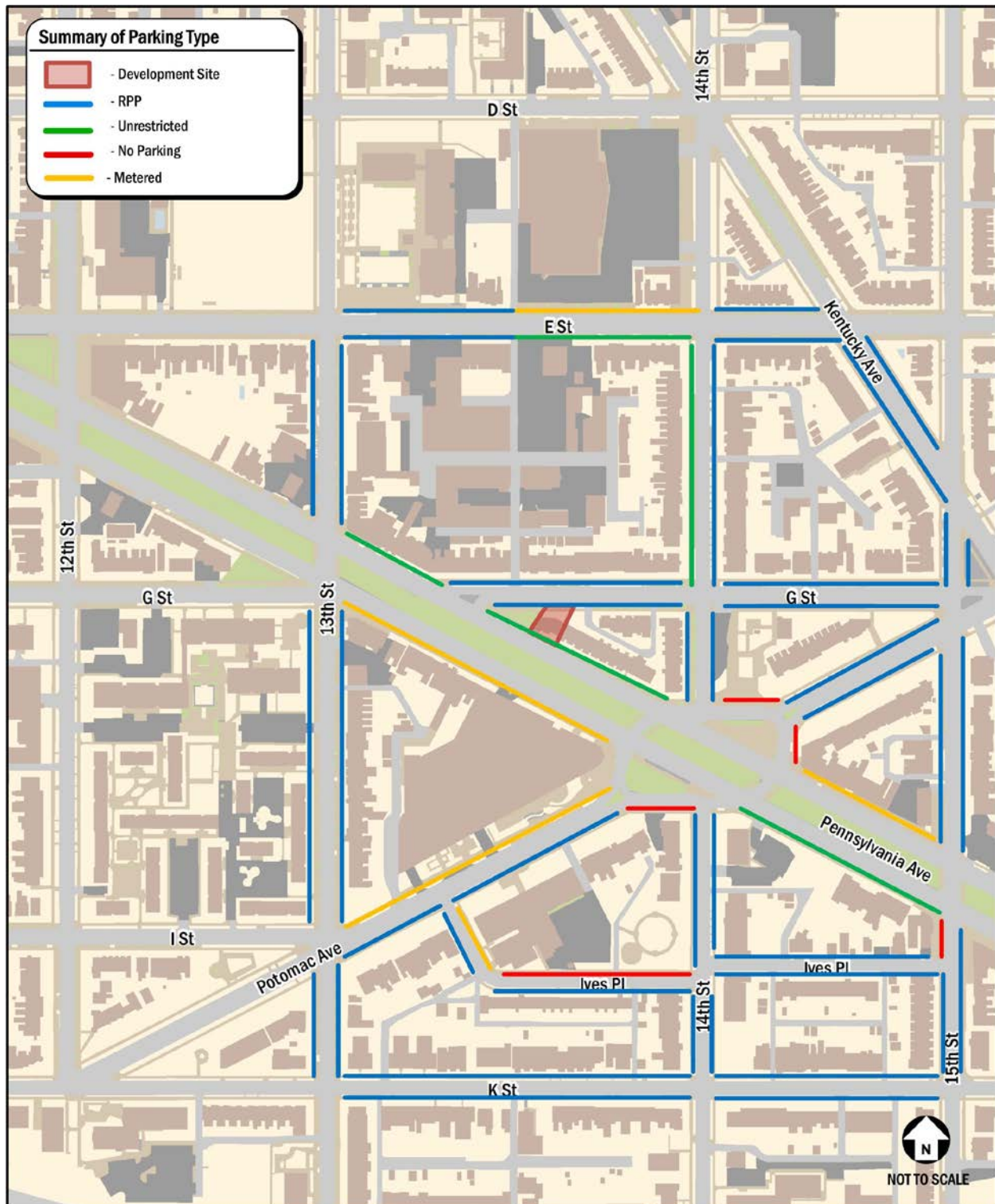


Figure 7: Summary of Parking Type

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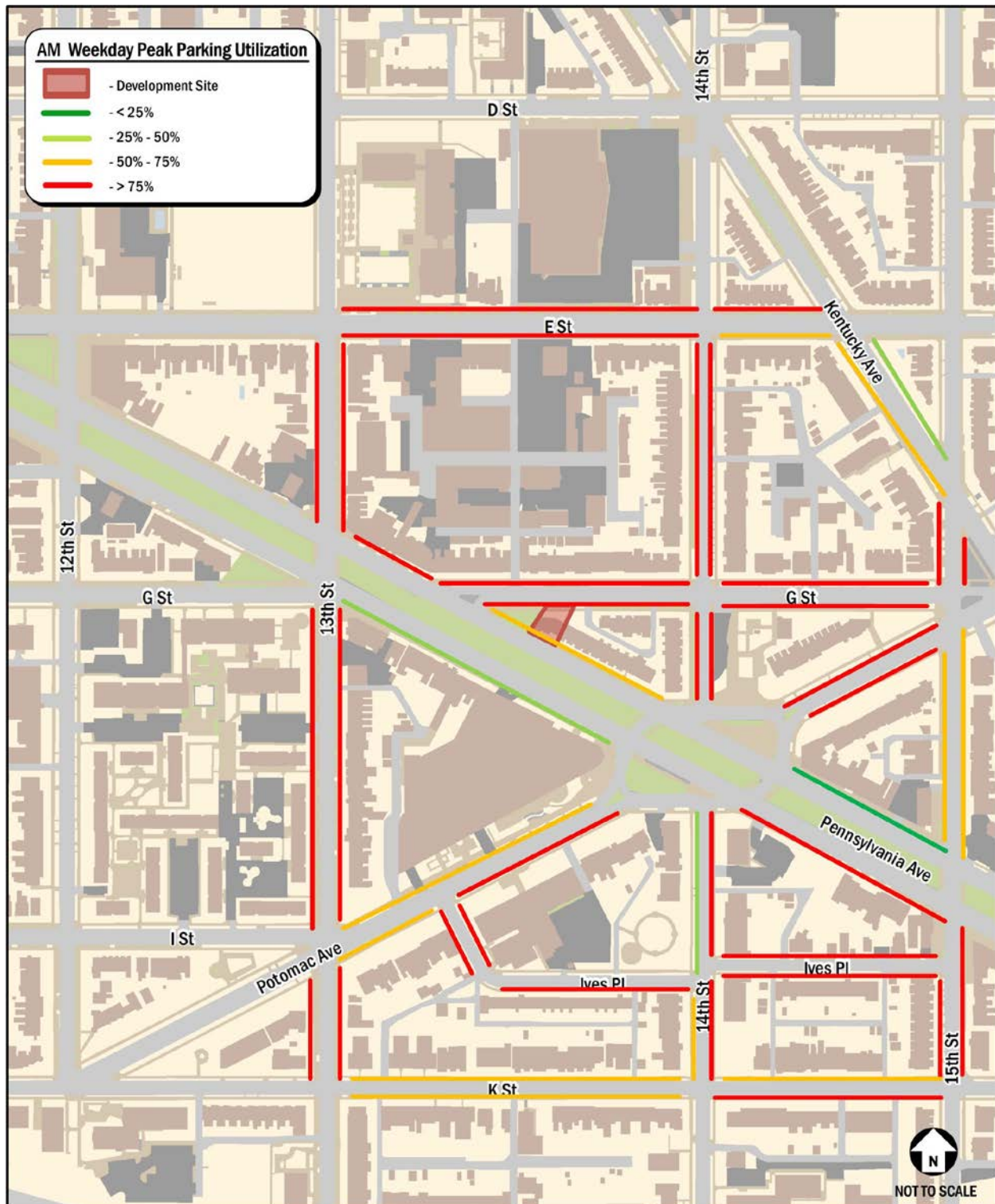


Figure 8: Weekday AM Peak Parking Utilization

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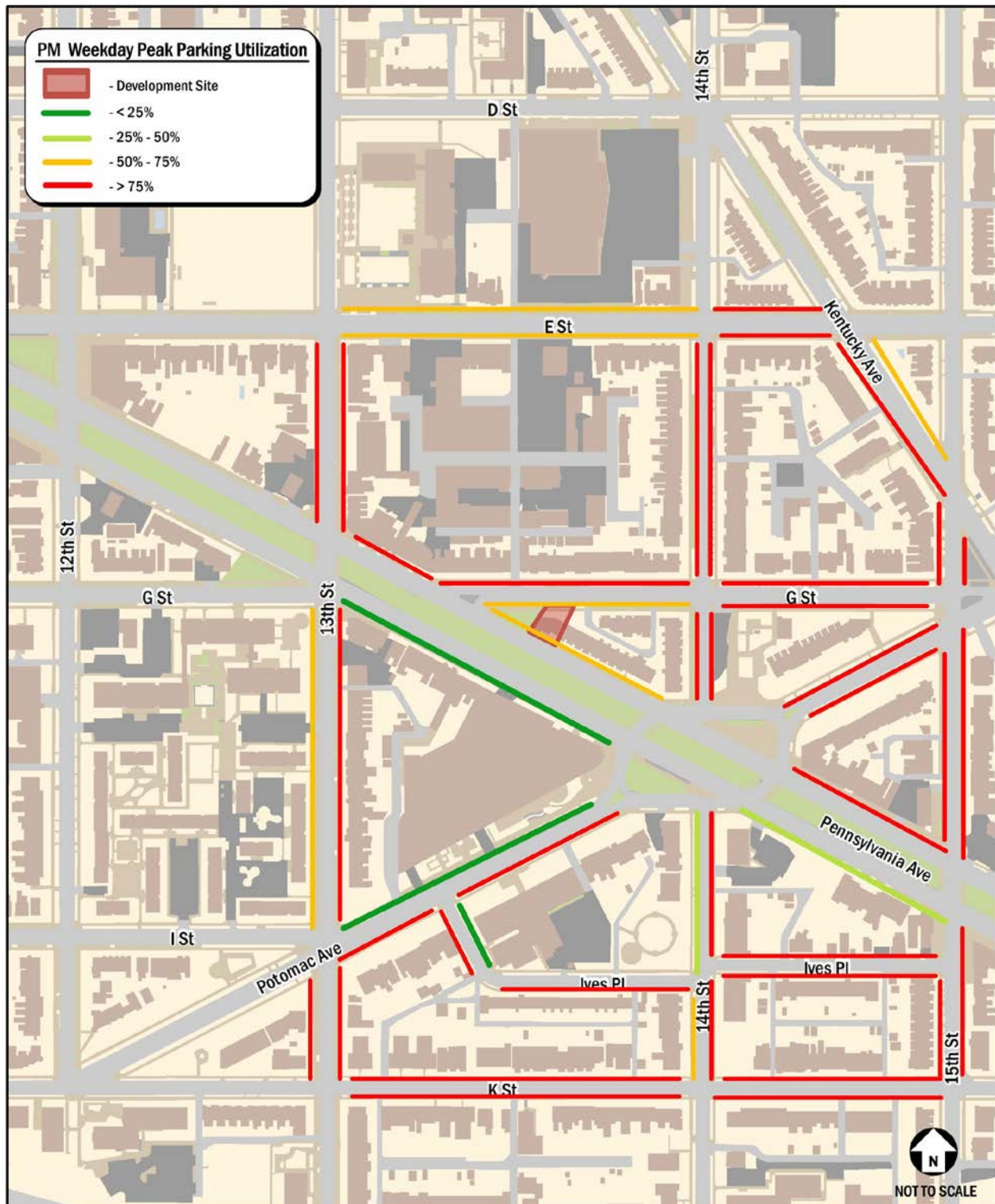


Figure 9: Weekday PM Peak Parking Utilization

Bicycle Facilities

The site plan specifies that a portion of the ground level will be utilized for dedicated long-term bike parking, which will include at least three 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 three residential units for all new residential buildings. Based on these regulations the development would require three bicycle parking spaces, which this development exceeds. Four short term bicycle parking spaces 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 1330 Pennsylvania Avenue SE development.

- **Resident Permit Parking (RPP) Restrictions**

Unit owners and tenants of the development will be prohibited from obtaining RPP or Visitor Parking Pass (VPP) permits from the District Department of Motor Vehicles (DMV). This will be included in a provision in the condominium declaration and bylaws and will include consent and authorization to the Condominium Board to police and enforce this prohibition for the life of the project. This will also be recorded as a covenant against the Property among the Land Records of the District of Columbia prohibiting any lessee or owner of the Property from obtaining an RPP or VPP at the building for the life of the project.

- **Transportation Incentives**

To help encourage non-auto transportation uses, the Applicant will provide the occupants of each residential unit with a \$200 SmartTrip card, a Capital Bikeshare membership, or a car sharing membership for a period of five (5) years from opening 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 to residents and retail employees. Bicycling will be promoted with the provision of on-site bicycle parking spaces as described above which provides more than the required number of bicycle parking spaces in a secure space in the building as well as short-term spaces along the G Street frontage of the building.

- *Marketing Program*

A TDM marketing program will be established 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.

- *On-Site Transportation Information*

A TransitScreen will be installed in the residential lobby to keep residents and visitors informed on all available transportation choices and provide real-time transportation updates. In addition, printed materials related to local transportation alternatives will be made available to residents and retail employees upon request and at move-in for new tenants. Instructions will also be made available to residents and retail employees describing the numerous available sources of real-time transportation updates and how to access transportation updates via multiple mediums.

- *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 1330 Pennsylvania Avenue SE development. The building will contain approximately 10 residential units above 2,600 square feet (sf) of ground floor restaurant space. The following conclusions were made regarding the 1330 Pennsylvania Avenue SE development:

- The site is located near excellent transit services (including Metrobus and Metrorail) and includes the implementation of an aggressive TDM plan that will mitigate any vehicular parking needs of the site.
- The site is surrounded by an existing network of transit, bicycle, and pedestrian facilities as well as numerous neighborhood amenities that result in an excellent environment for safe and effective non-auto transportation;
- There is an adequate supply of on-street parking. On-street parking is moderately utilized near the site with a peak of 81 percent utilization during the weekday AM parking peak (8:00 – 9:00 AM) and 81 percent utilization during the weekday PM parking peak (11:00 PM – 12:00 AM). 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 on street loading adjacent to the site.
- An aggressive TDM plan for the development will include the restriction of owners and tenants from obtaining RPP and VPP parking as well as the implementation of transportation incentives, bicycle amenities, a marketing program, on-site information, and ride-matching/ridesharing programs.