
Transportation Impact Study

2100 K Street PUD

Washington, DC

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EXECUTIVE SUMMARY

The following report is a Transportation Impact Study (TIS) for the 2100 K Street PUD, Zoning Case 14-04. This report reviews the transportation aspects of the PUD (Planned Unit Development) application submitted to the District of Columbia including the PUD plans and Statement of the Applicant.

The purpose of this study is to evaluate whether the PUD will generate a detrimental impact to the surrounding transportation network. This evaluation is based on a technical comparison of two future conditions: one with the PUD constructed and one without. This report concludes that the PUD **will not have a detrimental impact** to the surrounding transportation network. These recommendations are summarized at the end of this executive summary and in detail in the body of the report.

The methodologies and analyses contained within are tailored to reach a conclusion on the impact of the PUD, and thus, this report is not a general neighborhood study that makes recommendations to solve all existing and predicted transportation concerns near the PUD. Although some discussions within this report do discuss non-PUD generated impacts.

Proposed PUD

The 2100 K Street PUD is located in the southwest corner of the K Street/21st Street intersection in the Northwest quadrant of Washington, DC, in Ward 2. The proposed redevelopment is located in a primarily commercial area of the District along K Street and will be designed to be integrated into the adjacent IFC Headquarters at 2121 Pennsylvania Avenue building which occupies the remainder of the block. While the development will be designed to be integrated into the adjacent building, it is also being designed to ultimately be able to stand on its own, with separate parking garage and pedestrian entrances and loading facilities. The site will be served by a single curb cut on the west side of 21st Street just south of K Street. The site is served by several arterials and collector roadways, as well as public transportation sources. The PUD site area also features a robust pedestrian network and is served by the District's bicycle network.

The project site consists of Lots 832 and 840 in Square 74. The site is currently occupied by a 9-story office building which would be demolished for the construction of the 2100 K Street PUD. The site includes approximately 11,111 square feet of land area and is located within the boundaries of Advisory Neighborhood Commission (ANC) 2A. The PUD application proposes the development of a mixed-use project consisting of a eleven-story office building with ground floor commercial retail facing K Street and 21st Street. The site is currently located in the C-3-C District.

The PUD will include 153,992 sf of office space and 4,000 square feet of ground floor retail. As mentioned above, the development is being designed to be incorporated into the overall IFC Headquarters building at 2121 Pennsylvania Avenue, which occupies the remainder of the block. A 48-space below grade parking garage is proposed below the building that will be directly accessed via a single curb cut on the west side of 21st Street just south of K Street. The 2100 K Street PUD will have its own parking garage entrance, pedestrian entrances, and loading facilities, but each floor of the building will be designed to be integrated directly into its counterpart floor of the adjacent IFC Headquarters, similar to an expansion of the building. Similarly, the parking garage will include connection points for vehicles to cross from the 2121 Pennsylvania Avenue parking garage into the 2100 K Street parking garage. However, the building is also being designed so that it could function independently of the adjacent 2121 Pennsylvania Avenue building, should this become needed in the future. The proposed PUD includes a Transportation Demand Management Plan (TDM) plan that meets DDOT expectations for TDM programs for projects of this size.

Impacts Review

The purpose of the impacts review is to determine if development of the site will lead to adverse impacts on the local transportation network by projecting future conditions with and without development of the site and performing analysis of intersection delays. These delays are compared to the acceptable levels of delay set by DDOT standards to determine if the site will negatively impact the study area. The report describes what improvements to the transportation network are needed to mitigate adverse impacts.

Generally speaking, the proposed development is considered to have an impact at an intersection within the study area if the capacity analyses show an unacceptable level of delay at an intersection or along an approach in the future conditions with the proposed development where one does not exist in the future conditions without the proposed development. Based on the capacity analysis contained in this report, the PUD will not have a detrimental impact on the roadway capacity in the study area.

In addition to the roadway capacity, non-auto impacts were also examined. However, based on the availability of Metro service, the capacity of the sidewalks surrounding the site, and the quality of bicycle routes near the site, the PUD will not have a detrimental impact on the non-auto modes as well.

The PUD is not anticipated to rely on on-street parking to serve its demand. Since there is a significant amount of available parking in the adjacent 2121 Pennsylvania Avenue garage in addition to the 48 parking spaces planned for 2100 K Street, any additional demand by the 2100 K Street PUD will be absorbed by the adjacent connected parking garage.

1: INTRODUCTION

This report presents the findings of a Transportation Impact Study (TIS) performed for 2100 K Street Planned Unit Development (PUD). The proposed PUD is located in the southwest corner of the intersection of K Street and 21st Street in Ward 2 of Northwest Washington, DC. The mixed-use development consists of a eleven-story office building with ground-floor commercial retail, replacing the existing nine-story office building currently occupying the site.

The purpose of this report is to:

1. Review the transportation elements of the PUD, supplement the material provided in the site plans that accompanied the application, and demonstrate that the site conforms to the District Department of Transportation's (DDOT) general policies of promoting sustainability through the use of non-automobile modes of travel. The Design Review section of the report covers this topic.
2. Provide information on how the proposed redevelopment of the site may influence the local transportation network. This report accomplishes this by identifying the potential trips generated by the site on all major modes of travel and where these trips will be distributed on the network. The Impacts Review section of the report contains this analysis.
3. Determine if the proposed redevelopment of the site could lead to adverse impacts on the local transportation network. This is accomplished through using projections of future conditions with and without the proposed redevelopment of the site and performing analysis of pedestrian and vehicular delays. These delays are compared to the acceptable levels of delay set forth by DDOT standards to determine if the site will negatively impact the study area. The report describes what improvements to the transportation network are needed to mitigate any adverse impacts. The Impacts Review section of the report contains this analysis.

This report contains three sections as follows:

- *Introduction & Site Review*

This section provides a summary of major transportation features near and adjacent to the 2100 K Street PUD. This includes reviewing roadways, transit facilities, bicycle facilities, future developments, and District initiatives. This section contains information on the site to help establish a reference for the sections that follow.

- *Design Review*

This section provides a summary of the internal transportation features of the PUD. This section is meant to supplement the details provided in the site plan package contained in the Master Plan application. This section reviews such items as the general parking strategy and the plan for accommodating bicycles throughout the site.

- *Impacts Review*

This section provides a review of the possible impacts that redevelopment of the site could have to each mode within the transportation network. For each mode, and where necessary, a list of recommendations and mitigation measures are compiled.

1.1 Site Location and Major Transportation Features

The 2100 K Street PUD is located in the southwest corner of the intersection of K Street and 21st Street in the Northwest quadrant of Washington, DC, in Ward 2. The proposed redevelopment is located in a primarily commercial area of the District along K Street and will be designed to be integrated into the adjacent IFC Headquarters at 2121 Pennsylvania

Avenue building which occupies the remainder of the block. While the development will be designed to be integrated into the adjacent building, it is also being designed to ultimately be able to stand on its own, with separate parking garage and pedestrian entrances and loading facilities. A single curb cut will provide direct access into the below grade parking structure along the west side of 21st Street just south of K Street.

The overall site area, as shown in Figure 1, is bounded by 21st Street NW on the east, K Street NW to the north, and a private alley on the west and south. The site is served by several arterials, including K Street NW, L Street NW, I “Eye” Street NW, Pennsylvania Avenue NW, New Hampshire Avenue NW, 19th Street, 20th Street, 22nd Street (north of Pennsylvania Avenue), and 23rd Street. Major collector roadways include 21st Street, and 22nd Street (south of Pennsylvania Avenue). The site is also served by public transportation sources.

The PUD site area also features a pedestrian network consisting of sidewalks and crosswalks along the local streets surrounding the project site. In addition to pedestrian accommodations, the site is served by the bicycle network, which consists of signed bicycle routes along local roadways, as well as the L Street cycle track located north of the site.

1.2 Roadways

As stated previously, the site is accessible via arterial, collector, and local roadways. Figure 2 shows the roadway network hierarchy and Figure 3 shows the average annual daily traffic volumes for the roadways in the vicinity of the proposed redevelopment. The immediate study area of the proposed redevelopment has several key local access roads. These include the following:

- L Street NW
L Street is a three-lane one-way eastbound minor arterial with a cycle track located north of the site. It has an average daily traffic volume of 14,100 vehicles per day.
- K Street NW
K Street is a four-lane east-west principal arterial with service lanes that borders the northern edge of the site. It has an average daily traffic volume of 31,200 vehicles per day.
- I “Eye” Street NW
I “Eye” Street is a four-lane east-west principal arterial south of the site. I “Eye” Street is one-way westbound east of 21st Street and two-way west of 21st Street. It has an average daily traffic volume of 14,400 vehicles per day.
- Pennsylvania Avenue NW
Pennsylvania Avenue is a six-lane southeast to northwest principal arterial located south of the site. It has an average daily traffic volume of 17,700 vehicles per day.
- New Hampshire Avenue NW
New Hampshire Avenue is a three-lane one-way northwest bound minor arterial located north of the site. It has an average daily traffic volume of 8,900 vehicles per day.
- 19th Street NW
19th Street is a four-lane one-way southbound minor arterial located west of the site. It has an average daily traffic volume of 12,600 vehicles per day.



Figure 1: Site Location



Figure 2: Roadway Network Hierarchy



Figure 3: Average Annual Traffic Volumes

- 20th Street NW
20th Street is a four-lane one-way northbound minor arterial located south of the site. It has an average daily traffic volume of 8,600 vehicles per day.
- 21st Street NW
21st Street is a three-lane one-way southbound collector roadway that borders the eastern edge of the site. It has an average daily traffic volume of 7,400 vehicles per day.
- 22nd Street NW
22nd Street is a three-lane one-way northbound roadway located east of the site. It is classified as a minor arterial north of Pennsylvania Avenue, a collector roadway south of Pennsylvania Avenue, and has an average daily traffic volume of 5,800 vehicles per day.
- 23rd Street NW
23rd Street is a six-lane north-south principal arterial located west of the site. It has an average daily traffic volume of 17,300 vehicles per day.

1.3 Car-Sharing

Four car-sharing companies provide service in the District: Zipcar, Hertz 24/7, Enterprise Carshare, and Car2Go. All four services are private companies that provide registered users access to a variety of automobiles. All three car-sharing companies have locations in the vicinity of the site with 36 vehicles in all being available nearby. Table 1 lists the car-sharing location nearby and the number of vehicles.

Table 1: Carshare Location and Vehicles

Carshare Location	Number of Vehicles
Zipcar	
2200 Pennsylvania Avenue	2 Vehicles
1150 22 nd Street	5 Vehicles
1775 I "Eye" Street	3 Vehicles
GWU West	1 Vehicle
The 925 Apartments	2 Vehicles
2400 M Street	6 Vehicles
1120 Connecticut Avenue	2 Vehicles
1150 Connecticut Avenue	2 Vehicles
Hertz 24/7	
2121 K Street	2 Vehicles
1900 L Street	2 Vehicles
1050 17 th Street	3 Vehicles
1201 24 th Street	1 Vehicle
Enterprise CarShare	
2121 K Street	2 Vehicles
21 st & I "Eye" Streets	2 Vehicles
1230 New Hampshire Avenue	1 Vehicle
Total Number of Car Share Vehicles in Study Area	36 Vehicles

However, car-sharing is also provided by Car2Go, which provides point-to-point car sharing. Unlike Zipcar, Enterprise, or Hertz, which require round 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 (RPP) location in any zone throughout the defined “Home Area”. Members do not have to pay the meters or pay stations. Car2Go does not have permanent designated spaces for their vehicles; however availability is tracked through their website, which provides an additional option for car-sharing patrons.

1.4 Transit Service

The study area is well served by Metrorail and Metrobus. Combined, these transit services provide local, city wide, and regional transit connections and link the site with major cultural, residential, employment, and commercial destination throughout the region. Figure 4 identifies the major transit routes, stations, and stops in the study area.

1.4.1 Metrorail

Three Metrorail stations are located near the proposed PUD: Foggy Bottom-GWU, Farragut West, and Farragut North. The Foggy Bottom-GWU and Farragut West stations are located approximately one third of a mile from the site and provide access to the Orange and Blue Lines. These two stations connect the site to Vienna, Virginia via Arlington to the west and New Carrollton, Maryland via Capitol Hill to the east on the Orange Line. The two stations also provide access to Franconia-Springfield, Virginia via Alexandria to the south and Largo, Maryland via Capitol Hill to the east on the Blue Line.

The Farragut North station is located approximately four tenths of a mile to the east of the site and provides access to the Red Line. This station connects the site with Shady Grove, Maryland via Bethesda to the north and Glenmont, Maryland via Silver Spring to the northeast. Trains at these stations run approximately every 6 minutes during the morning and afternoon peak hours, every 12 minutes during the weekday mid-day and evening hours, and every 20 minutes on weekends.

1.4.2 Metrobus

Metrobus routes within a quarter-mile of the site include the 3Y, 11Y, 16Y, 38B, 31, 32, 36, 37, 39, 80, D 3/4/5/6, H1, L1, N3, S1, and X1 lines as well as the DC Circulator Dupont Circle-Rosslyn and Georgetown-Union Station lines. Bus stops with shelters provide rider amenities, such as protection from elements, benches, route maps, and schedules, while those without shelters are designated by a WMATA bus stop sign and do not have additional amenities. Bus stops are located along streets adjacent to the site, including K Street, I “Eye” Street, Pennsylvania Avenue, and other streets within two or three blocks walking distance. Table 2 shows a summary of the bus route information for the lines that serve the site, including service hours and headways.

Table 2: Existing Bus Routes

Route Number	Route Name	Service Hours ¹	Headway ¹
3Y	Lee Highway – Farragut Square Line	Weekdays: 6:30 – 9:30 AM (Eastbound only) 4:15 – 8 PM (Westbound only)	25 min
11Y	Mt Vernon Express Line	Weekdays: 6:30 – 9:00 AM (Northbound only) 4:10 – 7:30 PM (Southbound only)	15 – 30 min
16Y	Columbia Pike – Farragut Square Line	Weekdays: 6:10 – 9:40 AM (Eastbound Only) 3:45 – 7:35 PM (Westbound Only)	10 – 20 min

¹ WMATA route schedules, <http://wmata.com/bus/timetables/>

Route Number	Route Name	Service Hours ¹	Headway ¹
388	Ballston – Farragut Square Line	Mon - Sat: 5:20 AM – 2:00 AM Sunday: 5:30 AM – 12:30 AM Weekdays: 5:30 AM – 12:30 AM	15 – 30 min
31	Wisconsin Avenue Line	Saturdays: 6:00 AM – 12:45 AM Sundays: 7:00 AM – 8:30 PM Late night extension of A2, 6, 8 line	15 – 30 min
32, 36	Pennsylvania Avenue Line	Weekdays: 12:00 am – 6:00 am Weekends: 12:00 am – 8:00 am Weekdays:	30 min
37	Wisconsin Avenue Limited Line	6:30 – 10:00 AM (Southbound only) 4:00 – 7:45 PM (Northbound only) Weekdays:	15 min
39	Pennsylvania Avenue Limited Line	6:30 – 9:45 AM (Westbound only) 3:30 – 7:30 PM (Eastbound only) Weekdays: 4:30 AM – 2:00 AM	15 min
80	North Capitol Street Line	Weekends: 5:00 AM – 1:00 AM Mon – Sat:	10 - 30 min
D3, D4	Ivy City – Dupont Circle Line	6:00 – 10:00 AM (Westbound only) 3:00 – 6:45 PM (Eastbound only) Weekdays: 4:30 AM – 2:00 AM	20 – 30 min
D5, D6	MacArthur-Sibley Hospital – Stadium – Armory Line	Saturdays: 5:00 AM – 3:00 AM Sundays: 5:30 AM – 1:00 AM Mon – Fri	20 – 40 min
H1	Brookland-Potomac Park Line	6:30 AM – 10:00 AM (Southbound only) 4:00 PM – 7:00 PM (Northbound only) Mon – Fri	15 – 20 min
L1	Connecticut Avenue Line	6:30 AM – 9:30 AM (Southbound only) 4:00 PM – 7:30 PM (Northbound only) Mon – Fri	15 – 20 min
N3	Massachusetts Avenue Line	6:45 AM – 9:30 AM (Southbound only) 5:00 PM – 7:00 PM (Northbound only) Mon – Sat	15 – 20 min
S1	16 th Street – Potomac Park Line	6:00 AM – 9:30 AM (Southbound only) 4:00 PM – 7:30 PM (Northbound only) Mon – Fri	15 – 20 min
X1	Benning Road Line	6:00 AM – 9:30 AM (Westbound only) 3:30 PM – 7:00 PM (Eastbound only)	15 – 20 min
DC Circulator	Dupont Circle – Rosslyn	Sun – Thurs: 7:00 AM – 12:00 AM Fri – Sat: 7:00 AM – 2:00 AM	10 min
DC Circulator	Georgetown – Union Station	Sun – Thurs: 7:00 AM – 12:00 AM Fri – Sat: 7:00 AM – 2:00 AM	10 min

1.4.3 Future Transit Service

Due to growth of population, jobs, and retail, the District's infrastructure is challenged with the need for transportation investments to support growth and to further strengthen neighborhoods. In order to meet these challenges and capitalize on future opportunities, DDOT has developed a plan to identify transit challenges and opportunities and to recommend investments. This is outlined in the DC's Transit Future System Plan report published by DDOT in April 2010. This plan includes the reestablishment of streetcar service in the District and near the proposed development.

The streetcar system element of the plan includes three routes that travel 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. The future planned routes serving the study area will connect the site to several areas in the District including Georgetown, Washington Circle, Congress Heights, Buzzard Point, Takoma, Rhode Island Avenue, and Benning Road.

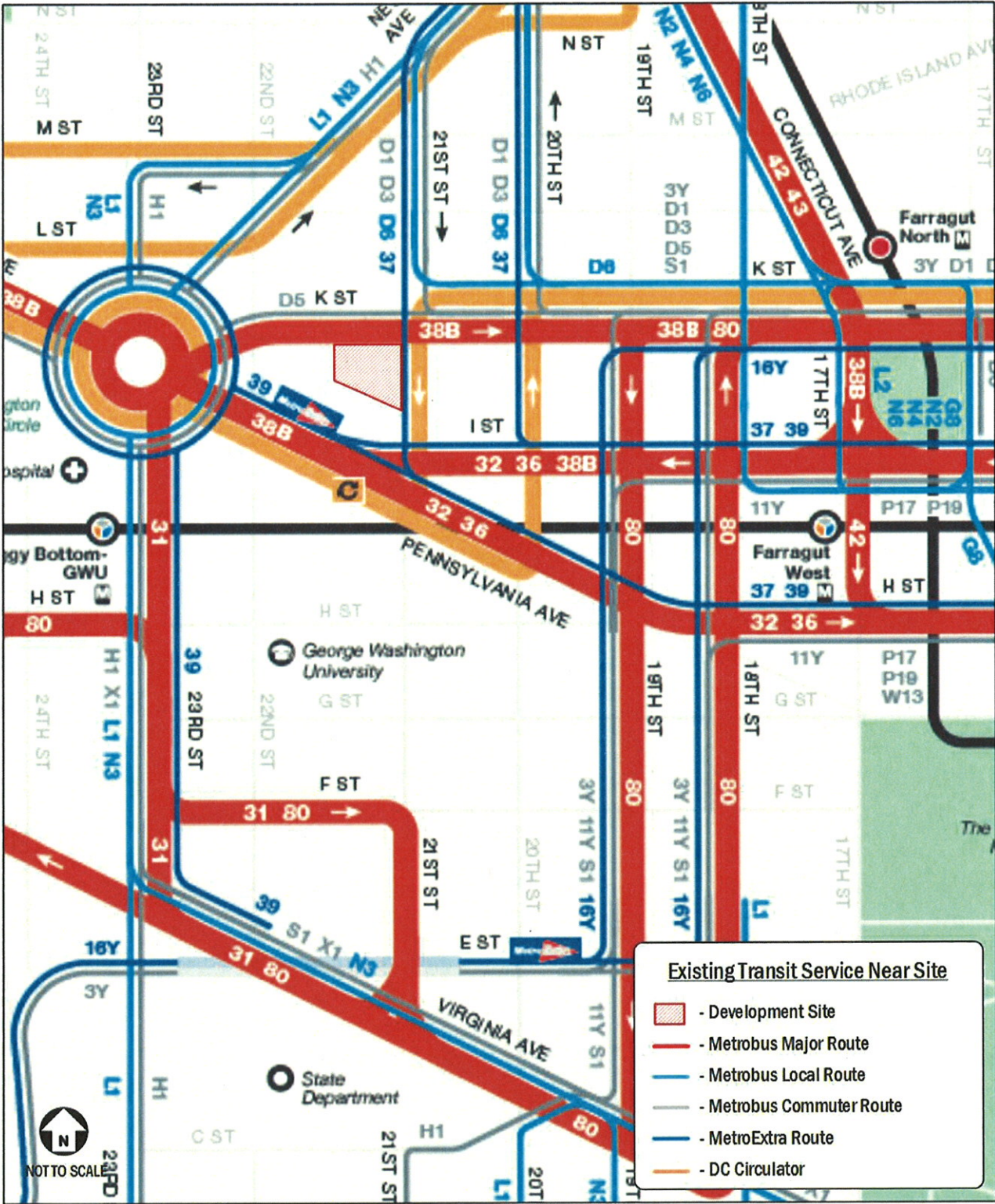


Figure 4: Existing Transit Service

In addition, the K Street Transitway will be located near the study area. The project will reconfigure the K Street corridor to benefit mass transit, passengers, pedestrians, cyclists, and motorists. The most updated plan consists of a two-way, two-lane median transitway as well as two general purpose travel lanes between 20th Street and 9th Street NW, and one 10-foot travel/off-peak parking lane in each direction on K Street between 20th Street and 12th Street.

1.5 Bicycle Facilities

1.5.1 Existing Bicycle Facilities

Surrounding the site, bicycles have access to on-street bike lanes, signed bike routes, and local and residential streets that facilitate cycling. The bicycle network provides good conditions for local trips and there are several routes for trips between the study area and other areas within the District.

For the most part, cyclists to and from the 2100 K Street site have short and direct access to existing bicycle facilities. As shown on FIGURE, there is very good north-south connectivity east of the site via the 15th Street cycle track. Although there is a small break in the cycle track, bicycle specific signage leads bicyclists along an area with no vehicular traffic in order to regain access to the cycle track. There is also significant east-west connectivity east of the site via the Pennsylvania Avenue cycle track in addition to the New York Avenue and G Street bike lanes.

Although the bicycle infrastructure is primarily good, one deficiency is the east-west connectivity west of the site. The L Street cycle track offers an exclusive eastbound lane, however westbound facilities are limited in that the N Street cycle track only provides connectivity between Connecticut Avenue and 22nd Street. However, an additional complimentary westbound facility for the L Street cycle track is being planned. Currently, bicyclists will likely continue westbound along I (Eye) Street as it is a one-way street. Additionally, other one-way streets near the site such as M Street might be utilized due to an enhanced sense of safety on one-way streets. Overall, the existing bicycle infrastructure near the site is very good with many cycle tracks and bike lanes creating multi-directional connectivity throughout the district.

Some bicycle parking was observed in the study area though many cyclists were observed using street signs, parking meters or similar objects to secure their bicycles. This indicates that there may be demand for additional bicycle parking facilities in the study area.

1.5.2 Capital Bikeshare

Capital Bikeshare was launched in late September 2010 to replace the DC SmartBike program. This program has placed over 300 bicycle-share stations across Washington, DC; Arlington and Alexandria, VA; and Montgomery County, MD with over 2,500 bicycles provided. Capitol Bikeshare stations in the vicinity of the site provide for excellent availability of bicycles nearby. There are seven stations within a quarter-mile radius of the site contributing to 145 docking stations as summarized in Table 3.

Table 3: Bikeshare Stations

Bikeshare Location	Number of Docks
Pennsylvania Ave & 21 st Street	19 docking stations
21 st & I "Eye" Streets	35 docking stations
22 nd & I "Eye" Streets	15 docking stations
19 th & K Streets	23 docking stations
19 th & L Streets	15 docking stations
20 th & L Streets	19 docking stations
21 st & M Streets	19 docking stations
Total	145 docking stations



Figure 5: Existing Bicycle Facilities

1.6 Pedestrian Facilities

1.6.1 Existing Pedestrian Facilities

Overall, the pedestrian facilities within the study area provide a good walking environment, and pedestrian access to the site is provided along all adjacent streets. Most pedestrians accessing the site arrive from the nearby Farragut West and Foggy Bottom-GWU Metro stations. Nearly all streets in the study area have adequate sidewalks, curb ramps, and planted buffers between sidewalks and the curb. Additionally, many of the local and neighborhood streets allow on-street parking, which provides an additional buffer between pedestrians and moving vehicles. A construction project by DDOT is also currently underway to upgrade the median crossings along K Street between 12th Street and 21st Street to include ADA accessible ramps. Figure 6 shows the existing pedestrian facilities in the vicinity of PUD, and Figure 7 shows the weekday peak hour pedestrian volumes collected on Tuesday, March 11, 2014; Wednesday, March 26, 2014; Thursday, March 27, 2014; Thursday, April 10, 2014; and Wednesday, April 23, 2014. Along the site perimeter, all roadways have sidewalks on both sides of the street. Routes between the site and the adjacent bus stops have good walking conditions with sidewalks provided along both sides of the street. Good walking conditions are also provided between the site and the nearby Metrorail stations (Farragut West and Foggy Bottom-GWU).

The Farragut West and Foggy Bottom-GWU stations are located almost equidistant from the PUD, at approximately one third of a mile. This measurement reflects the shortest walk distance along study area sidewalks. Based on the walking speed of 4 feet per second for a typical individual, this distance could be covered in approximately 7 minutes. However, daily commuters will likely cover this distance in a shorter time period. As a rule of thumb, ideal walking distance to a heavy rail station is typically less than one-half mile. This is based on the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND) guidelines and rating system.

The bus stops located along K Street, 21st Street, and Pennsylvania Avenue provide local service between the study area, the nearby Metrorail stations, and other destinations in the District. Pedestrians access these bus stops along the local pedestrian network that borders the site and within the residential neighborhoods located adjacent to the site.

1.6.2 District Department of Transportation Pedestrian Master Plan

Due to growth of population, jobs, and retail, the District's infrastructure is challenged with the need for transportation investments to support growth and to further strengthen neighborhoods. In order to meet these challenges and capitalize on future opportunities, DDOT has developed a plan to identify transit challenges and opportunities and to recommend investments. This is outlined in the DC's Transit Future System Plan report published by DDOT in April 2010. This plan includes the reestablishment of streetcar service in the District and near the proposed development.

The streetcar system element of the plan includes three routes that travel 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. The future planned routes serving the study area will connect the site to several areas in the District including Georgetown, Washington Circle, Congress Heights, Buzzard Point, Takoma, Rhode Island Avenue, and Benning Road.

In addition, the K Street Transitway will be located near the study area. The project will reconfigure the K Street corridor to benefit mass transit, passengers, pedestrians, cyclists, and motorists. The most updated plan consists of a two-way, two-lane median transitway as well as two general purpose travel lanes between 20th Street and 9th Street NW, and one 10-foot travel/off-peak parking lane in each direction on K Street between 20th Street and 12th Street.



Figure 6: Existing Pedestrian Facilities



Figure 7: Existing Pedestrian Volumes

2: DESIGN REVIEW

This report section provides an overview of the on-site transportation features of the proposed 2100 K Street PUD. It supplements the information provided in the site plans package that accompanied the Zoning Application, which includes several illustrations of site circulation and layout.

2.1 Site Development Program

2.1.1 Existing Site Plan

The project site consists of Lots 832 and 840 in Square 74. The site is currently occupied by a 9-story office building which would be demolished for the construction of the 2100 K Street PUD. The site includes approximately 11,111 square feet of land area and is located within the boundaries of Advisory Neighborhood Commission (ANC) 2A. The PUD application proposes the development of a mixed-use project consisting of an eleven-story office building with ground floor commercial retail facing K Street and 21st Street. The site is currently located in the C-3-C District.

The existing commercial use currently has one curb cut along 21st Street NW. Some off-peak on-street parking is provided along the border of the site, although on-street parking restrictions vary. Figure 8 identifies the existing curb cuts and on-street parking surrounding the site.

2.1.2 Proposed PUD

The PUD will include 153,992 sf of office space and 4,000 square feet of ground floor retail. Due to the unique design of the building to be incorporated into the adjacent IFC Headquarters at 2121 Pennsylvania Avenue, for zoning purposes, this project is being considered as a PUD. Based on this the existing 718,424 sf IFC Headquarters office building will be expanded with this project for an overall area of 872,181 sf.

However, the 2100 K Street PUD is also being designed so that it could function independently of the adjacent IFC Headquarters building, should this become needed in the future. As such, a 48-space below grade parking garage is proposed below the building that will be directly accessed via a single curb cut on the west side of 21st Street just south of K Street and will provide internal connections to the larger 331-space below grade parking garage at the adjacent IFC Headquarters. The single curb cut proposed for the 2100 K Street PUD will be located in approximately the same place along 21st Street as the curb cut serving the existing garage for the existing property, however, it is designed so as to meet DDOT's 32 foot spacing standard from the alley and will be 20 feet in width. The existing curb cut does not meet these standards.

The 2100 K Street PUD will have its own parking garage entrance, pedestrian entrances, and loading facilities, but each floor of the building will be designed to be integrated directly into its counterpart floor of the adjacent IFC Headquarters, similar to an expansion of the building. As mentioned above, the independent vehicular and pedestrian entrances and loading facilities will allow the 2100 K Street PUD to function independently should it become necessary in the future.

Figure 9 provides an overview of the project's development program, and Figure 10 shows the site access plan.

2.2 Parking

2.2.1 Parking Supply

Since the project is being treated as an expansion for zoning purposes, the overall parking requirement for the site is linked to the parking required for the adjacent IFC Headquarters as well as the 2100 K Street PUD site. As such, the parking requirement for the overall block totals 299 spaces (299 for the IFC Headquarters building and 0 for the 2100 K Street PUD) and the overall block will provide a total of 379 parking spaces (331 in the IFC Headquarters building and 48 in the 2100 K Street PUD). Since no additional parking is required with the project being assumed an expansion, the site meets the required parking per zoning. It should be noted, however, that the 48 parking spaces planned below grade would ultimately serve the 2100 K Street PUD should the property need to function independently from the adjacent IFC Headquarters building.

2.2.2 Parking Demand

Based on the proposed development's location, the amount of parking proposed is adequate to serve the expected demand without providing too much parking and encouraging driving as a mode. While working on various projects within the District, Gorove/Slade had observed that parking demand for office & retail land uses within the District core is around 20-25% of the demand generated by suburban locations. The comparable suburban parking demand for the office & retail components (including the adjacent IFC Headquarters building) would be over 2,000 spaces (calculated using ITE's Parking Generation, 4th Edition). The 379 total spaces (331 in the IFC Headquarters building and 48 in the 2100 K Street PUD) provided represents 19% of this suburban demand estimate, and thus the amount of parking is in line with what would be expected in the District core, particularly given the amount of transit options that exist in the immediate area surrounding the site. The parking proposed exceeds parking requirements as defined by zoning regulations.

2.3 Site Access and Internal Circulation

2.3.1 Vehicular Access

All vehicular access to the 2100 K Street PUD parking garage will be provided from a curb cut on 21st Street that will be located approximately in the same location the existing curb cut. Additional internal access will be provided to the adjacent IFC Headquarters garage, which has access to 21st Street (south of the 2100 K Street PUD) and the K Street Access Road. An existing alley separates the 2100 K Street PUD from the adjacent IFC Headquarters which will be maintained. Loading access is provided to the adjacent IFC Headquarters via the alley and will be provided in a similar manner to the 2100 K Street PUD.

As mentioned previously, while the 2100 K Street PUD is being designed as an expansion to the adjacent IFC Headquarters building, separate vehicular (and pedestrian) accesses are being proposed for the 2100 K Street PUD should the building be separated from the adjacent IFC Headquarters in the future. Separate vehicular access points would allow the 2100 K Street PUD to function independently should it be deemed necessary.

Pick-up and drop-off activity will likely occur along K Street and 21st Street. The primary pedestrian access points for the 2100 K Street PUD will be located in the southwest corner of the K Street/21st Street intersection.

2.3.2 Loading

Similar to the parking supply described above, no loading facilities are required based on Zoning Regulations since the development is considered an expansion to the adjacent IFC Headquarters building. However, one (1) 30-foot deep loading berth with an accompanying loading platform and one (1) 10 foot by 20 foot loading space are proposed for the 2100 K Street PUD, in order to allow the building to function independently should it be needed in the future. A summary of the loading facilities is shown on Figure 10.

The amount of loading facilities provided is adequate to handle the expected amount of deliveries. The office building will generate around 15 van-sized and 3 30' truck deliveries per week. The retail tenant is yet to be determined; however it is safe to assume that the retail component will generate no more than 2 van-sized and 4 30' truck deliveries per week. This amounts to 2 to 3 van-sized and 1 to 2 30' truck deliveries per day or approximately 2 trucks per day using each loading dock, an amount of activity easily accommodated by the proposed loading facilities.

Turning diagrams for trucks accessing the proposed site are shown on Figure 11. These diagrams show 30' single-unit trucks accessing the loading docks via the alley without difficulties.

2.3.4 Bicycle Facilities

The proposed PUD provides both short and long term bicycle parking, taking advantage of its location in a bicycle friendly area of the District. The proposed landscape includes short-term public bicycle spaces near building entrances and public places. These short-term spaces will include inverted U-racks placed in high-visibility areas. The current plans show three racks, or six short-term bicycle parking spaces.

Additionally, the development includes secured long-term bicycle parking within the parking garage. The current site plans show 39 long-term bicycle parking spaces within the garage. Based on District zoning regulations and laws, a development is required to provide bicycle parking spaces equivalent to 5 percent of the required (or provided) vehicular parking spaces. This would equate to 3 spaces for this development. Thus, the proposed PUD is greatly exceeding the bicycle parking minimums.

2.3.5 Pedestrian Access

The primary pedestrian access points for the PUD will be located in the southwestern corner of the K Street/21st Street intersection. Retail access will be from 21st Street and office access will be from K Street. The majority of pedestrians travelling to and from the site will be transit riders going to and from the nearby Farragut West and Foggy Bottom-GWU Metrorail stations.

As outlined previously, the intersections surrounding the site provide pedestrian facilities including crosswalks, curb ramps, and pedestrian signals at signalized intersections in order to accommodate pedestrians. Additionally, the PUD is designed to provide pedestrian-friendly walkways along K Street and 21st Street, including wide sidewalks, landscaped brick pavers, grass and tree boxes, and improved lighting.

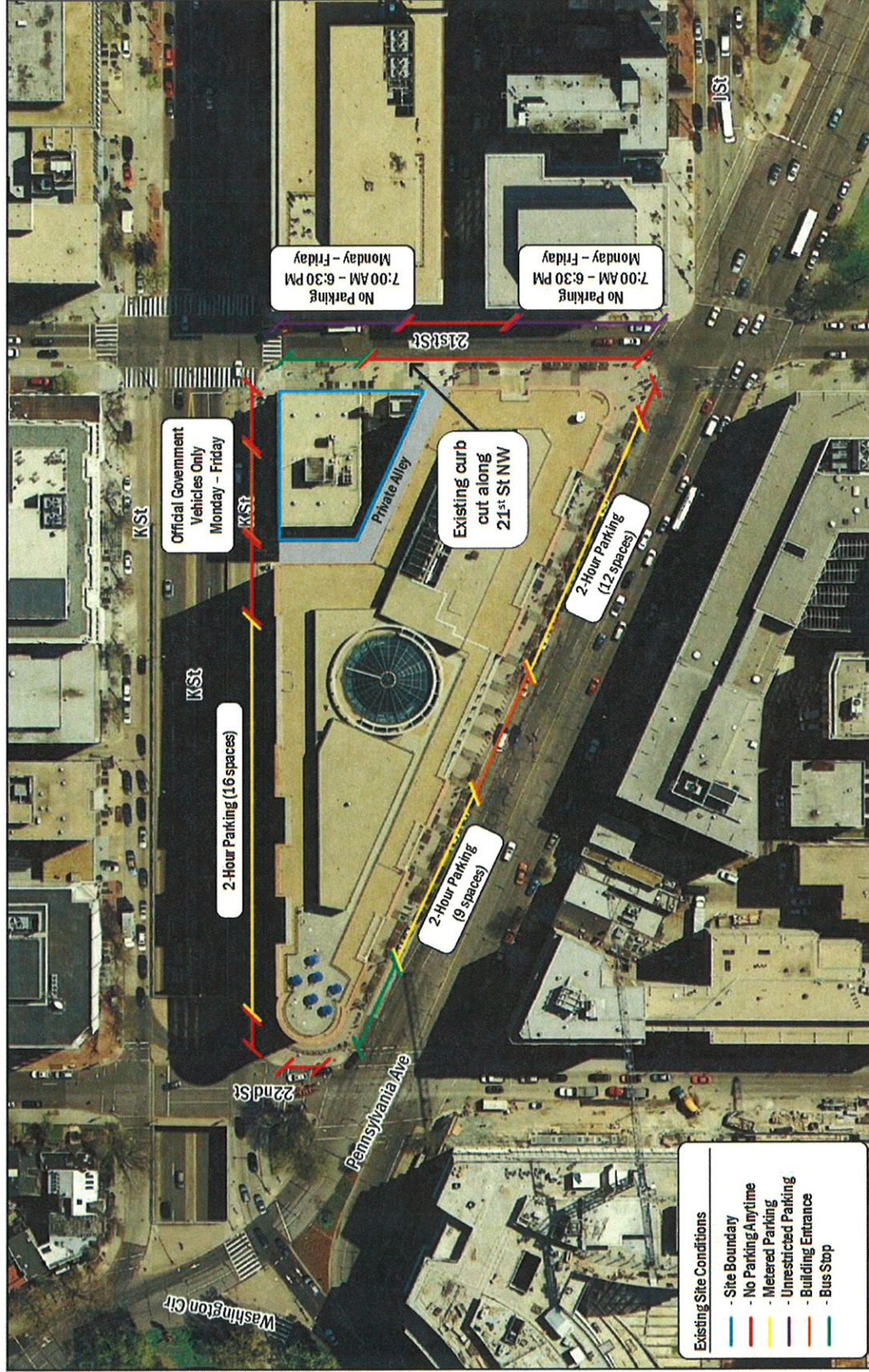


Figure 8: Existing Site

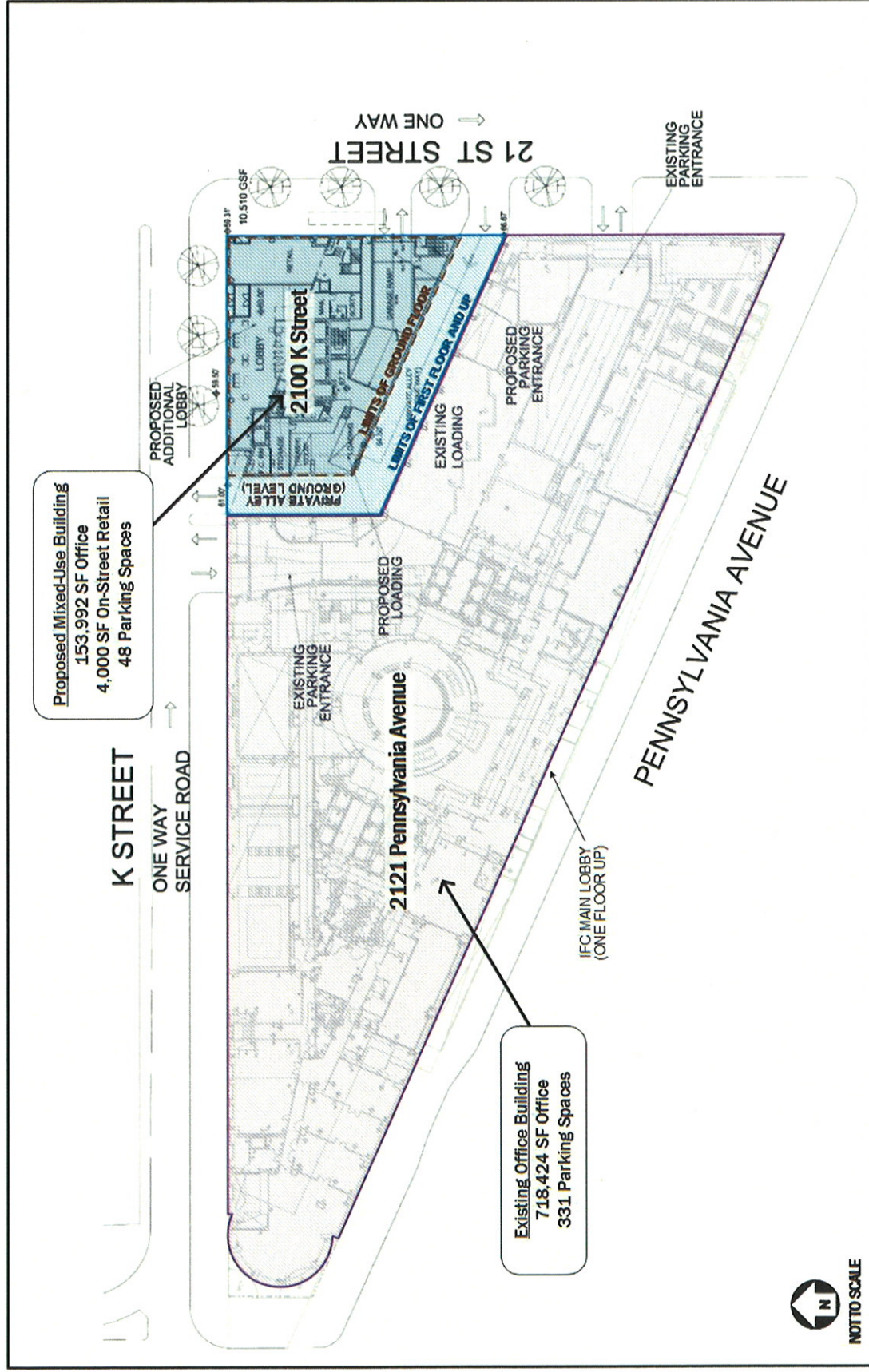


Figure 9: Development Program

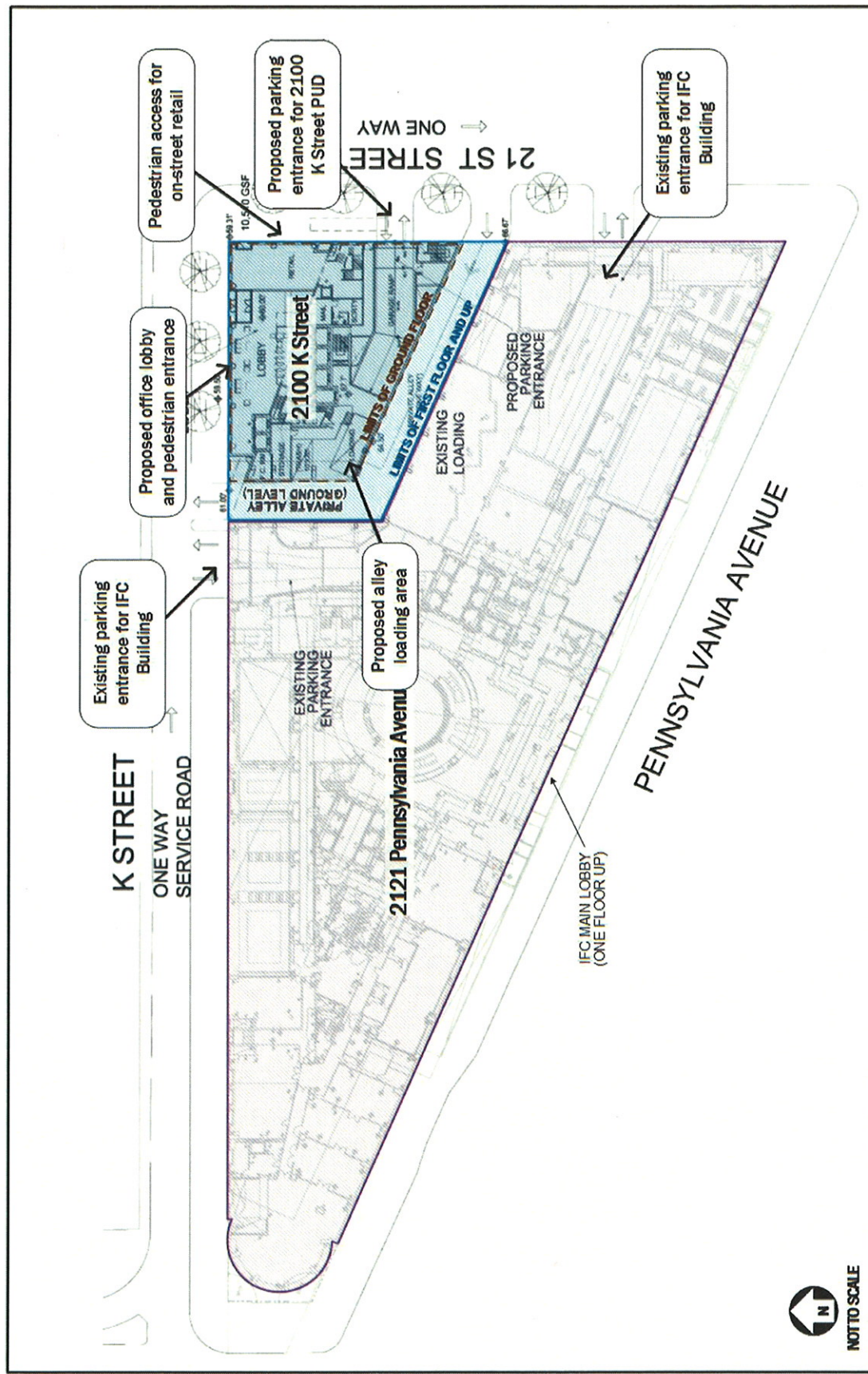


Figure 10: Site Access Plan

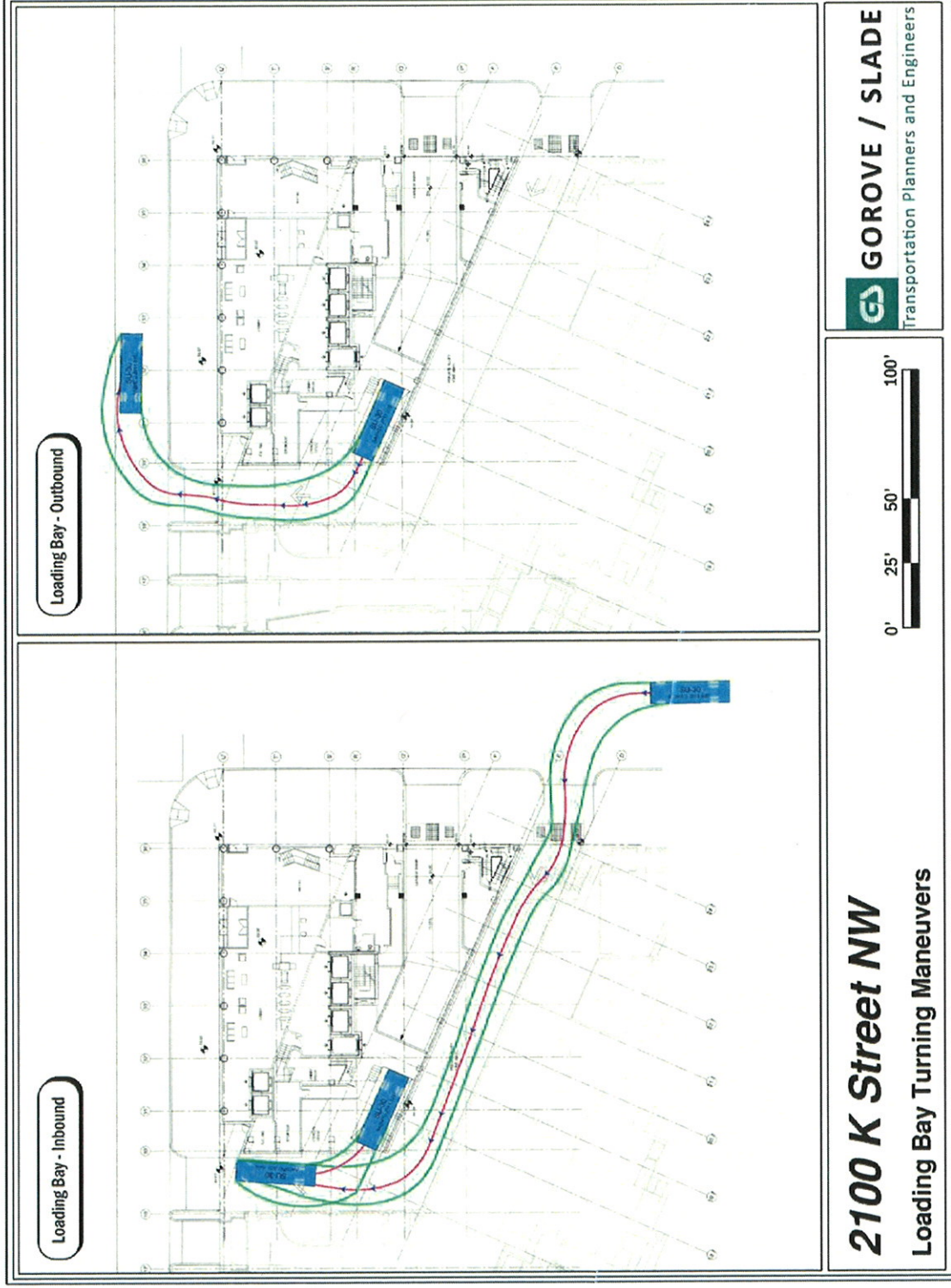


Figure 11: Truck Turning Diagrams (TO BE UPDATED)

2.4 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. As stated in the Plan, the Washington DC, metropolitan region is a leader in developing and implementing TDM strategies. Typical TDM programs include:

- Carpooling/vanpooling, employee shuttles, and improvements that encourage bicycling and walking
- Financial incentives, such as preferential parking for ride-sharers and transit subsidies
- Congestion avoidance strategies, such as compressed work weeks, flexible work schedules and telecommuting

2.4.1 DDOT TDM Expectations for District Development Proposals

The District of Columbia is quickly growing and attracting new residential, commercial, and retail development and redevelopment, which are generating significant additional vehicular traffic to, from, and within the District. In order to meet the District's goals of reducing automobile trips and accommodation travel through the complete transportation network, DDOT is developing a systematic approach and process for integrating TDM in to the development and redevelopment permit process.

This report recommends that detailed TDM plans be submitted at the time of their application submissions. It is highly likely that DDOT TDM expectations and requirements, as well as changes in transportation options (for example, the growth of Capital Bikeshare and the DC Circulator in recent years); will change the landscape of TDM planning.

2.4.2 Proposed TDM Plan

The Transportation Demand Management (TDM) plan for the 2100 K Street PUD is based on the DDOT expectations for TDM programs. The Applicant proposes the following TDM measures:

- The Applicant will comply with zoning requirements to provide bicycle parking/storage facilities. As stated earlier, the Applicant proposes to greatly exceed these minimums.
- The Applicant will provide limited additional parking with the PUD.
- The Applicant will identify a project's TDM Leader (for planning, construction, and operations), and provide DDOT/Zoning Enforcement with annual TDM Leader contact updates.
- The Applicant will post all TDM commitments on IFC intranet, publicize availability to employees, and allow employees to see what commitments have been promised. This will include providing website links to CommuterConnections.com and goDCgo.com and information regarding nearby transit, carsharing, and bikesharing services on the IFC intranet.
- The Applicant will provide reserved spaces for carpools that are conveniently located with respect to the elevators serving the buildings.