

**GOVERNMENT OF THE DISTRICT OF COLUMBIA**  
**DEPARTMENT OF TRANSPORTATION**



**d. Policy, Planning and Sustainability Administration**

**MEMORANDUM**

**TO:** Sara Bardin  
Director, Office of Zoning

**FROM:** Jamie Henson  
Manager, Systems Planning

**DATE:** October 17, 2016

**SUBJECT:** ZC Case No. 16-10 – 400 Florida Avenue NE

A handwritten signature in black ink, appearing to read 'J. Henson', is written over the 'FROM:' field.

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**PROJECT SUMMARY**

EAJ 400 Florida Avenue, LLC (the “Applicant”) proposes a Consolidated PUD and Map Amendment from C-M-1 to C-3-C at 400 Florida Avenue, NE (Sq. 3588, Lots 4, 25 & 803). The development proposal includes:

- 110 residential units
- 164 hotel rooms
- 2,200 square feet of restaurant/retail
- Zero (0) on-site vehicle parking spaces
- 50 off-site vehicle parking spaces at the 1270 4<sup>th</sup> Street, NE garage (ZC 14-07)
- 106 long-term and 16 short-term bicycle parking spaces

**SUMMARY OF DDOT REVIEW**

The District Department of Transportation (DDOT) is committed to achieving an exceptional quality of life in the nation’s capital by encouraging sustainable travel practices, constructing safer streets, and providing outstanding access to goods and services. As one means to achieve this vision, DDOT works through the zoning process to ensure that impacts from new developments are manageable within, and take advantage of, the District’s multimodal transportation network.

The purpose of DDOT’s review is to assess the potential safety and capacity impacts of the proposed action on the District’s transportation network and, as necessary, propose mitigations that are commensurate with the action. After an extensive, multi-administration review of the case materials submitted by the Applicant, DDOT finds:

## Site Design

- Vehicle and loading access is proposed via the rear public alley between 4<sup>th</sup> Street, NE and 5<sup>th</sup> Street, NE, and is in keeping with DDOT's approach to site access;
- No on-site vehicular parking is proposed. Fifty (50) parking spaces are proposed off-site in the garage at 1270 4<sup>th</sup> Street NE (ZC 14-07). Twenty (20) of the off-site spaces are intended to serve residents and 30 spaces will be allocated for hotel visitors.
- The Applicant proposes changes to curb lines on 4<sup>th</sup> and 5<sup>th</sup> Streets NE. The proposal is generally appropriate but details of the final location of the new curb lines will be decided in public space permitting;
- DDOT does not support the proposed lay-bys on both 4<sup>th</sup> and 5<sup>th</sup> Streets NE or valet staging for pick-up/drop-off for the residential portion on 5<sup>th</sup> Street. Instead, residents should utilize the proposed valet for the hotel portion along 4<sup>th</sup> Street NE;
- The Applicant proposes one 30' loading berth and a shared service space and seeks relief from a 55-foot loading berth and two full-time 20' service spaces;
- The development is expected to generate a significant amount of truck trips. The proposed loading berth and loading management plan does not sufficiently address loading impacts; and
- Access and preliminary public space plans are consistent with DDOT's recent Florida Avenue Multimodal Study.

## Travel Assumptions

- The Applicant utilized sound methodology and assumptions to perform the analysis;
- Future residents, hotel guests, employees, and retail patrons are likely to use transit, walking, and bicycling at high rates; thus, auto use is likely to be low; and
- The proposed mode split and subsequent trip generation is consistent with the level of off-site parking provided.

## Analysis

- A total of four intersections are projected to operate at LOS E or F in either the AM or PM peak hour under the Future with Development scenario. However, the proposed development does not significantly impact or contribute to the conditions experienced at these intersections;
- The site is well-served by rail and bus services, as well as a robust network of bicycle facilities;
- Much of the existing pedestrian infrastructure within the vicinity is substandard, specifically the wheel chair ramps and crosswalks. Pedestrian facilities will largely be improved as part of pipeline developments in the vicinity, but some facilities along 4<sup>th</sup> Street and 5<sup>th</sup> Street north of the site on the route to the off-site parking location are expected to remain in their current condition;
- DDOT estimates a high level of truck usage from both residential and hotel uses that will exceed the demand that could be served by only one loading berth.
- The Applicant proposes 106 secure long-term bicycle parking spaces in a bicycle room on the ground floor, including 60 spaces for residents and 46 spaces and a shower/changing area for public use, and 16 short-term bicycle parking spaces, including inverted-U racks. This quantity of short- and long-term bicycle parking spaces exceed the amounts required by District Code, but additional description is needed regarding the operations and eligibility criteria of the public use spaces; and
- The Transportation Demand Management (TDM) plan is sufficient to encourage non-auto travel and supports the level of off-site parking provided.

## **Mitigations**

DDOT has no objection to the requested action with the following conditions:

- Implement the proposed TDM plan outlined in the Applicant's Comprehensive Transportation (CTR);
- Revise the site plan to include one (1) additional loading berth 30' in length;
- Provide interior connections from the long-term bicycle parking rooms to the hotel and residential lobbies;
- Strengthen the loading management plan to include a contingency for trucks larger than 30' in length; and
- Reconstruct the curb ramps and stripe highly visible crosswalks on Morse Street NE at the intersections with 4<sup>th</sup> and 5<sup>th</sup> Street NE to provide pedestrian connections to the off-site parking, if not already constructed by others.

## **Continued Coordination**

Given the complexity and size of the action, the Applicant is expected to continue to work with DDOT on the following matters outside of the zoning process:

- Public space, including curb and gutter, street trees and landscaping, street lights, sidewalks, curb ramps, and other features within the public rights of way, are expected to be designed and built to DDOT standards. Public space plans are required to be compatible with changes from the Florida Avenue Multimodal Study and Union Market Streetscape Guidelines, which may include minor changes in curb line on Florida Avenue NE;
- A curbside management and signage plan, assumed to include multi-space meter installation at the Applicant's expense, consistent with current DDOT policies;
- Revise the site plan to remove the proposed lay-bys from both 4<sup>th</sup> and 5<sup>th</sup> Street NE and valet staging from 5<sup>th</sup> Street NE;
- Construct sidewalks to be at least 8-feet wide on 4<sup>th</sup> and 5<sup>th</sup> Street NE and at least 10-feet wide on Florida Avenue NE;
- Location of the 16 proposed short-term bicycle parking spaces, preferably inverted U-shaped racks, in highly visible locations near building entrances;
- Additional description regarding the operations and eligibility criteria of the public use long-term bicycle parking spaces; and
- A location within the adjacent public space for the proposed Capital Bikeshare station.

## **TRANSPORTATION ANALYSIS**

DDOT requires applicants requesting an action from the Zoning Commission complete a Comprehensive Transportation Review (CTR) in order to determine the action's impact on the overall transportation network. Accordingly, an applicant is expected to show the existing conditions for each transportation mode affected, the proposed impact on the respective network, and any proposed mitigations, along with the effects of the mitigations on other travel modes. A CTR should be performed according to DDOT direction. The Applicant and DDOT coordinated on an agreed-upon scope for the CTR that is consistent with the scale of the action.

The review of the analysis is divided into four categories: site design, travel assumptions, analysis, and mitigations. The following review provided by DDOT evaluates the Applicant's CTR to determine its accuracy and assess the action's consistency with the District's vision for a cohesive, sustainable

transportation system that delivers safe and convenient ways to move people and goods, while protecting and enhancing the natural, environmental, and cultural resources of the District.

## **Site Design**

Site design, which includes site access, loading, and public realm design, plays a critical role in determining a proposed action's impact on the District's infrastructure. While transportation impacts can change over time, the site design will remain constant throughout the lifespan of the proposed development, making site design a critical aspect of DDOT's development review process. Accordingly, new developments must provide a safe and welcoming pedestrian experience, enhance the public realm, and serve as positive additions to the community.

### Site Access

Loading, trash, carshare, and long-term bicycle access are proposed via the rear public alley in keeping with DDOT's approach to site access. The east-west alley connects 4<sup>th</sup> Street and 5<sup>th</sup> Street, NE. The alley is currently 25-feet wide. No on-site parking will be provided for residents or hotel patrons/employees. Instead, the Applicant has an agreement with 1270 4<sup>th</sup> Street NE project (ZC 14-07) to utilize 50 parking spaces in their garage. Additionally, valets are proposed for the hotel on 4<sup>th</sup> Street NE and also for the residential component on 5<sup>th</sup> Street NE. DDOT does not support the proposed valet on 5<sup>th</sup> Street NE serving the residential portion of the site. Residents should use the proposed valet and pick-up/drop-off on 4<sup>th</sup> Street NE. The retail component will be accessed by pedestrians from Florida Avenue NE.

### Loading

DDOT's practice is to accommodate vehicle loading in a safe and efficient manner, while at the same time preserving safety across non-vehicle modes and limiting any hindrance to traffic operations. For new developments, DDOT requires that loading take place in private space and that no back-up maneuvers occur in the public realm. This often results in loading being accessed through an alley network.

The Zoning Regulations require that the Applicant provide at least one (1) 55-foot berth for the residential component and one (1) 30-foot berth for the hotel component plus a 20' service space for each use. As shown in Figure 1 below, the Applicant proposes one 30-foot loading berths to be used for both the hotel and apartments and one shared service/electric vehicle space. The Applicant estimates the site will generate approximately 6-7 trucks per day including trash, mail, hotel deliveries, and residential move-ins. DDOT estimates that twice that figure, approximately 12 to 14 trucks per day, is more likely to be expected. DDOT finds that hotel uses typically generate approximately 6 truck trips daily for items such as linens, beverages, food, paper, and trash. The hotel is proposed to include other loading-intensive uses such as restaurant, professional office space, and a coffee bar. In addition, residents moving in and out of the residential component will also need to utilize a loading berth.

Of note, Florida Avenue does not include any space for curbside uses such as parking or loading, and therefore loading from the curbside is prohibited. All loading activities are required to be accommodated on-site.

The Applicant proposes to address potential loading impacts with a loading management plan with the following elements:

- Designate a loading facility manager, who will coordinate with residents and tenants to schedule deliveries;
- Require all residents and tenants to schedule deliveries utilizing trucks 20-feet or larger; and
- Prohibit loading from the curbside of 4<sup>th</sup> Street, 5<sup>th</sup> Street, and Florida Avenue, NE.

DDOT finds the loading management plan to be insufficient and, due to the expected volume of truck trips, a second 30' loading berth is required to serve the site. In addition, a loading management plan is needed to address accommodations for larger trucks expected to serve the restaurant and coffee bar uses.

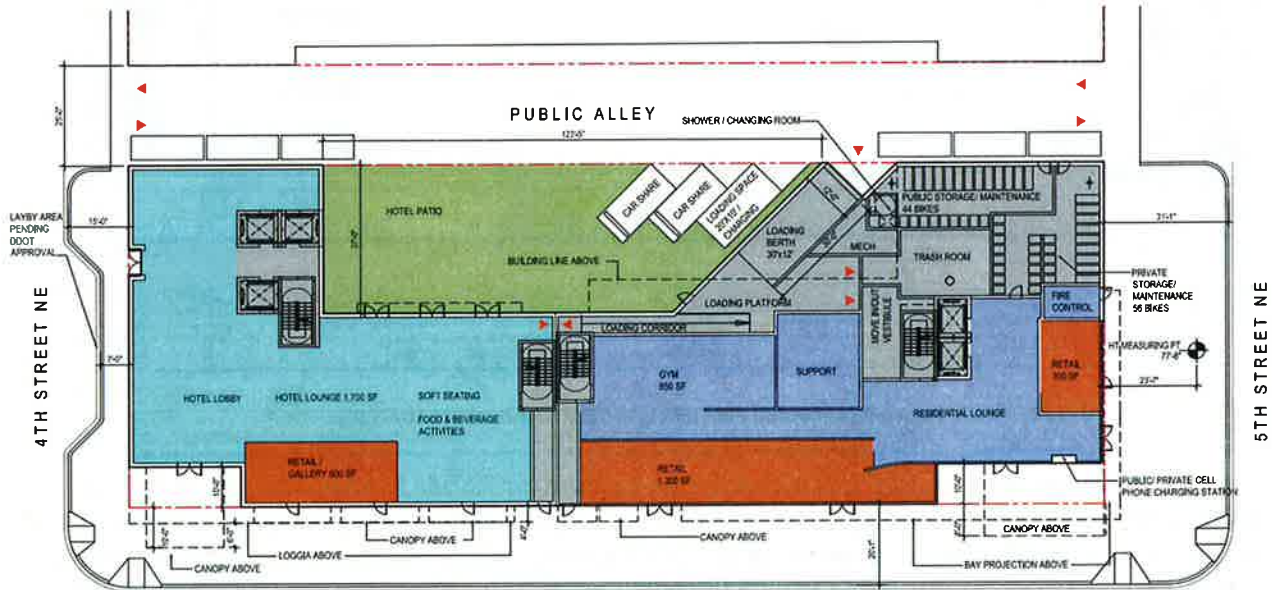


Figure 1 Site Design and Access (Source: SK&I Architecture 10/7/16)

### Streetscape and Public Realm

In line with District policy and practice, any substantial new building development or renovation is expected to rehabilitate streetscape infrastructure between the curb and the property lines. This includes curb and gutters, street trees and landscaping, street lights, sidewalks, and other appropriate features within the public rights of way bordering the site.

All proposed elements in public space, including components shown on the conceptual plan (Figure 2), require public space permits. As the plan has not received public space approval, it may need to be adjusted as it progresses through the public space permitting process. The elements shown in the conceptual plan are generally consistent with approved uses in public space.

The Applicant must work closely with DDOT and the Office of Planning to ensure that the design of the public realm meets current standards and will substantially upgrade the appearance and functionality of the streetscape for public users needing to access the property or circulate around it. In conjunction with the District of Columbia Municipal Regulations, DDOT's *Design and Engineering Manual*, the Florida Avenue Multimodal Safety Study, and streetscape guidelines for the area will serve as the main public realm references for the Applicant. Public space designs will be reviewed in further detail during the public space permitting process. DDOT staff will be available to provide additional guidance during these

processes. DDOT suggests that the Applicant participate in a Preliminary Design Review Meeting (PDRM) to address design related issues prior to the submission of public space permit applications.

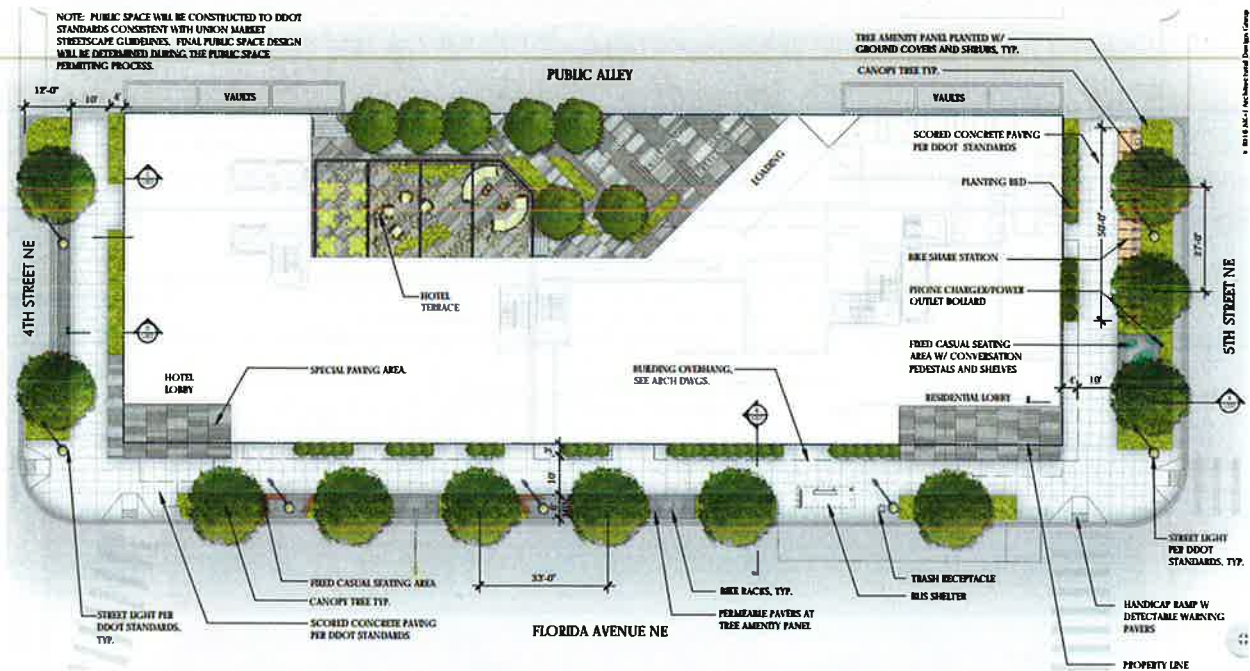


Figure 2 Landscape Plan (Source: SK&I Architecture 10/7/16)

The Florida Avenue Multimodal Study may alter the curblines for Florida Avenue adjacent to the site. The proposed development is generally consistent with the Florida Avenue project. The Applicant will need to coordinate with DDOT as the timeline for the DDOT project and development are better defined to determine how the Applicant should rebuild the public space. Depending on timing, the Applicant may need to rebuild public space based on the current or future curblines. In addition, curblines changes are expected for 4<sup>th</sup> Street and 5<sup>th</sup> Street to accommodate wider sidewalks and narrow vehicle travel lanes to better support land use changes within the Market. The Applicant will be expected to coordinate with DDOT through the public space permitting process to determine and implement the appropriate curblines for all adjacent streets.

While the preliminary public space plans are generally consistent with DDOT standards, there are several considerations that need to be incorporated during the public space permitting process:

- The proposed lay-bys on 4<sup>th</sup> and 5<sup>th</sup> Street NE are not supported by DDOT. Note that some graphics provided by the Applicant show lay-bys on both streets or neither street or other graphics like Figure 2 only show one on 4<sup>th</sup> Street NE;
- As noted above, curblines locations for Florida Avenue, 4<sup>th</sup> and 5<sup>th</sup> Street NE are anticipated to be altered from the existing conditions. The Applicant is expected to coordinate with DDOT through the public space permitting process to determine and implement the appropriate curblines for all adjacent streets;
- The sidewalk width on Florida Avenue, NE should be 10-feet wide and the sidewalks on 4<sup>th</sup> and 5<sup>th</sup> Street NE should be at least 8-feet wide. Note that the Applicant is showing different measurements on different graphics. Some of the provided graphics only show 7-foot sidewalks on 4<sup>th</sup> Street NE while others like Figure 2 show 10-foot sidewalks.
- Determine a location for the proposed Capital Bikeshare station; and

- Reduce the amount of special paving in front of the main entrances to a maximum of twice the width of the doorway and 1/3 the width of the sidewalk within public space.

### Sustainable Transportation Elements

Sustainable transportation measures target to promote environmentally responsible types of transportation in addition to the transportation mode shift efforts of TDM programs. These measures can range anywhere from practical implementations that would promote use of vehicles powered by alternative fuels to more comprehensive concepts such as improving pedestrian access to transit in order to increase potential use of alternative modes of transportation. Within the context of DDOT's development review process, the objective to encourage incorporation of sustainable transportation elements into the development proposals is to introduce opportunities for improved environmental quality (air, noise, health, etc.) by targeting emission-based impacts.

The Applicant is providing one electric car charging station in the rear of the building to be accessed via the public alley. The station should be 240 volts, consistent with the industry standard. At least one station should be provided in the event that the existing space is converted into a second loading berth.

### **Travel Assumptions**

The purpose of the CTR is to inform DDOT's review of a proposed action's impacts on the District's transportation network. To that end, selecting reasonable and defensible travel assumptions is critical to developing a realistic analysis.

### Background Developments and Regional Growth

As part of the analysis of future conditions, DDOT requires applicants to account for future growth in traffic on the network or what is referred to as background growth. The Applicant coordinated with DDOT on the appropriate background developments to include in the analysis. Only projects that were both approved and included an origin or destination within the study area were included in the analysis.

DDOT also requires applicants account for regional growth. This can be done by assuming a general growth rate or by evaluating growth patterns forecast in MWCOC's regional travel demand model. The Applicant coordinated with DDOT on an appropriate measure to account for regional growth that accurately accounted for background growth on the network.

### Roadway Network

DDOT requires applicants to consider future changes to the roadway network. Anticipated roadway changes include improvements due to the Florida Avenue Multimodal Study and the two-way conversion of 4<sup>th</sup> Street and 5<sup>th</sup> Street associated with Florida Avenue Market developments. The Applicant included these changes in the analysis.

### Trip Generation

The Applicant provided trip generation estimates utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual, the Census, and the assumed mode split to convert base vehicular trips to base

person trips using average auto occupancy data and then back to vehicular trips. DDOT finds this method appropriate.

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, and transit. The means of travel is referred to as a ‘mode’ of transportation. A variety of elements impact the mode of travel, including density of development, diversity of land use, design of the public realm, availability and cost of parking, among many others. Mode split assumptions used in the subject analysis were informed by the Census, WMATA’s 2005 Development-Related Readership Survey, and mode splits used for nearby developments. Figure 3 shows the mode splits that were assumed.

Land Use	Mode			
	Auto	Transit	Bike	Walk
Residential	30%	35%	15%	20%
Hotel	50%	35%	5%	10%

Figure 3 Mode Split Assumptions (Source: Gorove/Slade CTR Table 2)

Based on the trip generation and mode split assumptions, Figure 4 shows the predicted number of weekday peak hour trips generated by mode:

Mode	Land Use	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Apartments	4 veh/hr	14 veh/hr	18 veh/hr	15 veh/hr	8 veh/hr	23 veh/hr
	Hotel	18 veh/hr	12 veh/hr	30 veh/hr	18 veh/hr	17 veh/hr	35 veh/hr
	Pass-by	8 veh/hr	5 veh/hr	13 veh/hr	8 veh/hr	7 veh/hr	15 veh/hr
	<b>Total</b>	<b>30 veh/hr</b>	<b>31 veh/hr</b>	<b>61 veh/hr</b>	<b>41 veh/hr</b>	<b>32 veh/hr</b>	<b>73 veh/hr</b>
Transit	Apartments	5 ppl/hr	18 ppl/hr	23 ppl/hr	20 ppl/hr	11 ppl/hr	31 ppl/hr
	Hotel	39 ppl/hr	28 ppl/hr	67 ppl/hr	39 ppl/hr	37 ppl/hr	76 ppl/hr
	<b>Total</b>	<b>44 ppl/hr</b>	<b>46 ppl/hr</b>	<b>90 ppl/hr</b>	<b>59 ppl/hr</b>	<b>48 ppl/hr</b>	<b>107 ppl/hr</b>
Bike	Apartments	2 ppl/hr	8 ppl/hr	10 ppl/hr	9 ppl/hr	4 ppl/hr	13 ppl/hr
	Hotel	6 ppl/hr	4 ppl/hr	10 ppl/hr	6 ppl/hr	5 ppl/hr	11 ppl/hr
	<b>Total</b>	<b>8 ppl/hr</b>	<b>12 ppl/hr</b>	<b>20 ppl/hr</b>	<b>15 ppl/hr</b>	<b>9 ppl/hr</b>	<b>24 ppl/hr</b>
Walk	Apartments	3 ppl/hr	10 ppl/hr	13 ppl/hr	12 ppl/hr	6 ppl/hr	18 ppl/hr
	Hotel	11 ppl/hr	8 ppl/hr	19 ppl/hr	11 ppl/hr	11 ppl/hr	22 ppl/hr
	<b>Total</b>	<b>14 ppl/hr</b>	<b>18 ppl/hr</b>	<b>32 ppl/hr</b>	<b>23 ppl/hr</b>	<b>17 ppl/hr</b>	<b>40 ppl/hr</b>

Figure 4 Peak Hour Trip Generation by Mode (Source: Gorove/Slade CTR Table 3)

The proposed action is expected to generate a moderate number of vehicle, transit, bicycle, and walk trips during the peak hours. The proposed mode split and subsequent trip generation is consistent with the parking provision.

#### Study Area and Data Collection

The Applicant in conjunction with DDOT identified 12 intersections where detailed vehicle counts would be conducted and a level of service analysis would be performed. These intersections are immediately adjacent to the site and include intersections radially outward from the site that have the greatest potential to see impacts in vehicle delay. DDOT acknowledges that not all affected intersections are



included in the study area and there will be intersections outside of the study area which would realize new trips. However, DDOT expects minimal to no increase in delay outside the study area as a result of the proposed action.

The Applicant collected weekday intersection data between 6:30 AM-9:30 AM and 4:00 PM-7:00 PM on multiple dates throughout 2014, 2015, and 2016. DDOT agrees with the time frame and collection dates.

### Analysis Scenarios

Robust analysis should be provided on a set of scenarios comparing build and no-build options in the near- and long-term. Such analysis helps pinpoint an action's impact on the transportation network compared to a no-build scenario. If the proposed development will be approved in stages, with significant trip generation for each stage, then each stage will be examined individually and collectively for the entire action. Ultimately, mitigations will be expected for the action as a whole. These expected mitigations would then be allotted to each development phase as appropriate.

### **Analysis**

To determine the action's impacts on the transportation network, a CTR includes an extensive multi-modal analysis of the existing baseline conditions, future conditions without the proposed action, and future conditions with the proposed development. The Applicant completed their analysis based on the assumptions described above. The Applicant's CTR studied existing (2016) conditions, future with no development (2018 Background) conditions, and future conditions with development (2018 Future).

### Roadway Capacity and Operations

DDOT aims to provide a safe and efficient roadway network that provides for the timely movement of people, goods and services. As part of the evaluation of travel demand generated by the site, DDOT requests analysis of traffic conditions for the agreed upon study intersections for the current year and after the facility opens both with and without the site development or any transportation changes.

Analysis provided by the Applicant shows that four intersections within the study area have approaches that operate at Level of Service (LOS) E or LOS F conditions during at least one peak hour in one of the three study scenarios:

- 4<sup>th</sup> Street & Florida Avenue NE
- 6<sup>th</sup> Street & Florida Avenue NE
- 4<sup>th</sup> Street & M Street NE
- 6<sup>th</sup> Street & Morse Street NE

The additional trips generated by the proposed development have little or no impact on delay and queuing at these intersections.

### Transit Service

The District and Washington Metropolitan Area Transit Authority (WMATA) have partnered to provide extensive public transit service in the District of Columbia. DDOT's vision is to leverage this investment to increase the share of non-automotive travel modes so that economic development opportunities increase with minimal infrastructure investment.

The site is located approximately ¼ mile, roughly a 5 minute walk, from the NoMa-Gallaudet U Metro Station. The station is served by the Red Line.

The site is well-served by high-frequency bus routes. Available bus routes and frequencies are summarized in Figure 5.

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
90,92	U Street-Garfield Line	Weekdays: 4:05AM – 2:04 AM Weekends: 4:05AM – 2:18 AM	7-15 min	<0.1 miles, 1 minute
X3	Benning Road Line	Weekdays: Westbound 6:00AM-8:39AM Eastbound 3:31PM-5:37PM	20-30 min	<0.1 miles, 1 minute

Figure 5 Bus Service (Source: Gorove/Slade CTR Table 8)

These bus routes provide frequent service with peak hour headways less than 10 minutes. The closest bus stop is located in front of the site on Florida Avenue for buses heading in the westbound direction. Across the street, on the south side of Florida Avenue, there is a bus stop for buses traveling eastbound. The site is approximately 0.5 miles from the H Street Streetcar Line and X2 and X9 Metrobus lines.

WMATA’s analysis of bus load factors revealed overcrowding conditions on the 90 Line. A recent study of the route recommended additional express service for this line in the future in order to reduce overcrowding and expand capacity.

Pedestrian Facilities

The District of Columbia is committed to enhance the pedestrian accessibility by ensuring consistent investment in pedestrian infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including pedestrian trips. Walking is expected to be an important mode of transportation for this development.

The Applicant’s inventory of the pedestrian infrastructure in the vicinity identified significant substandard pedestrian facilities in the Market. Developments in the Market (ZC 06-40C, ZC 14-07, and 14-12, 15-24, and 15-24A) will upgrade the pedestrian facilities on 4<sup>th</sup> Street between Florida Avenue and Penn Street, the south side of Neal Place between 4<sup>th</sup> Street and 5<sup>th</sup> Street, and 5<sup>th</sup> Street and 6<sup>th</sup> Street between Morse Street and Penn Street. Deficiencies along Florida Avenue will be repaired as part of ZC 06-40C, ZC 15-01, ZC 15-22 and the Florida Avenue Multimodal Study implementation.

The Applicant proposes to upgrade the pedestrian facilities along Florida Avenue NE and on 4<sup>th</sup> and 5<sup>th</sup> Streets adjacent to the site. It is imperative that pedestrian connections be in place to connect the site to the off-site parking location. Accordingly, DDOT expects that the Applicant will upgrade pedestrian facilities on 4<sup>th</sup> and 5<sup>th</sup> Street NE between the alley immediately north of the site and Morse Street NE to current DDOT standards or streetscape guidelines. Specifically, the curb ramps and crosswalks on Morse Street NE at both 4<sup>th</sup> and 5<sup>th</sup> Street NE should be upgraded.

Bicycle Facilities

The District is committed to enhance bicycle access by ensuring consistent investment in bicycle infrastructure by both the public and private sectors. DDOT expects new developments to serve the

needs of all trips they generate, including bicycling trips. The site is located in close proximity to a southbound bicycle lane on 4<sup>th</sup> Street south of Florida Avenue and a northbound bicycle lane on 6<sup>th</sup> Street south of Florida Avenue and a two-way cycle track north of Florida Avenue. Bicycle lanes on I Street and G Street provide east-west connectivity. The site is approximately two blocks from the Metropolitan Branch Trail. Future plans include a concept for a multiuse trail along New York Avenue that will connect through the Market area via railroad right of way to the west of 4<sup>th</sup> Street.

There are two Capital Bikeshare stations within three blocks of the site: 1) 20 docks – 6<sup>th</sup> Street & Neal Place (next to Union Market), 2) 22 docks – M Street & Delaware Avenue (next to NoMa Metro Station)

The Applicant proposes 106 secure long-term bicycle parking spaces in a bicycle room on the ground floor, which exceeds District Code requirements, including 60 spaces for residents and 46 spaces and a shower/changing area for public use. Additional description is needed regarding the operations and eligibility criteria of the public use spaces. The Zoning Regulations also require a total of 8 short-term bicycle parking spaces adjacent to the site. The Applicant is proposing 16 short-term bicycle parking spaces, specifically inverted U-racks in highly visible locations. Circulation between the bicycle room and each use within the development is unclear. As shown in Figure 1, an interior connection between the bicycle room and the various lobbies is not provided.

### Parking

The overall parking demand created by the development is primarily a function of land use, development square footage, price, and supply of parking spaces. However in urban areas, other factors contribute to the demand for parking, such as the availability of high quality transit, frequency of transit service, proximity to transit, connectivity of bicycle and pedestrian facilities within the vicinity of the development, and the demographic composition and other characteristics of the potential residents.

A minimum of 69 vehicular parking spaces are required by Zoning, including 28 spaces for the residential component and 41 spaces for the hotel component. The Applicant is seeking relief from the parking requirement to provide no on-site parking. Instead, the Applicant proposes 50 off-site parking spaces (20 for residents, 30 for hotel visitors) per an agreement with the owners of 1270 4<sup>th</sup> Street NE (ZC 14-07) to utilize spaces in a parking garage.

### Safety

DDOT requires that the Applicant conduct a safety analysis to demonstrate that the site will not create new, or exacerbate existing safety issues for all travel modes. DDOT asks for an evaluation of crashes at study area intersections as well as a site distance analysis along the public space where there is expected to be conflicts between competing modes (e.g. crosswalks, driveway entrances, etc.).

The Applicant's analysis of DDOT crash data reveals seven (7) intersections within the study area that have a crash rate of 1.0 Million Entering Vehicles (MEV) or higher.

Each of the high crash intersections along Florida Avenue are included within the Florida Avenue improvements currently in the design phase and will be targeted for safety improvements. Converting 4<sup>th</sup> Street and 5<sup>th</sup> Street north of Morse Street to two-way operations will enhance safety of the Morse Street & 4<sup>th</sup> Street, Morse Street & 5<sup>th</sup> Street, and Neal Place & 4<sup>th</sup> Street intersections. The two

intersections along M Street at 4<sup>th</sup> and 5<sup>th</sup> Streets NE will be changed as part of a planned addition of a cycle track on M Street.

Intersection	Rate per MEV	Right Angle	Left Turn	Right Turn	Rear End	Side Swiped	Head On	Parked	Fixed Object	Ran Off Road	Ped. Involved	Backing	Non-Collision	Under/Over Ride	Unspecified	Total
Florida Avenue & 3rd Street NE	<b>2.13</b>	0	2	1	13	22	1	0	0	0	0	1	0	0	1	<b>41</b>
		0%	5%	2%	32%	54%	2%	0%	0%	0%	0%	2%	0%	0%	2%	
Florida Avenue & 5th Street NE	<b>1.31</b>	5	0	1	6	4	3	2	1	0	1	2	0	0	4	<b>29</b>
		17%	0%	3%	21%	14%	10%	7%	3%	0%	3%	7%	0%	0%	14%	
M Street & 4th Street NE	<b>1.28</b>	1	1	0	1	3	0	1	1	0	1	1	0	0	1	<b>11</b>
		9%	9%	0%	9%	27%	0%	9%	9%	0%	9%	9%	0%	0%	9%	
M Street & 5th Street NE	<b>1.33</b>	0	0	0	0	3	0	1	0	0	0	2	0	0	1	<b>7</b>
		0%	0%	0%	0%	43%	0%	14%	0%	0%	0%	29%	0%	0%	14%	
Morse Street & 4th Street NE	<b>6.80</b>	2	1	1	3	11	0	8	1	1	2	10	0	0	2	<b>42</b>
		5%	2%	2%	7%	26%	0%	19%	2%	2%	5%	24%	0%	0%	5%	
Morse Street & 5th Street NE	<b>1.62</b>	1	0	0	0	3	1	0	0	0	0	3	0	0	0	<b>8</b>
		13%	0%	0%	0%	38%	13%	0%	0%	0%	0%	38%	0%	0%	0%	
Neal Place & 4th Street NE	<b>5.07</b>	0	1	0	2	6	0	5	0	1	0	7	0	0	1	<b>23</b>
		0%	4%	0%	9%	26%	0%	22%	0%	4%	0%	30%	0%	0%	4%	

Figure 6 Intersection Safety (Source: Gorove/Slade CTR Table 12)

## Mitigations

As part of all major development review cases, DDOT requires the Applicant to mitigate the impacts of the development in order to positively contribute to the District's transportation network. The mitigations must sufficiently diminish the action's vehicle impact and promote non-auto travel modes. This can be done through Transportation Demand Management (TDM), physical improvements, operations, and performance monitoring.

DDOT preference is to mitigate vehicle traffic impacts first through establishing an optimal site design and operations to support efficient site circulation. When these efforts alone cannot properly mitigate an action's impact, TDM measures may be necessary to manage travel behavior to minimize impact. Only when these other options are exhausted will DDOT consider capacity-increasing changes to the transportation network because such changes often have detrimental impacts on non-auto travel and are often contrary to the District's multi-modal transportation goals.

The following analysis is a review of the Applicant's proposed mitigations and a description of DDOT's suggested conditions for inclusion in the PUD.

### Loading

As noted above, DDOT expects significantly more daily truck traffic at the site than estimated by the Applicant. DDOT finds the loading management plan to be insufficient and, due to the expected volume of truck trips, a second 30' loading berth is required to serve the site. In addition, a loading management plan is needed to address accommodations for larger trucks expected to serve the restaurant and coffee bar uses.

### Pedestrian Facilities

As noted above, the Applicant's inventory of the pedestrian infrastructure in the vicinity identified significant substandard pedestrian facilities exist in the Market. Developments in the Market will upgrade much of these deficient conditions. The Applicant proposes to upgrade the pedestrian facilities along Florida Avenue NE and on 4<sup>th</sup> and 5<sup>th</sup> Streets adjacent to the site. The sidewalk areas on 4<sup>th</sup> Street and 5<sup>th</sup> Street between the alley immediately north of the site and Morse Street NE are not proposed to be improved by the Applicant or other nearby developments. These two block faces are expected to be common pedestrian paths between the site and the off-site parking location, and therefore ensuring adequate pedestrian facilities is vital. Accordingly, DDOT expects that the Applicant will upgrade pedestrian facilities on Morse Street NE at the intersections with 4<sup>th</sup> and 5<sup>th</sup> Street NE to provide highly visible crosswalks and upgraded curb ramps to current standards, if not already constructed by others.

### Transportation Demand Management

As part of all major development review cases, DDOT requires the Applicant to produce a comprehensive Transportation Demand Management (TDM) plan to help mitigate an action's transportation impacts. TDM is a set of strategies, programs, services, and physical elements that influence travel behavior by mode, frequency, time, route, or trip length in order to help achieve highly efficient and sustainable use of transportation facilities. In the District, this typically means implementing infrastructure or programs to maximize the use of mass transit, bicycle and pedestrian facilities, and reduce single occupancy vehicle trips during peak periods. The Applicant's proposed TDM measures play a role in achieving the desired and expected mode split.

The specific elements within the TDM plan vary depending on the land uses, site context, proximity to transit, scale of the development, and other factors. The TDM plan must help achieve the assumed trip generation rates to ensure that an action's impacts will be properly mitigated. Failure to provide a robust TDM plan could lead to unanticipated additional vehicle trips that could negatively impact the District's transportation network.

The Applicant proposes the following TDM elements:

- Designate TDM leaders responsible for organizing and marketing the TDM plan;
- Provide TDM information to new residents in the welcome package materials;
- Provide 106 long-term, 30 short-term bicycle parking spaces, two (2) bike repair stations, and one (1) locker/shower area;
- Unbundle residential parking costs from the price of lease;
- Install a transportation information screen in the residential and hotel lobbies;
- Provide 1-year membership of Capital Bikeshare or carsharing service for the first year of operation of the residential component;
- Provide two (2) parking spaces in the rear alley for carsharing service;
- Restrict residents of the building from obtaining a Residential Parking Permit (RPP) under penalty of lease termination to discourage car ownership; and
- Install a new Capital Bikeshare station and fund the operations and maintenance for one year.

DDOT finds the proposed TDM plan sufficiently robust to justify the assumed modes splits and support the level of proposed off-site vehicle parking.

JH:jr & az

