


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



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Sara Bardin
Director, Office of Zoning

FROM: Samuel Zimbabwe 
Associate Director

DATE: March 16, 2015

SUBJECT: ZC Case No. 14-07 – 1270 4th Street NE (EDENS Shapiro)

PROJECT SUMMARY

1250 4th St EDENS, LLC (the “Applicant”) proposes a mixed-use development within the Florida Avenue Market (the “Market”) at the premises 1270 4th Street NE (Sq. 3587, Parcels 129/95 & 129/96). The development is proposed to contain two phases:

- Phase 1, “South Building”: A Consolidated Planned Unit Development (PUD) and Zoning Map Amendment consisting of:
 - 29,042 square feet of ground floor retail
 - 415-510 residential units
 - 400-550 vehicle parking spaces
- Phase 2, “North Building”: A First Stage PUD consisting of:
 - 12,000 square feet ground of floor retail
 - 130-170 residential units
 - 80-200 vehicle parking spaces

The South Building and North Building are separated by a proposed extension of Neal Place, which is proposed to be used as a park on an interim basis prior to being opened as a street.

SUMMARY OF DDOT REVIEW

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 site access is proposed from an existing alley owned by the District, but is not DDOT right-of-way.
- A Neal Place extension is proposed between 4th Street and the alley, and is proposed to be used as a park use on an interim basis. The ultimate build out of the street would fulfill the street connection envisioned in the Small Area Plan for the area, help support future development of the Market, and disperse site-generated traffic.
- 4th Street and 5th Street are proposed to be converted from one-way couplets to two-way operations in conjunction with the 1309-1329 5th Street PUD (ZC 14-12);
- The loading management plan as proposed is acceptable;
- A non-standard curb-less streetscape is proposed, which will be subject to the design guidelines process committed to as part of ZC 14-12. In the absence of guidelines, the Applicant will be required to install a streetscape that complies with DDOT's standards;
- A series of canopies are proposed that do not meet regulations for canopies and should be revised to comply with regulations. Revisions of the canopies are likely to alter the design of the building. The final design of the canopies will be addressed during public space permitting; and
- The Applicant proposes to develop a curbside management plan for 4th Street between Florida Avenue and Penn Street.

Travel Assumptions

- To provide a conservative analysis of vehicle impacts, the analysis accounted for the trips generated by the development program and the retail parking reservoir under the South Building;
- The action is expected to generate a disproportionately high number of new vehicle trips, largely as the result of the supply of vehicle parking spaces proposed for the project, along with a large number of transit and pedestrian trips and a moderate number of bicycle trips;
- 480 - 750 vehicle parking spaces are proposed for the site at full build out. Of the 400-550 vehicle parking spaces proposed for Phase 1, approximately 195-255 spaces are intended to serve off-site uses within the Market; and
- Significant pedestrian activity is expected between the on-site parking and the off-site uses.

Analysis

- The Applicant utilized sound methodology to perform the analysis;
- Three intersections are negatively impacted by the proposed development and queuing issues were identified at five intersections;
- The site is well-served by rail and bus services as well as a robust network of bicycle trails and paths;
- Current pedestrian facilities in the Market are substandard but will be improved as part of the subject development and other developments in the Market; and
- The proposed conversion of 4th Street/Morse Street intersection to a four-way stop controlled intersection would likely improve safety conditions;

Mitigations

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

- Triggers for Neal Place extension - DDOT finds the triggers proposed by the Applicant to be a good basis for transitioning from an interim use to the final condition, but adjustments are needed. The following triggers should be established: The Applicant shall secure the necessary funds in an escrow account and as soon as possible but within twelve (12) months of the earlier of the following events, the Applicant shall design and construct the final Neal Place extension improvements as shown on the Final Neal Place Extension Plan and open the Neal Place extension to vehicular traffic. When:
 - After review of a Monitoring Study that demonstrates queuing extending more than 150' on 4th Street south from Morse Street toward Florida Avenue on more than one (1) observation day, and DDOT concludes and communicates to the Applicant that the Neal Place Extension is needed to alleviate traffic queuing conditions at 4th and Morse Street; or
 - DDOT communicates to the Applicant that all required permits have been issued for the proposed 3rd Street NE as a public or private street, alley, or driveway connection serving vehicular traffic; or
 - DDOT communicates to the Applicant that all required permits have been issued for Neal Place to the immediate west as a public or private street, alley, or driveway connection serving public vehicular traffic; or
 - After 5 years from the issuance of the certificate of occupancy for the South Building.
- *Transportation Demand Management* - As proposed, the TDM plan is a good basis for encouraging non-auto travel. However, some additional elements would further strengthen the plan:
 - A transit information screen should be installed in the South Building and North Building's residential lobby, for a total of two screens;
 - Provide each new resident for the first year with an annual membership for a car-sharing or bike-sharing program, up to a maximum of \$35,000;
 - Provide information and website links to commuterconnections.com, goDCgo.com, and other transportation services on developer and property management websites; and
 - Unbundle parking costs from the price of lease or purchase, and price no less than charges of the lowest fee garage within one-quarter mile;

Additional mitigations measures might be necessary as part of the North Building Stage 2 PUD.

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:

- The development of streetscape guidelines for the Market as described in ZC 14-12. The scope of work for the guidelines shall be developed in coordination and approved by DDOT along with the final guidelines proposal for the area;
- Public space, including curb and gutter, street trees and landscaping, street lights, sidewalks, and other features within the public rights of way, are expected to be designed and built to the streetscape guidelines, or in the absence of guidelines, to DDOT standards;
- The location of utility vaults are expected to be accommodated on private property;

- Operational and geometric changes being pursued such as changing intersection control and roadway directionality along with implementing pedestrian facilities will be subject to public space permitting;
- 4th Street / Morse Street All-Way Stop – The Applicant proposes to convert the intersection from two-way stop controlled to all-way stop control, which will be subject to public space permitting;
- The development of a curbside management plan for 5th Street between Morse Street and Penn Street. The plan, which must address needs identified in this Report, will be determined as part of the public space permitting process;
- Compatibility between and sequencing with other developments in the Market. The substantial amount of anticipated development in the Market will require close coordination on various aspects of the projects, including implementation of mitigations, construction staging, and traffic control plans;
- For the subsequent North Building Stage 2 PUD submission, DDOT expects consistency with the Stage 1 analysis, and an updated CTR might be necessary; and
- Additional mitigations measures might be necessary as part of the North Building Stage 2 PUD.

TRANSPORTATION ANALYSIS

DDOT requires applicants who request PUD approval from the Zoning Commission perform a Comprehensive Transportation Review (CTR) in order to determine the PUD’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

The site is located in the Florida Avenue Market, which is home to many wholesale, production, and warehousing business that generate significant numbers of truck trips and loading activities.

Vehicle site access for both phases of the project is proposed from an alley, in compliance with DDOT standards. Of note, the alley is controlled by the District through the Deputy Mayor for Planning and Economic Development, and is not DDOT right-of-way. See Figure 1 below for details.

The Florida Avenue Market Small Area Plan (SAP) identified an east-west connection in the vicinity of the site. The extension was envisioned as part of an expanded road network to serve development within the Market, particularly developments to the west of 4th Street. The Applicant proposes a 50' private extension of Neal Place through the site from 4th Street to the alley immediately to the west of the site. Such a connection is in keeping with the SAP. The Applicant proposes an interim park in the Neal Place extension that would transition to a street in the future. The Neal Place extension is discussed in greater detail in the Analysis and Mitigations sections.

The Applicant proposes to convert 4th Street and 5th Street from one-way couplets to two-way operations as part of the subject PUD and the 1309-1329 5th Street PUD (ZC 14-12). Conversion of these streets to two-way could improve circulation within the Market.

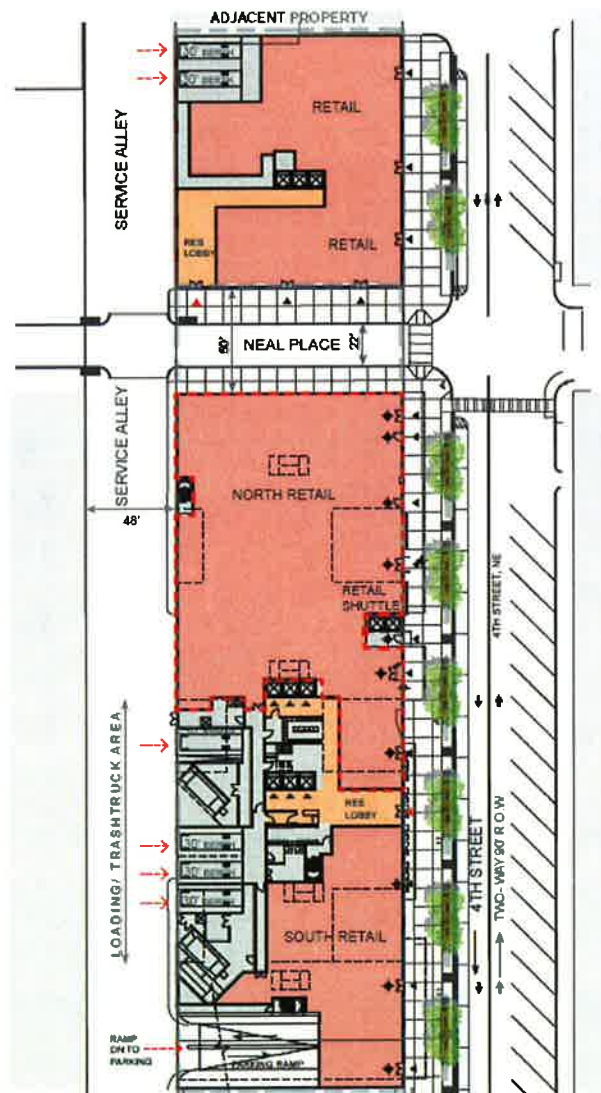


Figure 1 Site Design and Access (Source: Gorove/Slade)

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.

Loading for both buildings is proposed via the alley. The loading facilities are designed such that loading is accommodated with front-in/front-out movements in compliance with DDOT standards. The Applicant's proposed loading locations comply with DDOT's loading requirements.

In order to ensure safe pedestrian activity in the interior market and that the site's loading activities are manageable within the context of the Florida Avenue Market, the Applicant has proposed the following Loading Management Plan:

- Designate a loading facility manager, who will coordinate with residents and retail vendors to schedule deliveries; and
- Require that all residential and retail tenants schedule deliveries that utilize the loading dock.

DDOT finds that the Loading Management Plan as proposed sufficiently addresses loading impacts.

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.

The current streetscape within the Market lacks standard pedestrian infrastructure, street trees, and other elements of a streetscape that promote safe and pleasant pedestrian travel, which reflects the industrial nature of the Market. Significant improvements to the streetscape are necessary to accommodate the anticipated increase in non-auto activity.

The Applicant proposes a non-standard streetscape that features a curb-less street section, wide sidewalks, and new street trees. The Applicant has been working closely with DDOT on the proposed streetscape to determine if the curb-less section can be acceptable to DDOT and as part of the 1309-1329 5th Street PUD (ZC 14-12) has committed to developing streetscape guidelines for the Market in close coordination with DDOT and other District agencies.

The Applicant is expected to continue to work closely with DDOT and other agencies to ensure that the design of the public realm addresses concerns with the curb-less streetscape and will substantially upgrade the appearance and functionality of the streetscape for public users needing to access the property or circulate around it. DDOT is committed to continuing conversations related to the curb-less streetscape; however, if the curb-less streetscape cannot be permitted, the Applicant will be required to install a streetscape that complies with DDOT's standards. Final design of the streetscape will be determined through the public space permitting process.

The Applicant's plans show a series of canopies extending laterally along a significant portion of the building façade and projecting between 7' - 10' from the building façade. The canopies, as shown, do not meet regulations for canopies and should be revised to comply with regulations. Revisions of the canopies are likely to alter the design of the building. The final design of the canopies will be addressed during public space permitting.

The "Retail Tenant Storefront and Signage Design Guidelines" (Exhibit 31B) propose guidelines affecting individual retailer's façades. DDOT notes that any storefront or signage design affecting public space, including door swings, signage in public space, and sidewalk cafés, should meet District regulations and will be subject to public space permitting.

Curbside Management

Curbside space is a limited commodity with multiple competing demands placed upon it. This area is commonly utilized for vehicle parking in the District. However, in more densely populated areas, this space tends to serve a diverse set of uses such as commercial loading zones, motor coach passenger loading areas, bicycle parking corrals, bikeshare stations, and building entrance zones.

The existing curbside uses in the Market area are reflective of the Market's current wholesale business focus. The dominant curbside use is loading. Most truck operations in the Market involve trucks 24' or shorter parking perpendicular to the curb and loading from the front of the properties. Signage and road striping to manage curbside uses are largely lacking within the area.

The proposed development will have different curbside needs compared to the wholesale businesses. These needs are reflected in the proposed streetscape plan that prioritizes wider sidewalks and street trees over loading space. As the Market transitions from a wholesale business district to a mix of wholesalers, retail, office, and residential, the curbside management plan must be adapted and still respect wholesaler needs. Accordingly, a curbside management plan must address the following needs:

- Accommodate 24' or shorter trucks with perpendicular loading operations adjacent to and across from the Site;
- Make provisions for larger trucks that cannot be accommodated in the perpendicular loading spaces; and
- Provide on-street vehicle parking spaces.

The Applicant's plans show curbside uses that includes angled back-in parking spaces along the east side of 4th Street. DDOT has not approved the proposed curbside uses as shown and does not support angled back-in parking spaces because of its impact to wholesaler operations. The Applicant has agreed to coordinate with DDOT on the development of a curbside management plan for the entirety of 4th Street between Florida Avenue and Penn Street. The details of the plan, which must account for the needs identified above, will be determined as part of the public space permitting process.

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 reasonably expected to be approved and constructed were included in the analysis. Three background developments – 1309-1329 5th Street PUD (ZC 14-12), Gateway Market, and Washington Gateway – were included. Given public and private sector interest in developing the Market, it is likely that additional background developments may be added prior to the delivery of the North Building. Additional analysis for the North Building’s Stage 2 PUD may be required to account for any new background developments expected between the baseline year and 2020.

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 regional growth rates based on volume projections at two different time periods within the model.

Off-Street Parking

The overall parking demand created by the development is primarily a function of land use, development square footage, and price/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, and proximity to transit.

A total of 480-750 vehicle parking spaces are proposed for the site at full build out, including 400-550 in the South Building and 80-200 in the North Building. Approximately 250-310 of the parking spaces in the South Building will be reserved for retail uses, in excess of the approximately 35 parking spaces required by zoning. The Applicant intends to use the remaining 215-275 retail parking spaces as a parking reservoir for retail shoppers visiting other sites within the Market. The remaining 150-240 will be reserved for residential uses, in excess of the approximately 104-128 spaces required by zoning.

DDOT has concerns with the overall high level of parking provision to be provided within the Market area. As shown in Table 1 below, over 800 spaces in excess of the required number of parking spaces are proposed. The Applicant’s justification for the high parking provision is to provide parking reservoirs to serve properties in the Market’s “spine” (between Neal Place, Morse Street, 4th Street, and 5th Street) that are small and may not have the ability to provide the parking needed to serve those sites and to replace street parking spaces lost to the reconfiguration of the ROWs within the Market from perpendicular parking to parallel parking. High levels of parking provision, however, serve to induce additional vehicle trips whereas constrained and properly managed parking can encourage a more balanced mix of travel options that include transit, walking, biking, and driving. Providing parking in excess is likely to result in high automobile mode splits for the Market, potentially leading to congestion within and adjacent to the Market. High vehicle volumes can detract from the vision for high transit, bike, and pedestrian activity as laid out in various District policies and documents like the Florida Avenue Market Small Area Plan, Comprehensive Plan, moveDC, and the Sustainable DC Plan. DDOT notes that the Applicant has assumed an auto-mode split commensurate with the level of parking provision and that the vehicle traffic projections in the CTR reasonably account for the high level of parking.

Table 1 Parking at Edens Properties

Development	Req'd Parking Spaces	Proposed/Approved Parking Spaces (max)	# of Additional Spaces Provided	% of Req'd Space Provided
Gateway Market	85	215	130	253%
Angelika	301	475	174	158%
Shapiro	225	750	517	333%
TOTAL	611	1440	821	236%

Trip Generation

The Applicant applied a multifaceted trip generation methodology in order to account for the complexities associated with the proposed parking reservoir. For the South Building, the Applicant utilized a combination of Institute of Traffic Engineers (ITE) land use codes (Apartment – Code 220) and ITE’s *Traffic Engineering Handbook, 6th Edition* guidance for projecting trip generation based on the number of retail spaces in the South Building. The Handbook provides guidance for projecting trip generation based on the number of retail parking spaces in the South Building. For a shopping center, the Handbook states that approximately 15% of spaces will turn over per hour in the morning and a little over half of the spaces will turn over in a given evening peak hour. Given these percentages and the known quantity of retail parking the peak hour trip generation was determined.

For the North Building, the Applicant utilized the following ITE land use codes to account for trip generation from the development program itself:

- Residential: Apartment (Code 220)
- Retail: Shopping Center (Code 820)

Of note, the Applicant did not apply the retail parking methodology utilized for the South Building, and therefore the CTR does account for trip generation from additional retail parking spaces. If the Phase 2 PUD site plans for the North Building include an additional retail parking reservoir (in excess of the 25 spaces assumed in the CTR), DDOT will require a revised CTR for the Phase 2 review that matches the methodology used for Phase 1.

The Applicant utilized mode splits used in the Gateway Market (ZC 06-40C) CTR. Of note, the Applicant did not claim any vehicle trip reductions from internal capture, pass-by, or diverted link trip percentages as these are captured in the peak hour mode splits. Based on the trip generation and mode split assumptions, the predicted level of weekday peak hour trip generation is shown in Figure 2.

The action is expected to generate a disproportionately high number of new vehicle trips, largely as the result of the supply of vehicle parking spaces proposed for the project, along with a large number of transit and pedestrian trips and a moderate number of and bicycle trips

Peak Hour Trip Generation - South Building

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Residential (520 Units)						
Auto	27 veh/hr	104 veh/hr	130 veh/hr	99 veh/hr	53 veh/hr	152 veh/hr
Transit	23 ppl/hr	92 ppl/hr	115 ppl/hr	88 ppl/hr	46 ppl/hr	134 ppl/hr
Bike	5 ppl/hr	19 ppl/hr	24 ppl/hr	18 ppl/hr	10 ppl/hr	28 ppl/hr
Walk	2 ppl/hr	7 ppl/hr	9 ppl/hr	7 ppl/hr	4 ppl/hr	11 ppl/hr
Retail (33,600 SF)						
Transit	6 ppl/hr	4 ppl/hr	10 ppl/hr	18 ppl/hr	20 ppl/hr	38 ppl/hr
Bike	4 ppl/hr	2 ppl/hr	6 ppl/hr	11 ppl/hr	12 ppl/hr	22 ppl/hr
Walk	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	3 ppl/hr	7 ppl/hr
Retail (350 parking spaces)						
Auto	67 veh/hr	42 veh/hr	109 veh/hr	189 veh/hr	203 veh/hr	392 veh/hr
Total						
Auto	93 veh/hr	146 veh/hr	239 veh/hr	288 veh/hr	256 veh/hr	544 veh/hr
Transit	29 ppl/hr	96 ppl/hr	125 ppl/hr	106 ppl/hr	66 ppl/hr	172 ppl/hr
Bike	9 ppl/hr	21 ppl/hr	30 ppl/hr	29 ppl/hr	22 ppl/hr	50 ppl/hr
Walk	3 ppl/hr	8 ppl/hr	11 ppl/hr	10 ppl/hr	7 ppl/hr	18 ppl/hr

Table A-1: Peak Hour Trip Generation - North Building

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Residential (160 Units)						
Auto	9 veh/hr	33 veh/hr	42 veh/hr	35 veh/hr	19 veh/hr	53 veh/hr
Transit	8 ppl/hr	29 ppl/hr	37 ppl/hr	31 ppl/hr	16 ppl/hr	47 ppl/hr
Bike	2 ppl/hr	6 ppl/hr	8 ppl/hr	7 ppl/hr	3 ppl/hr	10 ppl/hr
Walk	1 ppl/hr	2 ppl/hr	3 ppl/hr	3 ppl/hr	1 ppl/hr	4 ppl/hr
Retail (12,000 SF)						
Auto	5 veh/hr	4 veh/hr	8 veh/hr	15 veh/hr	16 veh/hr	32 veh/hr
Transit	2 ppl/hr	2 ppl/hr	4 ppl/hr	7 ppl/hr	7 ppl/hr	14 ppl/hr
Bike	1 ppl/hr	1 ppl/hr	2 ppl/hr	4 ppl/hr	4 ppl/hr	8 ppl/hr
Walk	0 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr
Total						
Auto	14 veh/hr	36 veh/hr	50 veh/hr	50 veh/hr	35 veh/hr	85 veh/hr
Transit	10 ppl/hr	31 ppl/hr	41 ppl/hr	38 ppl/hr	23 ppl/hr	61 ppl/hr
Bike	3 ppl/hr	7 ppl/hr	10 ppl/hr	11 ppl/hr	7 ppl/hr	18 ppl/hr
Walk	1 ppl/hr	2 ppl/hr	4 ppl/hr	4 ppl/hr	2 ppl/hr	6 ppl/hr

Figure 2 Peak Hour Vehicle Trip Generation (Source: Gorove/Slade)

Study Area and Data Collection

The Applicant in conjunction with DDOT identified nine intersections where level of service and vehicle queuing analysis would be performed. These intersections are immediately adjacent to the site and include intersections radially outward from the site that has the greatest potential to see moderate to significant increases in vehicle delay.

The Applicant utilized some data collected as part of the Gateway Market PUD and collected additional intersection data in fall 2014. In general, DDOT agrees with the time frame and collection dates. None of the collection dates occurred during Congressional recess or outside of the DC Public School calendar.

Roadway Improvements

DDOT is currently studying the area in the vicinity of the site as part of the *Florida Avenue Multimodal Study*. The study is likely to recommend changes to the road network in order to better and more safely accommodate multiple modes of travel. The Applicant coordinated with DDOT on the roadway

conditions to assume in the background and future scenarios, which included likely recommendations for Florida Avenue and 6th Street cross sections from the study. The conversion of 4th Street and 5th Street from one-way to two-way operations was assumed in the future scenarios.

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.

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 three intersections within the study area operate under failing conditions in the analysis years during one or more peak periods as measured by Level of Service (LOS):

- 4th Street/Penn Street NE & New York Avenue NE
- 4th Street/Morse Street NE
- 6th Street/Florida Avenue NE

Of these intersections, the 4th Street/Morse Street NE intersection operates at unacceptable conditions due to the subject development. The 4th Street/Penn Street NE & New York Avenue NE and 6th Street/Florida Avenue NE intersections operate at below acceptable levels of delay under existing conditions and are worsened by the development.

In addition, the Applicant identified five intersections – 4th Street/Penn Street NE & New York Avenue NE, 4th Street/Morse Street NE, Florida Avenue/5th Street NE, Florida Avenue/6th Street NE, Florida Avenue/4th Street NE – with queuing issues. A number of signal timing adjustments and minor intersection improvements are suggested. DDOT will review the proposed signal timing changes to determine their appropriateness during permitting.

The site is expected to generate many eastbound left turns from Florida Avenue to 4th Street. These vehicles would then turn left at the 4th Street/Morse Street intersection in order to access the parking garage via the alley. The high volume of left turning vehicles, coupled with the proposed conversion of the 4th Street/Morse Street intersection to four-way stop controlled, could cause vehicle queuing to exceed the available storage on 4th Street. The Applicant provided analysis showing that under conservative assumptions (i.e. high rates of walking and bicycling, which would require left-turning vehicles to wait for pedestrians and cyclists), queuing may extend to Florida Avenue, causing capacity and safety concerns at the 4th Street/Florida Avenue intersection.

DDOT acknowledges that not all intersections which will experience new trips are included in the study area. In particular, the study area did not include the New York Avenue/Florida Avenue intersection, which currently experiences high vehicle volumes especially at peak times. It is possible that delays and

queuing at this intersection could serve to artificially constrain traffic volumes at intersections within the study area.

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 northern edge of the site is located approximately 0.3 miles, roughly a 7 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. No bus stops are currently located within the interior of the Market, but several exist along the perimeter on Florida Avenue. Bus routes include:

- 90, 92, 93 – U Street – Garfield Line
- X3 – Benning Road Line

These bus routes provide frequent service with peak hour headways less than 10 minutes. The closest bus stops are 0.2 miles away at 5th Street/Florida Avenue. The site is approximately 0.5 miles from the H Street Streetcar Line.

WMATA's analysis of bus load factors revealed overcrowding conditions on the 90 Line. A recent study of the route recommended a WMATA Express route for this line in the future.

While the site is well served by transit, no transit options serve the site directly. Transit riders must walk to/from the site and the rail station or bus stop. Ensuring adequate pedestrian facilities to connect site visitors with transit options is critical for making transit accessible and realizing the anticipated mode splits.

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. Vehicle and transit trips are likely to involve a walking component due to the proposed parking reservoir in the subject development and distances from the transit stops, further adding to the importance of walking. The pedestrian desire lines, particularly for transit riders and those using the parking reservoir, would be along 4th Street north of Florida Avenue and Neal Place between 4th Street and 5th Street.

Significant substandard pedestrian facilities exist in the Market. Other developments in the Market will upgrade the pedestrian facilities on 4th Street between Florida Avenue and Morse Street, the south side of Neal Place between 4th Street and 5th Street, and along the 5th Street and 6th Street frontages adjacent to ZC 14-12. Such connections between the subject site and other pipeline developments in the Market will allow adequate and safe pedestrian connections between the subject site and other destinations in the Market. Pedestrian infrastructure within the Market will continue to be improved as the area redevelops.

Bicycle Facilities

The District is committed to enhance bicycle access by ensuring consistent investment in bicycle 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 bicycling trips. The closest Capital Bikeshare station with 23 docks is located two blocks from the site at the 6th Street/Neal Place intersection. The site is located in close proximity to a southbound bicycle lane on 4th Street south of Florida Avenue and a northbound bicycle lane on 6th Street south of Florida Avenue. DDOT recently installed a two-way cycle track on 6th Street north of Florida Avenue. 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 4th Street.

The Applicant is required to provide between 147-179 long-term bicycle parking spaces for the South Building and an additional 48-71 spaces for the North Building, depending on the ultimate number of residential units. Site plans for both buildings did not specify locations for long-term bicycle parking facilities. The Applicant also proposes 20 short-term bicycle parking spaces adjacent to the South Building subject to DDOT approval.

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 as 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 intersections within the study area that have a crash rate of 1.0 Million Entering Vehicles (MEV) or higher. A significant portion of the crashes are designated as “rear end” or “side swipe” crashes.

Intersection	Rate per MEV	Right Angle	Left Turn	Right Turn	Rear End	Side-Striped	Head On	Parked	Fixed Object	Ran Off Road	Ped. Involved	Backing	Non-Collision	Under/Over Ride	Unspecified	Total
4th Street/Penn Street & New York Avenue NE	2.94	4	10	5	32	27	4	1	1	3	0	3	2	0	1	93
		4%	11%	5%	34%	29%	4%	1%	1%	3%	0%	3%	2%	0%	1%	
Neal Place & 4th Street NE	4.01	0	2	0	4	4	0	0	0	0	1	2	0	0	1	14
		0%	14%	0%	29%	29%	0%	0%	0%	0%	7%	14%	0%	0%	7%	
Morse Street & 4th Street NE	6.11	2	1	0	2	7	1	3	0	2	2	3	0	0	3	26
		8%	4%	0%	8%	27%	4%	12%	0%	8%	8%	12%	0%	0%	12%	
Florida Avenue & 3rd Street NE	2.96	6	5	2	18	11	0	0	1	0	1	0	0	0	4	48
		13%	10%	4%	38%	23%	0%	0%	2%	0%	2%	0%	0%	0%	8%	

Figure 3 Elevated Crash Rate Intersections by Crash Type (Source: Gorove/Slade)

The Florida Avenue Multimodal Study will recommend geometric and operational changes to promote safety in the broader study area, particularly on Florida Avenue. Additionally, changes within the Market associated with new developments such as changing 4th Street and 5th Street to two-way operations, improving signage and striping, and a decrease in loading activities will serve to improve safety.

In addition, the Applicant proposes to convert the 4th Street/Morse Street intersection from two-way stop sign controlled to all-way stop sign controlled. The Applicant provided a warrant analysis to justify

the conversion, which will be further reviewed by DDOT during permitting. While the conversion to a four-way stop control is likely support the Market's transition to a more mixed-use neighborhood, the change could cause queuing problems that negatively impact the operations and safety of Florida Avenue.

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.

Site Circulation, Operations, and Design

The site should be designed in a manner to facilitate internal movement of people and vehicles such that the potential impacts to the external transportation network are minimized. When potential impacts are unavoidable, operational changes, such as limitations on turn movements or changes in directionality of roadways, are an effective way to manage a site's potential transportation impact.

Neal Place Extension & Triggers

The Applicant proposes a Neal Place extension through the site. The 50' wide private street is proposed to contain sidewalks, tree pits, and a 22' cart path to accommodate one vehicle lane in each direction. DDOT is in general agreement with the proposed cross section for the street. DDOT finds that the proposal satisfies the connection envisioned in the SAP and will help support future development of the Market and disperse site-generated traffic upon opening as a street.

The Applicant proposes an interim park in the Neal Place ROW that transitions to a street in the future. The interim condition would involve building out the sidewalk and tree box components of the extension and portions of the underlying roadbed infrastructure, but would include a park in place of the 22' cart path. Some construction would be required in order to transition from the interim park use to the final road condition. The Applicant estimates that conversion, including the securing of necessary permits, could take up to 12 months.

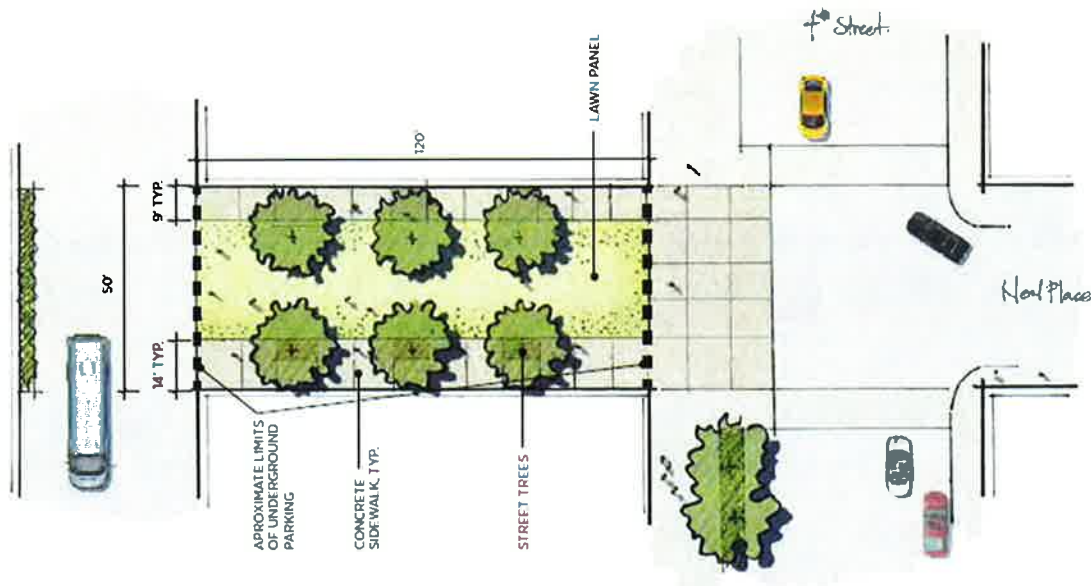


Figure 4 - Neal Place Interim Proposal

As discussed above, the Neal Place extension is critical to disperse site-generated traffic and support development within the Market, particularly developments to the west of 4th Street. While a temporary use of the space as a park may be appropriate, it is critical that the interim use be limited only to times when the connection is not needed to support development in the Market or for dispersing site-generated traffic to improve the operations in the vicinity.

At the time of this report, the Applicant and DDOT are working to finalize the trigger language that would prompt the conversion of Neal Place from its interim use to final condition. The Applicant proposes several conditions that would trigger the conversion of the Neal Place extension from the interim use to the final use as a roadway:

Prior to the issuance of a certificate of occupancy for the South Parcel building, the Applicant shall demonstrate that it has constructed the interim Neal Place extension improvements as shown on the Interim Neal Place Extension Plan.

Within 12 months of the issuance of the certificate of occupancy for the South Parcel building, on an annual basis thereafter, or within six weeks of DDOT requesting additional observation within the yearlong period, the Applicant shall initiate a performance monitoring study of the length of queues along the northbound 4th Street approach to Morse Street (“Monitoring Study”). Each Monitoring Study shall consist of at least three (3) visual observations of traffic conditions over a two (2) week period during the weekday PM peak period and the corresponding weekends before, during, and after a two week period. The weekday peak period is defined as the peak of the 4th Street and Morse Street intersection during a Tuesday, Wednesday or Thursday when DC Public Schools and Congress are in session, and when traffic patterns are not affected by inclement weather between the hours of 4 to 7 pm. The weekend peak period is defined as the peak of the 4th Street and Morse Street intersection during a Saturday during a week when DC Public Schools and Congress are in session and when traffic patterns are not affected by inclement weather between 11 am – 2 pm. The Applicant shall provide a copy of each Monitoring Study to DDOT.

The Applicant shall design and construct the final Neal Place extension improvements as shown on the Final Neal Place Extension Plan and open the Neal Place extension to vehicular traffic within twelve (12) months of the earlier of the following events. When:

- After review of a Monitoring Study that demonstrates more than two (2) instances per weekday or weekend period on more than one (1) observation day within a Monitoring Study of queuing spillover onto Florida Avenue, and DDOT concludes and communicates to the Applicant that the Neal Place Extension is needed to alleviate traffic queuing conditions at 4th and Morse Street. Each Monitoring Study should document whether queuing was the result of typical traffic patterns or the result of atypical traffic events (e.g. construction, holidays, or special events), and queuing resulting from atypical events shall not be counted as instances of queuing for purposes of the foregoing sentence; or
- DDOT communicates to the Applicant that all required building permits have been issued for, and construction has commenced on the proposed 3rd Street NE and further extension of Neal Place to 3rd Street as either public streets or as private street connections serving public vehicular traffic.

DDOT finds these triggers as a good basis for transitioning from an interim use to the final condition, but the following adjustments are needed to provide greater assurances that the Neal Place extension opens in a timely manner:

Prior to the issuance of a certificate of occupancy for the South Parcel building, the Applicant shall demonstrate that it has constructed the interim Neal Place extension improvements as shown on the Interim Neal Place Extension Plan.

As soon as possible but within 12 months of the issuance of the certificate of occupancy for the South Parcel building, on an annual basis thereafter, or within six weeks of DDOT requesting additional observation within the yearlong period, the Applicant shall initiate a performance monitoring study of the length of queues along the northbound 4th Street approach to Morse Street (“Monitoring Study”). Each Monitoring Study shall consist of video-based observations for two (2) observation periods during a three (3) week timeframe. An observation period is defined as Wednesday – Saturday peak periods. The weekday peak period is defined as between the hours of 4 to 7 pm when DC Public Schools and Congress are in session. The weekend peak period is defined as between 11 am – 2 pm during a Saturday during a week when DC Public Schools and Congress are in session. The Applicant shall provide a copy of each Monitoring Study, including the video footage, to DDOT.

The Applicant shall secure the necessary funds in an escrow account and shall design and construct the final Neal Place extension improvements as shown on the Final Neal Place Extension Plan and open the Neal Place extension to vehicular traffic within twelve (12) months of the earlier of the following events. When:

- After review of a Monitoring Study that demonstrates queuing extending more than 150’ on 4th Street south from Morse Street toward Florida Avenue on more than one (1) observation day, and DDOT concludes and communicates to the Applicant that the Neal Place Extension is needed to alleviate traffic queuing conditions at 4th and Morse Street. Each Monitoring Study should document whether queuing was the result of

typical traffic patterns or the result of atypical traffic events (e.g. construction, holidays, or special events); or

- DDOT communicates to the Applicant that all required permits have been issued for the proposed 3rd Street NE as a public or private street, alley, or driveway connection serving vehicular traffic; or
- DDOT communicates to the Applicant that all required permits have been issued for Neal Place to the immediate west as a public or private street, alley, or driveway connection serving public vehicular traffic; or
- After 5 years from the issuance of the certificate of occupancy for the South Building.

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 strategies:

- Designate a TDM coordinator responsible for organizing and marketing the TDM plan;
- Install a transit information screen in each building lobby;
- Reserve two car-sharing spaces in the garage;
- Provide between 147-179 long-term bicycle parking spaces for the South Building and an additional 48-71 spaces for the North Building. Additionally, install at least 20 short-term spaces adjacent to the South Building;
- Install two electric car sharing stations; and
- Provide each new resident for the first year with a \$75 subsidy for car-sharing or bike-sharing program, up to a maximum of \$35,000.

DDOT wishes to clarify the following elements of the proposed TDM plan:

- A transit information screen should be installed in the South Building and North Building's residential lobby, for a total of two screens; and
- Provide each new resident for the first year with an annual membership for a car-sharing or bike-sharing program, up to a maximum of \$35,000.

DDOT finds the TDM plan to a good basis for encouraging non-auto travel. However, some additional elements would further strengthen the plan:

- Provide information and website links to commuterconnections.com, goDCgo.com, and other transportation services on developer and property management websites; and
- Unbundle parking costs from the price of lease or purchase, and price no less than charges of the lowest fee garage within one-quarter mile;

The final design, including location, of short-term bicycle facilities will be determined during the public space permitting process.

Additional TDM measures might be necessary as part of the North Building Stage 2 PUD.

SZ:jr