

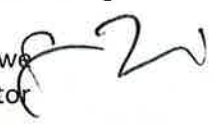
GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Sara Bardin
Director, Office of Zoning

FROM: Samuel Zimbabwe 
Associate Director

DATE: May 2, 2016

SUBJECT: **ZC Case No. 15-15** – Eckington Yards:
1611-1625 Eckington Place, NE and 1500 Harry Thomas Way, NE

PROJECT SUMMARY

JBG/Boundary 1500 Harry Thomas Way, LLC and JBG/Boundary Eckington Place, LLC (collectively, the “Applicant”) proposes a mixed-use building Planned Unit Development (PUD) and Zoning Map Amendment for 1500 Harry Thomas Way, NE (Square 3576, Lot 814) and 1611-1625 Eckington Place, NE (Square 3576, Lots 2001-2008). This consolidated project consists of:

- 695 residential units;
- 77,200 square feet of retail;
- 331 vehicular parking spaces (232 residential, 99 retail); and
- 271 long-term and 58 short-term bicycle parking spaces.

SUMMARY OF DDOT REVIEW

DDOT is committed to achieve an exceptional quality of life in the nation’s capital by encouraging sustainable travel practices, safer streets, and 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

- The proposed project is located adjacent to the existing Gale/NoMA Trilogy development (ZC 05-23) and proposes to share the loading facilities on Eckington Place and Harry Thomas Way with the existing development;
- The design of the loading facilities on Eckington Place and Harry Thomas Way do not meet DDOT standards due to backing movements in public space;
- Two new curb cuts are proposed to lead to a primarily pedestrian private alley, which will also be used for retail loading access;
- An existing public alley on Harry Thomas Way will be used for loading and vehicular access; and
- Vehicular access is proposed via an existing curb cut on Q Street associated with the Gale/NoMA Trilogy development. This access will lead to new vehicle parking, and residents will also have the ability to utilize excess parking spaces in the Gale/NoMA Trilogy.

Travel Assumptions

- The background growth, mode split, and trip generation assumptions proposed by the Applicant are reasonable if supported by an appropriate transportation network and Transportation Demand Management (TDM) measures;
- The Applicant utilized sound methodology to perform the analysis; and
- The action is expected to generate a high number of new vehicle, pedestrian, and transit trips.

Analysis

- While the project is a Consolidated PUD, the Applicant requested flexibility in allowing the project to potentially be built in two phases. DDOT's analysis did not break out impacts by phases, and instead considered the totality of the project;
- The action is projected to significantly impact three intersections (Rhode Island Avenue/3rd Street, NE, Eckington Place/Harry Thomas Way, NE, and Eckington Place/Florida Avenue, NE) requiring mitigations;
- The proposed vehicular parking supply is appropriate for the anticipated usage, but the ability to utilize the excess vehicle parking supply in the Gale/NoMA Trilogy development could increase the projected auto-mode split;
- Improvements to the pedestrian network are necessary to support the mode splits assumed in this transportation analysis;
- The proposed number of new loading facilities and shared use of existing loading facilities is appropriate for the anticipated usage. However, the existing loading facilities must be redesigned to ensure front-in/front-out movements;
- A loading management plan is necessary to ensure safety and reduce conflicts in the primarily pedestrian private alley; and
- The proposed TDM measures are not sufficiently robust to justify the proposed non-auto mode split, meaning potential impacts could be worse than projected.

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

Mitigations

If phased, DDOT expects the following mitigations be provided upon completion of the first phase of development:

- Conduct a signal warrant and, if warranted, design and install a signal at Rhode Island Avenue/3rd Street, NE, subject to DDOT approval;

- Conduct a warrant analysis and, if warranted, install a four-way stop at Eckington Place/Harry Thomas Way, NE, subject to DDOT approval. If a four way-stop is not warranted, additional mitigation measures must be investigated and implemented;
- Design and construct traffic calming and pedestrian recommendations of DDOT’s Mid-City East Livability Study Improvements at Eckington Place/Quincy Place, NE, Eckington Place/Q Street, NE, and Eckington Place/Harry Thomas Way, NE;
- Redesign the loading facilities on Eckington Place and Harry Thomas Way to provide head-in/head-out movements, in keeping with DDOT standards;
- Provide a loading management plan, subject to DDOT approval, for the retail loading on the proposed primarily pedestrian private alley;
- For the first five years from each phase of building opening, provide the equivalent value of an annual Capital Bikeshare membership (currently \$85) *or* an annual carshare membership *and* driving credit (equal to the value of an annual bikeshare membership) to all new residents. This benefit shall be codified in rental/condominium documents;
- Modify the language regarding unbundling all parking costs such that market rate is defined as the average cost for parking within a quarter-mile of the site on a weekday; and
- Modify the language regarding the funding for the installation of a Capital Bikeshare station to include the first year of operation of a new station at the perimeter of the NoMA Green Park (total cost currently \$88,000).

Continued Coordination

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

- 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 DDOT standards. Careful attention should be paid to pedestrian and bicycle connections along the site’s perimeter and adjacent infrastructure;
- The design and installation of the signal at Rhode Island Avenue/3rd Street, NE;
- Pedestrian upgrades as recommended in the Mid-City East Livability Study. In particular, the design of the curb extensions on Eckington Place at the new private alley may need to be altered to allow truck turns into the alley; and
- The location of utility vaults. DDOT expects vaults to be located on private property.

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

The proposed project is located adjacent to the existing Gale/NoMA Trilogy development (ZC 05-23) and proposes to share the loading facilities on Eckington Place and Harry Thomas Way with the existing development. These shared facilities do not meet DDOT standards due to backing movements in public space. While these curb cuts currently allow backing movements, the increased demand of the facilities and increased pedestrian, bicycle, and vehicular activity as a result of the increases potential conflicts. As such, the existing loading facilities must be redesigned to ensure front-in/front-out movements and a loading management plan is necessary to ensure safety, reduce conflicts, and ensure that demand of the existing loading facilities is not exceeded by the retail demand.

Vehicular access is proposed via an existing curb cut on Q Street associated with the Gale/NoMA Trilogy development. This access will lead to new vehicle parking, and residents will also have the ability to utilize parking spaces in the Gale/NoMA Trilogy as they are not fully utilized.

Additionally, two new curb cuts are proposed to lead to a primarily pedestrian private alley, which will be used for retail loading access. This alley will run west to east from Eckington Place to Harry Thomas Way. The design of the curb extensions on Eckington Place at this new private alley may need to be altered to allow truck turns into the alley, as truck turning movements currently show trucks tracking over the curb. The loading management plan, described above, will be required by DDOT as a condition of support for these two curb cuts. Finally, an existing public alley on Harry Thomas Way will be used for loading and vehicular access. This access is appropriate.

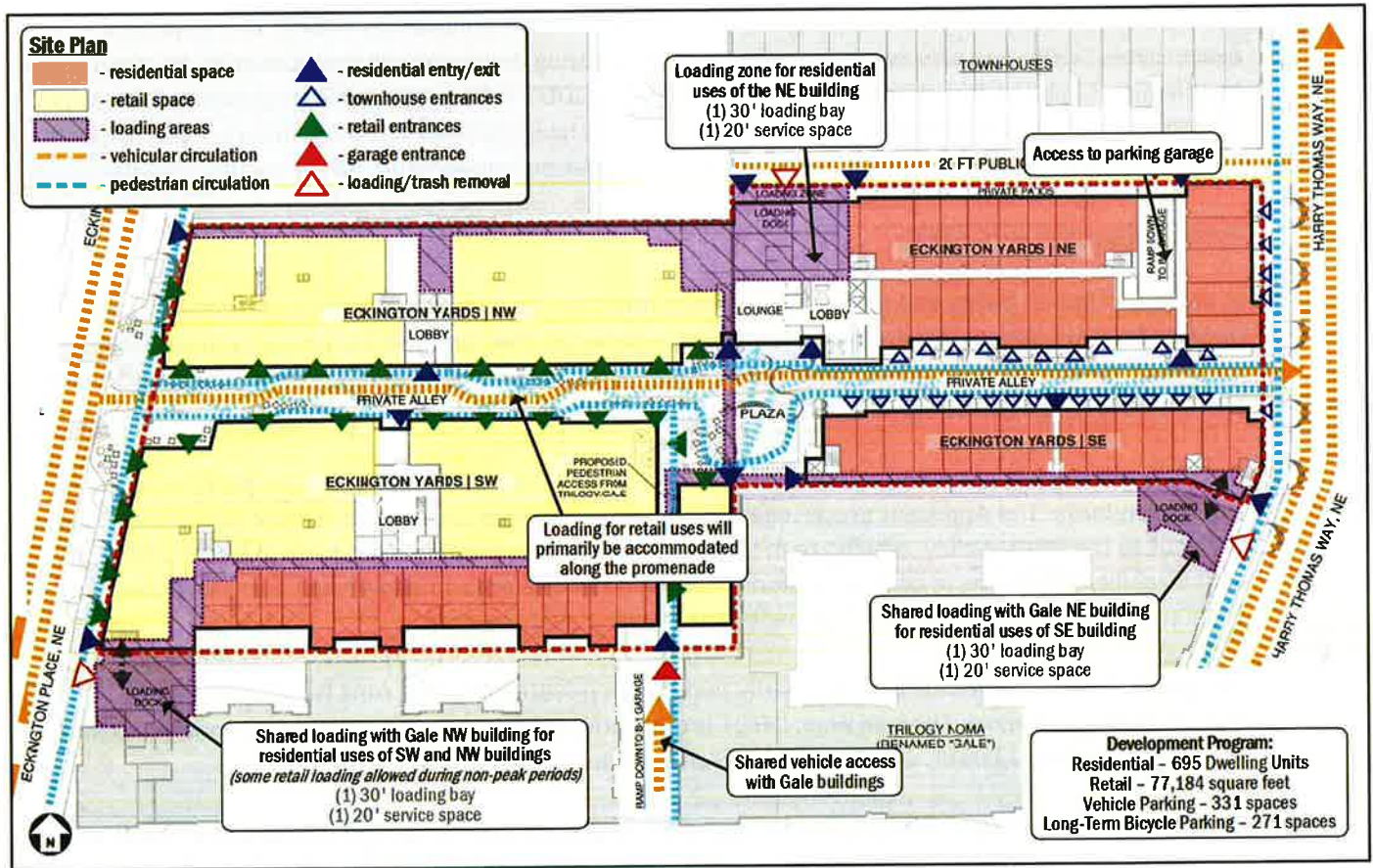


Figure 1: Site Design and Access (Source: Grove/Slade Associates)

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 Applicant seeks zoning relief from the loading requirements for all three of the required 55-foot loading berths. The Applicant meet the additional loading requirements by providing one 30-foot loading bay and one 20-foot service and delivery space, in addition to sharing the Gale/NoMA Trilogy development's two 30-foot loading bays and two 20-foot service and delivery spaces. The project also proposes to use a primarily pedestrian private alley for retail loading.

DDOT finds that this is an appropriate number of loading facilities for the two projects. However, the Applicant has not proposed a loading management plan, which DDOT requires as a condition of support for the two curb cuts to the primarily pedestrian private alley to ensure safety and reduce pedestrian conflicts.

DDOT does not support backing movements for loading onto Eckington Place and Harry Thomas Way. While this is an existing condition for the Gale/NoMA development, the increased use of the loading

facilities and increased pedestrian, bicycle, and vehicular traffic volumes as a result of this project exacerbates DDOT concerns regarding safety. As the existing development is proposed to be altered to enable direct loading access to the proposed buildings, DDOT believes that the proposed buildings can accommodate a hammerhead loading design to support head-in/head-out movements. DDOT expects the Applicant to revise their plans to enable head-in/head-out movements for all loading facilities.

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.

DDOT expects the Applicant to design and build the streetscape surrounding the property to current DDOT standards. The Applicant proposes to build curb extensions on Eckington Place at the proposed curb cut to the private alley, which are in line with the recommendations set forth in DDOT's Mid-City East Livability Study. These curb extensions may need to be altered to allow truck turns into the alley, as truck turning movements currently show trucks tracking over the curb.

The Applicant proposes a curbless primarily pedestrian private alley that runs west to east from Eckington Place to Harry Thomas Way. DDOT is currently developing curbless street standards as part of the Florida Avenue Market, which could be implemented on this private alley.

The Applicant must work closely with DDOT and OP 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* will serve as the main public realm references for the Applicant. DDOT staff will be available to provide additional guidance during the public space permitting process.

Final design of the public space will be determined during DDOT's public space permitting process. DDOT notes the importance of maximizing the width of sidewalks along the perimeter of the site to accommodate pedestrian and bicycle activity.

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 account for future growth in traffic on the network or what is referred to as background growth. One entitled project (50 Florida Avenue, NE) with an origin or destination within the study area was 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 pattern forecast in MWCOC's regional travel demand model. The

Applicant’s analysis used MWCOG’s model and background growth rate for certain roads due to the intensity of development in the area not accounted for by the background growth. Figure 2 summarizes the background growth rates used by the Applicant. DDOT agrees with the proposed growth rate.

Road	Proposed Annual Growth Rate		Total Growth between 2015 and 2018		Total Growth between 2015 and 2019	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Eckington Place NE – Northbound	0.10%	0.10%	0.30%	0.30%	0.40%	0.40%
Eckington Place NE – Southbound	0.10%	0.10%	0.30%	0.30%	0.40%	0.40%
R Street NE – Eastbound	0.10%	1.00%	0.30%	3.03%	0.40%	4.06%
R Street NE – Westbound	1.25%	0.75%	3.80%	2.27%	5.09%	3.03%
Florida Avenue – Northwestbound	0.50%	1.25%	1.51%	3.80%	2.02%	5.09%
Florida Avenue - Southeastbound	2.25%	0.25%	6.90%	0.75%	9.31%	1.00%
North Capitol Street – Northbound	0.10%	0.10%	0.30%	0.30%	0.40%	0.40%
North Capitol Street – Southbound	0.10%	0.10%	0.30%	0.30%	0.40%	0.40%
Rhode Island Avenue – Northeastbound	0.10%	0.10%	0.30%	0.30%	0.40%	0.40%
Rhode Island Avenue – Southeastbound	0.10%	0.10%	0.30%	0.30%	0.40%	0.40%

Figure 2: Background Growth Rates (Source: Grove/Slade Associates)

Off-Street Vehicle Parking

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

Zoning requires a total of 331 off-street vehicle parking spaces for all uses (232 for residential use and 99 for retail use), and the Applicant proposes 331 vehicle parking spaces. This supply is appropriate for the anticipated usage. However, the project proposes to share the excess vehicle parking supply of the Gale/NoMA Trilogy development, which may result in a higher vehicle trip generation than assumed and exacerbate impacts to intersections. While the trips generated by the Gale/NoMA Trilogy vehicular parking were accounted for in the CTR for that development, these trips were not fully realized in the existing conditions and could increase expected impacts and full build out and occupancy. Therefore, shared use of the existing Gale/NoMA Trilogy parking requires the Applicant to support the proposed mode split and trip generation assumptions, described in the next section of this report, through an appropriate transportation network and TDM measures. In order to limit vehicle trip generation and mitigate impacts to nearby intersections, DDOT recommends additional TDM measures.

Trip Generation

The Applicant provided trip generation estimates utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual. The Applicant utilized the following ITE land uses in their trip generation estimation:

- Residential: Apartments (Code 220)

- Retail: Shopping Center (Code 820)

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, etc. 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.

The Applicant developed the following mode split assumptions informed by WMATA's 2005 *Development-Related Ridership Survey*, the U.S. Census data, and amount of proposed vehicle parking supply. The mode split – and resulting trip generation assumptions – is reasonable for the proposed supply of vehicular parking if supported by an appropriate transportation network and Transportation Demand Management (TDM) measures. However, sharing the excess vehicle parking supply of the Gale/NoMA Trilogy development may result in a higher trip vehicle trip generation than assumed for this project.

Land Use	Mode			
	Auto	Transit	Bike	Walk
Residential	35%	50%	5%	10%
Retail	35%	40%	1%	24%

Figure 3: Mode Split (Source: Grove/Slade Associates)

Based on the trip generation and mode split assumptions discussed above, the Applicant predicted the following level of weekday peak hour trip generation as shown in Figure 4:

Mode	Land Use	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Apartments	24 veh/hr	96 veh/hr	120 veh/hr	91 veh/hr	49 veh/hr	140 veh/hr
	Retail	16 veh/hr	10 veh/hr	26 veh/hr	48 veh/hr	52 veh/hr	100 veh/hr
	Total	40 veh/hr	106 veh/hr	146 veh/hr	139 veh/hr	101 veh/hr	240 veh/hr
Transit	Apartments	39 ppl/hr	156 ppl/hr	195 ppl/hr	147 ppl/hr	79 ppl/hr	226 ppl/hr
	Retail	33 ppl/hr	20 ppl/hr	53 ppl/hr	98 ppl/hr	106 ppl/hr	204 ppl/hr
	Total	72 ppl/hr	176 ppl/hr	248 ppl/hr	245 ppl/hr	185 ppl/hr	430 ppl/hr
Bike	Apartments	4 ppl/hr	15 ppl/hr	19 ppl/hr	15 ppl/hr	8 ppl/hr	23 ppl/hr
	Retail	1 ppl/hr	0 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	5 ppl/hr
	Total	5 ppl/hr	15 ppl/hr	20 ppl/hr	17 ppl/hr	11 ppl/hr	28 ppl/hr
Walk	Apartments	8 ppl/hr	31 ppl/hr	39 ppl/hr	29 ppl/hr	16 ppl/hr	45 ppl/hr
	Retail	20 ppl/hr	12 ppl/hr	32 ppl/hr	59 ppl/hr	63 ppl/hr	122 ppl/hr
	Total	28 ppl/hr	43 ppl/hr	71 ppl/hr	88 ppl/hr	79 ppl/hr	167 ppl/hr

Figure 4: Weekday Peak Hour Trip Generation for Proposed Development (Source: Grove/Slade Associates)

The proposed residential and retail uses are expected to generate a combined 146 AM and 240 PM peak hour vehicle trips, 248 AM and 430 PM peak hour transit trips, 71 AM and 167 PM peak hour pedestrian only trips (i.e., this does not include individuals walking to transit or off-site parking and bicycle facilities), and 20 AM and 28 PM peak hour bicycle trips.

Trip Distribution and Assignment

The Applicant assumed that trips related to each of the land uses would travel to and from different parts of the region in a manner specific to the land use. Therefore, the Applicant created unique trip distribution rates for retail and residential trips. DDOT is in agreement with the methodology used to determine trip distribution.

Study Area and Data Collection

The Applicant identified 20 intersections or vehicle access points where detailed vehicle, bicycle, and pedestrian 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 moderate to significant increases 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 that realize new trips. However, DDOT expects minimal to no increase in delay outside the study area as a result of the proposed action.

Counts were conducted on Wednesday, June 17, 2015 and Wednesday, October 21, 2015 from 6:30 AM to 9:30 AM and from 4:00 PM to 7:00 PM, while Congress and DC Public Schools were in session. DDOT agrees with the time frame and collection dates.

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 indicates that the development significantly increases travel delay in the area for three intersections: Rhode Island Avenue/3rd Street, NE, Eckington Place/Harry Thomas Way, NE, and Eckington Place/Florida Avenue, NE.

For Rhode Island Avenue/3rd Street, NE, the site generated trips exacerbate failing conditions in the morning peak for the southbound approach and in afternoon peak for the northbound and southbound approaches. For example, the proposed development increases delay in the afternoon peak for the southbound approach from 46.9 seconds (LOS E) in the future background conditions to 57.1 seconds (LOS F) in total future conditions. Such site generated delay may result in the necessity of a new signal. In addition, the crash analysis shows two pedestrian-involved and two bicycle-involved crashes. No mitigation is proposed by the Applicant. DDOT recommends the Applicant conduct a signal warrant, and if warranted, must design and install a signal at this intersection, subject to DDOT approval.

For Eckington Place/Harry Thomas Way, NE, the site generated trips exacerbate failing conditions in the morning peak for the westbound approach and degrade operation of the westbound approach from LOS D to F in the afternoon peak. The Applicant recommends the conversion of the intersection from a two-way to four-way stop and agrees to pay for the necessary signing and marking improvements to implement the mitigation. However, the Applicant must provide a warrant analysis for the proposed four-way stop according to the methodology outlined in the Manual on Uniform Traffic Control Devices (MUTCD). If a four way-stop is not warranted, additional mitigation measures must be investigated and implemented.

For Eckington Place/Florida Avenue, NE, the site generated trips degrade the operation of the southbound approach from LOS D to LOS E during the morning and afternoon peak hours. No mitigations are proposed by the Applicant. Increased TDM measures and the design and construction of the traffic calming and pedestrian recommendations of DDOT's Mid-City East Livability Study Improvements at Eckington Place/Quincy Place, NE, Eckington Place/Q Street, NE, and Eckington Place/Harry Thomas Way, NE (see Figure 5) will support increased pedestrian activity and support their proposed non-auto mode split.

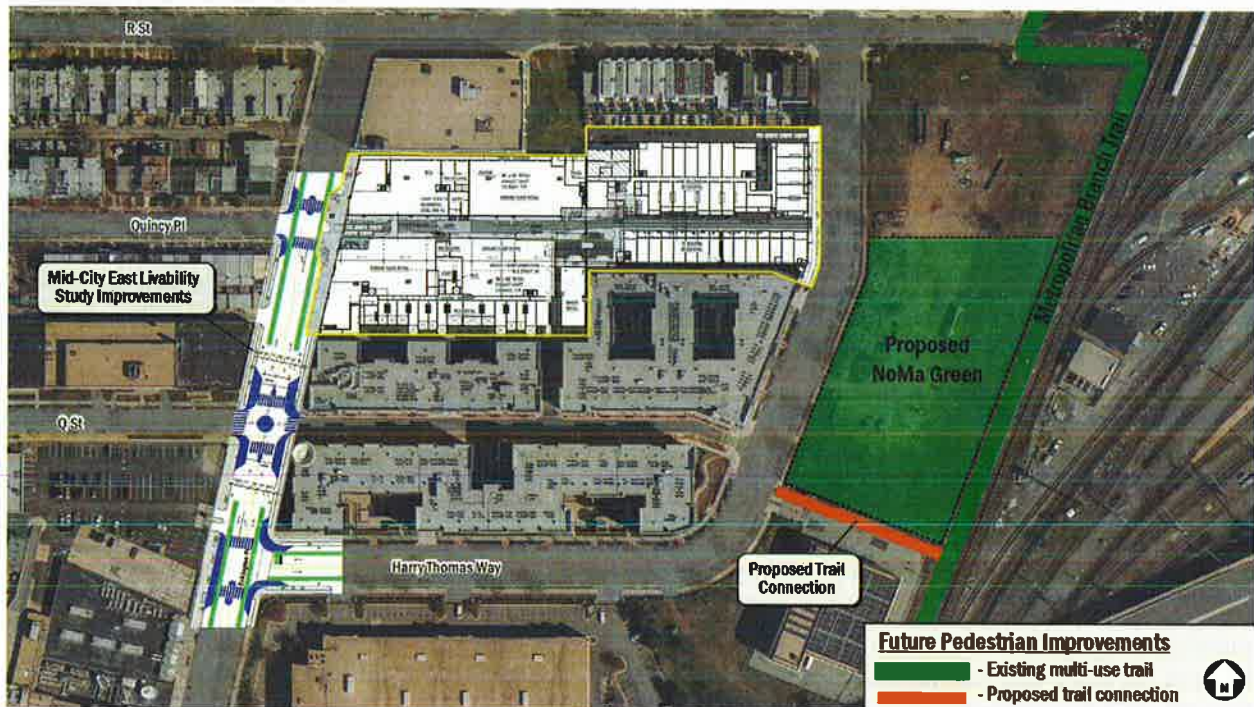


Figure 5: DDOT's Mid-City East Livability Study Improvements (Source: Grove/Slade Associates)

Transit Service

The District and the 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. Transit is expected to be an important mode of transportation for this development.

The proposed project is approximately 0.4 miles from the NoMA-Gallaudet U Yard Metro Station entrance and is served by seven bus lines (i.e., 80, 90, 92, 93, M31, P6, and X3). These bus lines operate with headways in the range of approximately 10 to 30 minutes. A mixed-use building located in such a transit rich area of the District should achieve high transit ridership. The Applicant's review of WMATA studies shows that sufficient capacity exist to absorb the expected increase of transit trips by this development with the exception of two Metrobus routes (the 90, 92 line and the X3 line) that exceed acceptable load factors.

Pedestrian Facilities

The District is committed to enhance 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.

The Applicant performed an inventory of the pedestrian infrastructure surrounding the site. The Applicant proposes to improve the pedestrian infrastructure and streetscape in front of their site, along Eckington Place and Harry Thomas Way. The site generates a high number of pedestrian trips – 71 AM peak and 167 PM peak trips, which does not account for the pedestrians walking to access nearby transit (an additional 248 AM peak and 430 PM peak trips). To support this mode split, in addition to mitigating impacts to the vehicular network, DDOT finds that the implementation of DDOT's Mid-City East Livability Study Improvements at Eckington Place/Quincy Place, NE, Eckington Place/Q Street, NE, and Eckington Place/Harry Thomas Way, NE (see Figure 5) by the Applicant is necessary.

Bicycle Facilities

The District of Columbia 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 Metropolitan Branch Trail is located one block east of the subject site. In addition, shared bicycle lanes surround the site. The closest Capital Bikeshare station is located adjacent to the site at Q Street and Eckington Place, NE Street.

The Applicant proposes 271 long-term bicycle parking spaces, which exceeds DDOT standards, and 58 short-term bicycle parking spaces (29 racks), the location will be worked out during the public space permitting process.

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 sight 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 three intersections within the study area 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. The Applicant's crash data analysis does not propose any mitigation measures at these three intersections. However, the proposed development does not

significantly impact these intersections. Instead, the crash analysis shows two pedestrian-involved and two bicycle-involved crashes at the intersection of Rhode Island Avenue and 3rd Street, which the proposed development significantly impacts. As such, DDOT finds that it is necessary for the Applicant to design and install a signal at this intersection.

Intersection	Total Crashes	Ped Crashes	Bike Crashes	Rate per MEV*
Rhode Island Avenue & 2nd Street NE	12	0	1	0.35
Rhode Island Avenue & 3rd Street NE	26	2	2	0.74
R Street & Eckington Place NE	2	0	0	0.25
R Street & 2nd Street NE	3	0	1	0.53
R Street & 3rd Street NE	4	0	1	1.25
Harry Thomas Way & Eckington Place NE	1	0	0	0.10
Florida Avenue & Eckington Place NE	13	0	0	0.56
North Capitol Street & R Street	57	0	1	1.27
North Capitol Street & Quincy Place	21	0	0	0.50
North Capitol Street & Lincoln Road	10	2	0	0.21
North Capitol Street & Florida Avenue	57	1	5	0.84
Quincy Place & Lincoln Road NE	0	0	0	0.00
Q Street & Florida Avenue NW	8	2	1	0.37
North Capitol Street & Q Street	10	2	0	0.21
Florida Avenue & R Street NW	30	5	0	1.29
Quincy Place & Eckington Place NE	0	0	0	0.00
Q Street & Eckington Place NE	6	0	0	0.59
Q Street & Harry Thomas Way NE	0	0	0	0.00

Figure 6: Intersection Crash Rates, 2012-2014 (Source: Grove/Slade Associates)

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
R Street & 3rd Street NE	1.25	0	0	1	2	0	0	1	0	0	0	0	0	0	0	4
		0%	0%	25%	50%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	
North Capitol Street & R Street	1.27	6	7	4	17	15	1	1	0	0	0	0	1	0	5	57
		11%	12%	7%	30%	26%	2%	2%	0%	0%	0%	0%	2%	0%	9%	
Florida Avenue & R Street NW	1.29	4	3	0	8	7	1	2	0	0	5	0	0	0	0	30
		13%	10%	0%	27%	23%	3%	7%	0%	0%	17%	0%	0%	0%	0%	

Figure 7: Crash Type Breakdown (Source: Grove/Slade Associates)

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.

New Signal at Rhode Island Avenue/3rd Street, NE

As discussed in the Analysis section, site generated impacts at the intersection of Rhode Island Avenue and 3rd Street, NE are significant. The site-generated trips significantly increase the delay at this intersection, and the crash analysis shows two pedestrian-involved and two bike-involved crashes. DDOT expects the Applicant to conduct a signal warrant, and if warranted, design and install the signal at Rhode Island Avenue/3rd Street, NE, subject to DDOT approval, in order to mitigate impacts of the development.

New Four-Way Stop and Warrant Analysis at Eckington Place/Harry Thomas Way, NE

For Eckington Place/Harry Thomas Way, NE, the site generated trips exacerbate failing conditions in the morning peak for the westbound approach and degrade operation of the westbound approach from LOS D to F in the afternoon peak. The Applicant agreed to provide a four-way stop at Eckington Place/Harry Thomas Way, NE, but the Applicant must first provide a warrant analysis, according to the methodology outlined in the Manual on Uniform Traffic Control Devices (MUTCD). If a four way-stop is not warranted, additional mitigation measures must be investigated and implemented.

New Traffic Calming and Pedestrian Facility Improvements on Eckington Place

The Applicant does not provide any recommendations for mitigation of site impacts at the intersection of Eckington Place and Florida Avenue due to the on-going study of the Virtual Circle by DDOT. However, the site-generated trips degrade the operation of the southbound approach from LOS D to LOS E during the morning and afternoon peak hours. Design and construction of the traffic calming and pedestrian recommendations of DDOT's Mid-City East Livability Study Improvements at Eckington Place/Quincy Place, NE, Eckington Place/Q Street, NE, and Eckington Place/Harry Thomas Way, NE (see Figure 5) will support increased pedestrian activity and support the Applicant's proposed non-auto mode split.

Redesign the Shared Loading Facilities on Eckington Place and Harry Thomas Way

DDOT does not support backing movements for loading onto Eckington Place and Harry Thomas Way. While this is an existing condition for the Gale/NoMA development, the increased use of the loading facilities on roadways that have increased pedestrian, bicycle, and vehicular traffic volumes as a result of this project exacerbates DDOT concerns regarding safety. DDOT expects the Applicant to revise their plans to provide head-in/head-out movements for all loading facilities, in keeping with DDOT standards.

Loading Management Plan

Due to the pedestrian-oriented design of the proposed private alley, DDOT requires the Applicant provide a loading management plan, subject to DDOT approval, for the retail loading.

Transportation Demand Management

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 proposed the following TDM strategies:

- Appoint a TDM Leader (for planning, construction, and operations), who will work with goDCgo staff to create free customized marketing materials and a TDM outreach plan for residents and retail employees;
- Provide updated contact information for the TDM Leader and report of TDM efforts and amenities to goDCgo staff once per year;
- Stock Metrorail, Metrobus, DC Circulator, Capital Bikeshare, Guaranteed Ride Home, DC Commuter Benefits Law, and other brochures;
- Unbundle all parking costs from the cost of the lease and set the cost at no less than the charges of the lowest fee garage located within a quarter-mile of the site;
- Exceed zoning requirements for long-term bicycle parking by providing 271 spaces;
- Provide a public transit information screen, showing real-time information on nearby transit services within all residential lobbies; and
- Fund the installation of a Capital Bikeshare Station within the NoMA Green Park or expansion of the existing station located at Q Street and Eckington Place.

DDOT does not find the above TDM measures appropriate to address the impacts expected from the project. As such, DDOT expects the following modifications or additional measures:

- For the first five years from each phase of building opening, provide the equivalent value of an annual Capital Bikeshare membership (currently \$85) *or* an annual carshare membership *and* driving credit (equal to the value of an annual bikeshare membership) to all new residents. This benefit shall be codified in rental/condominium documents;
- Modify the language regarding unbundling all parking costs such that market rate is defined as the average cost for parking within a quarter-mile of the site on a weekday; and
- Modify the language regarding the funding for the installation of a Capital Bikeshare station to include the first year of operation of a new station at the perimeter of the NoMA Green Park (total cost currently \$88,000).

SZ:ei