

**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 *SZ*
Associate Director

DATE: June 6, 2016

SUBJECT: ZC Case No. 15-29 – Shepherd Park PUD (7828 Georgia Avenue NW)

PROJECT SUMMARY

Jemal's Gateway DC, LLC (the "Applicant") seeks a consolidated Planned Unit Development ("PUD") in order to construct a mixed-use development at premises 7828 Georgia Avenue NW (Square 2960, Lot 17). The site is bounded by Georgia Avenue, Eastern Avenue, Kalmia Road, Alaska Avenue, and an adjacent alley. The development program includes:

- 199 residential units
- 56,000 square foot grocer
- 2,700 square feet of additional retail
- 271 off-street vehicle parking spaces
- 88 long-term bicycle parking spaces

SUMMARY OF DDOT REVIEW

The District Department of Transportation (DDOT) review responds to the revised Comprehensive Transportation Review (CTR), dated May 31, 2016.

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

- Vehicle access is proposed via a single curb cut on Kalmia Road and loading/trash access is proposed via a single curb cut on Eastern Avenue;
- The Applicant proposes to install signage to restrict rights out of the parking garage onto westbound Kalmia Road;
- Truck maneuvers are accommodated on-site with head-in, head-out movements;
- Public space permits, including curb cuts for site access, were approved with conditions in December 2016; and
- Primary pedestrian access points are located on Eastern Avenue and Kalmia Road for the retail and residential uses, respectively.

Travel Assumptions

- The Applicant utilized sound methodology and assumptions;
- Future residents and retail visitors are likely to utilize automobiles at high rates and transit, walking, and bicycling at moderate rates; and
- The Applicant's analysis assumed full access out of the parking garage and did not provide analysis for limited access from the garage.

Analysis

- The action is projected to increase travel delay and queuing at three intersections in the study area. Of note, impacts attributed to the development were found at the Georgia Avenue/Alaska Avenue/Kalmia Road intersection. These impacts are likely to be greater if the parking garage turn restriction is implemented;
- Existing transit service, pedestrian infrastructure, and bicycle infrastructure has capacity to accommodate future demand; and
- The Applicant proposes to provide an adequate number of short- and long-term bicycle parking spaces.

Mitigations

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

- Ensure full access out of the parking garage driveway on Kalmia Road, which is consistent with the analysis. DDOT has not seen analysis of limited access;
- Install traffic management cameras at 16th Street & Kalmia Road, Alaska Avenue & Kalmia Road, and Georgia Avenue & Geranium Street for integration into the DDOT traffic management program to provide real-time traffic signal updates in coordination with other signals in the District;
- Implement the signal and physical improvements at the Alaska Avenue/Kalmia Road/Georgia Avenue intersection, subject to DDOT approval;
- Remove from the TDM plan the commitment to coordinate with DDOT to identify carsharing spaces within the public space;
- Strengthen the TDM plan to include:
 - Dedicate two parking spaces in the parking garage for car sharing services to use with right of first refusal;
 - Install a transportation information screen in the grocery store;

- Provide showers and changing facilities for grocery store employees; and
- Offer each unit's incoming residents an annual carsharing membership or an annual Capital Bikeshare membership for a period of three years.

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:

- Any alterations to the public space be needed in response to building design changes as a result of the PUD review or broader changes in the vicinity. Specifically, the Applicant should coordinate with DDOT to explore relocating both existing bus shelters within the public space designs associated with the subject development;
- Further refinement of striping changes and development of a signal design to accommodate the northbound left turn movements at the Alaska Avenue/Kalmia Road/Georgia Avenue intersection. All aspects of changes must meet DDOT standards and are subject to DDOT approval; and
- Location of electric vehicle charging stations in the parking garage.

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

Vehicle and long-term bicycle parking access is proposed via a single curb cut on Kalmia Road that serves the parking for both the retail and residential uses. Of note, the Applicant proposes a sign within the garage to restrict right turns out of the garage onto westbound Kalmia Road. As discussed in the Travel

Assumptions section, DDOT does not support turn restrictions out of the site due to Kalmia Road's functional classification as a Collector and the likelihood of further impacts to the Georgia Avenue/Alaska Avenue/Kalmia Road intersection if implemented.

Loading and trash access is proposed via a single curb cut on Eastern Avenue.

Public space permits were approved for the entire site, including curb cuts, at the Public Space Committee's December 17, 2015 hearing.

Concurrent with the subject PUD, the Applicant is pursuing an alley closing application (Surveyor's Order 15-53893). DDOT submitted a report to the Office of the Surveyor on May 19, 2016 noting a lack of objection to the request.

Primary pedestrian access points are proposed on Eastern Avenue and Kalmia Road for the retail and residential uses, respectively.

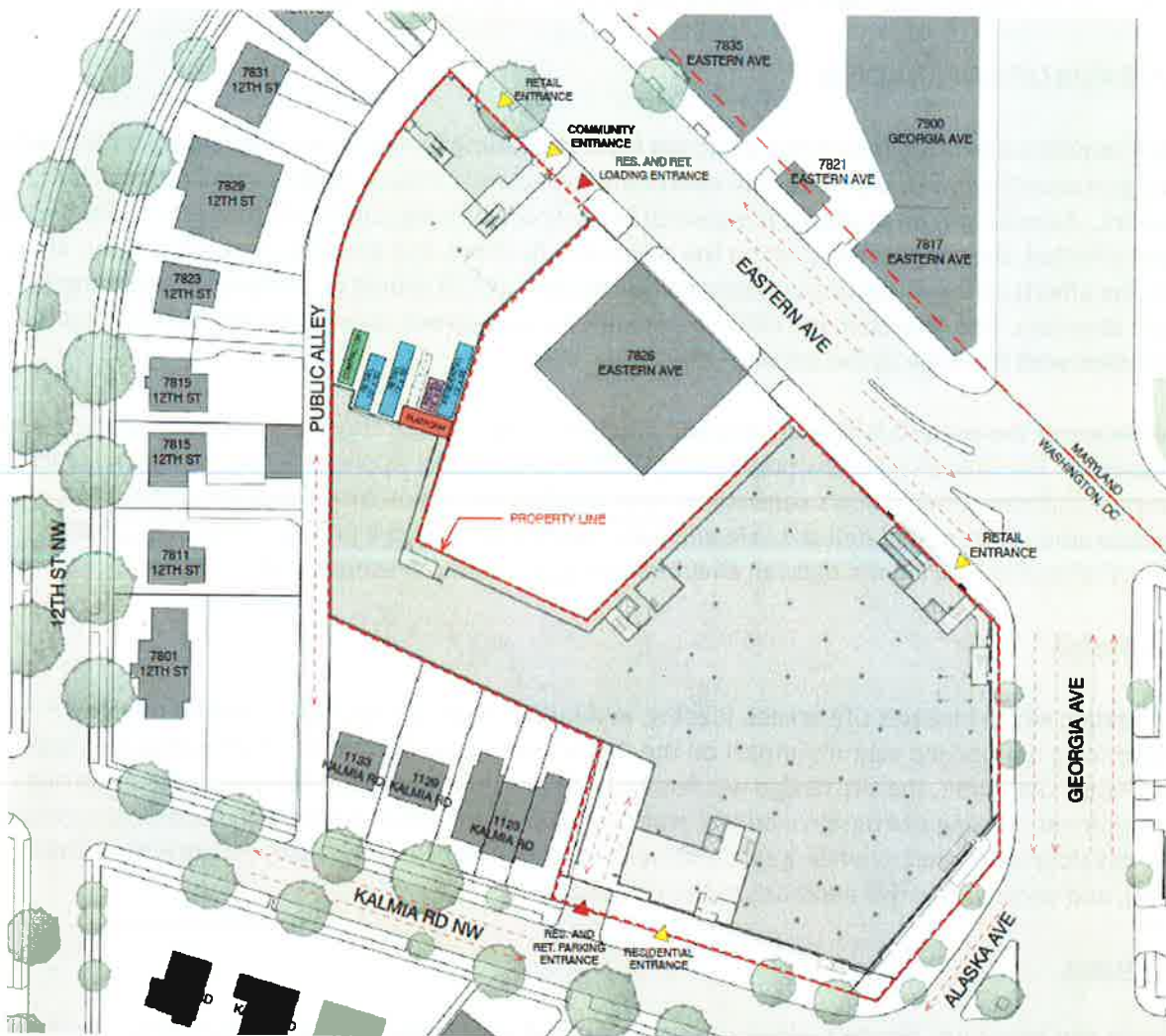


Figure 1 Site Design and Access (Source: Perkins Eastman)

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 proposes two 55-foot loading berths, one 30-foot loading berth, and one service/delivery space for the project. The proposed loading facilities meet zoning requirements with the exception of the requirement for two service/delivery spaces. The one service/delivery space is proposed to be shared by the residential and retail uses, and relief is sought for one service/delivery space.

Truck-turning diagrams provided by the Applicant demonstrate that all truck maneuvers can be accommodated with head-in, head-out movements consistent with DDOT standards.

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.

As discussed above, public space permits for the entire site were approved with conditions at the Public Space Committee's December 17, 2015 hearing. Should any alterations to the public space be needed in response to building design changes or broader changes in the vicinity, the Applicant would be required to secure any necessary additional permits. Specifically, the Applicant should continue to coordinate with DDOT to relocate the two existing bus shelters within the new public space designs associated with the proposed development. The conditionally approved public space plans included only one relocated bus shelter, but further review of boardings and alightings at this stop reveal sufficient demand for two bus shelters.

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.

Based on the size of the proposed development and the number of vehicular parking spaces, DDOT recommends that the Applicant provide at least one 240-volt electric car charging station for the residential component and at least one station for grocery use.

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 travel forecasting methodology to include in the analysis.

Trip Distribution and Assignment

Trip distribution refers to assumptions made about routing and travel patterns to and from the site. Despite proposing signage to restrict right turns out of the parking garage, the Applicant’s analysis assumes the garage operates with full access movements. Full access allows for site traffic to distribute through the network, thus reducing focused vehicle impacts from a particular intersection.

Off-Street Vehicle 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.

The Applicant proposes a total of 271 vehicle parking spaces for the project. Table 1 provides a breakdown of the parking between uses and a comparison of the parking provision to zoning requirements.

Table 1 Parking Provision

	Proposed Parking Supply	Zoning Requirements	Difference
Retail	130	71	+59
Residential	141	67	+74
Total	271	138	+133

The residential parking provision equates to a parking supply of 0.7 parking spaces per unit, which is higher than what is typical for other multi-family developments in close proximity to high quality transit. As discussed in the Trip Generation subsection below, the relatively high parking provision will lead to additional vehicle trips than would be generated with a lower parking ratio.

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 and WMATA's 2005 *Development-Related Readership Survey*. The following mode splits were assumed, which account for the level of parking provision.

Land Use	Mode			
	Auto	Transit	Bike	Walk
Residential	55%	33%	2%	10%
Grocery Store/Retail	60%	20%	5%	15%

Figure 2 Assumed Mode Splits (Source: Gorove/Slade)

Based on the trip generation and mode split assumptions, the Applicant predicted weekday and Saturday peak hour trip generation as shown in Figure 3.

The proposed action is expected to generate a significant number of transit, vehicular, and walk trips during the peak hours. The Saturday peak period is expected to generate the greatest amount of trips, and is the result of travel behavior associated with the grocery store. A moderate number of bike trips are also expected.

Mode	Land Use	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Auto	Apartments	12 veh/hr	44 veh/hr	56 veh/hr	46 veh/hr	24 veh/hr	70 veh/hr	28 veh/hr	29 veh/hr	57 veh/hr
Auto	Supermarket	71 veh/hr	44 veh/hr	115 veh/hr	130 veh/hr	125 veh/hr	255 veh/hr	146 veh/hr	140 veh/hr	286 veh/hr
Auto	Retail	1 veh/hr	1 veh/hr	2 veh/hr	3 veh/hr	3 veh/hr	6 veh/hr	4 veh/hr	4 veh/hr	8 veh/hr
Auto	Total	84 veh/hr	89 veh/hr	173 veh/hr	179 veh/hr	152 veh/hr	331 veh/hr	178 veh/hr	173 veh/hr	351 veh/hr
Transit	Apartments	8 ppl/hr	30 ppl/hr	38 ppl/hr	31 ppl/hr	17 ppl/hr	48 ppl/hr	19 ppl/hr	20 ppl/hr	39 ppl/hr
Transit	Supermarket	43 ppl/hr	27 ppl/hr	70 ppl/hr	100 ppl/hr	96 ppl/hr	196 ppl/hr	112 ppl/hr	108 ppl/hr	220 ppl/hr
Transit	Retail	1 ppl/hr	0 ppl/hr	1 ppl/hr	2 ppl/hr	2 ppl/hr	4 ppl/hr	2 ppl/hr	3 ppl/hr	5 ppl/hr
Transit	Total	52 ppl/hr	57 ppl/hr	109 ppl/hr	133 ppl/hr	115 ppl/hr	248 ppl/hr	133 ppl/hr	131 ppl/hr	264 ppl/hr
Bike	Apartments	0 ppl/hr	2 ppl/hr	2 ppl/hr	2 ppl/hr	1 ppl/hr	3 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr
Bike	Supermarket	11 ppl/hr	7 ppl/hr	18 ppl/hr	25 ppl/hr	24 ppl/hr	49 ppl/hr	28 ppl/hr	27 ppl/hr	55 ppl/hr
Bike	Retail	0 ppl/hr	0 ppl/hr	0 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	1 ppl/hr	0 ppl/hr	1 ppl/hr
Bike	Total	11 ppl/hr	9 ppl/hr	20 ppl/hr	27 ppl/hr	26 ppl/hr	53 ppl/hr	30 ppl/hr	28 ppl/hr	58 ppl/hr
Walk	Apartments	2 ppl/hr	9 ppl/hr	11 ppl/hr	9 ppl/hr	5 ppl/hr	14 ppl/hr	6 ppl/hr	6 ppl/hr	12 ppl/hr
Walk	Supermarket	33 ppl/hr	20 ppl/hr	53 ppl/hr	75 ppl/hr	72 ppl/hr	147 ppl/hr	84 ppl/hr	81 ppl/hr	165 ppl/hr
Walk	Retail	1 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	2 ppl/hr	1 ppl/hr	3 ppl/hr
Walk	Total	36 ppl/hr	29 ppl/hr	65 ppl/hr	85 ppl/hr	79 ppl/hr	164 ppl/hr	92 ppl/hr	88 ppl/hr	180 ppl/hr

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

Study Area and Data Collection

The Applicant in conjunction with DDOT identified fifteen intersections 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 which 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 intersection data on Wednesday, October 7, 2015, Saturday, October 10, 2015, Tuesday, October 13, 2015, Thursday, October 15, 2015, and Saturday, October 17, 2015. Existing traffic volumes were collected adjacent to a Columbus Day, which is a federal and District holiday. The counts collected on Saturday, October 10, 2015 fell on a holiday weekend, and the counts collected on Tuesday, October 13, 2015 fall on the day after the holiday. The Applicant provided supplemental spot counts to compare the traffic volumes collected on or near a holiday to a non-holiday situation. The spot counts confirmed that the holiday counts were somewhat higher than the non-holiday counts, and thus the holiday counts are an acceptable basis for the vehicle capacity analysis.

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 vehicle traffic impacts from the action will degrade vehicle operations as measured by Level of Service (LOS) at three intersections in the study area:

- Eastbound approach of 16th Street & Kalmia Road
- Eastbound approach of Alaska Avenue & Kalmia Road
- Eastbound approach of Georgia Avenue & Geranium Street

Queuing analysis found that the following approaches will be impacted by the proposed development:

- Eastbound and westbound Kalmia Road at Alaska Avenue during the PM peak hour
- Eastbound Kalmia Road at Alaska Avenue during the Saturday peak hour

These approaches were found to exceed available storage capacity as a result of the subject development.

Of note, the Applicant's analysis assumed right turns to be permitted exiting the parking garage despite the proposed sign restricting right turns out of the parking garage. If a right turn restriction were to be implemented, additional site traffic would be required to utilize the Alaska Avenue & Kalmia Road intersection, thus further degrading operations and queuing.

Mitigations for these impacts are discussed in the Mitigations section of the report.

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 0.7 miles from the Silver Spring Metro Station, roughly a 15 minute walk. The station is served by Metro's Red line. The MARC station adjacent to the Metro Station serves the Brunswick Line which provides service between Martinsburg, WV and Union Station.

The site is well-served by high-frequency bus routes. A summary of availability is found in Figure 5.

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
70	Georgia Avenue-7th Street Line	Monday-Saturday: 24 hour service Sundays: 4:10 am - 3:00 am	10-40 minutes	< 0.1 miles (< 2 minutes)
79	Georgia Avenue Limited Line	Monday - Saturday: 6:00 am - 7:50 pm	6-15 minutes	< 0.1 miles (< 2 minutes)
S2	16th Street Line	Monday-Saturday: 24 hour service Sundays: 4:30 am - 2:15 am	10-40 minutes	< 0.1 miles (< 2 minutes)
S9	16th Street Limited Line	Weekdays: 6:30 am - 10:35 am 3:00 pm - 10:10 pm Saturdays: 6:30 am - 10:35 am 3:00 pm - 7:35 pm	6-15 minutes	< 0.1 miles (< 2 minutes)

Figure 4 Bus Route Information (Source: Gorove/Slade)

The S9 and 79 offers very frequent express peak hour headways with stops immediately adjacent to the site. The 70 and S2 line provide local transit service.

Pedestrian Facilities

The District 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 site generally has excellent pedestrian access to nearby destinations and transit. Pedestrian facilities – sidewalks, curb ramps, and crosswalks – are generally in good condition and meet current DDOT standards; however, the Applicant's analysis revealed a missing standard sidewalk link along the east side of East-West Highway in Montgomery County, MD, outside the jurisdiction of DDOT. The segment is along the most likely walking route between the site and the Silver Spring Metro Station. Further inspection of the substandard link reveals that a paved area is provided within this link, but the pavement is not a standard sidewalk treatment. DDOT encourages the Applicant to coordinate with the relevant agencies in Maryland to explore improving this section of sidewalk.

As part of the approved public space permits, the Applicant will improve all pedestrian amenities adjacent to the site to current DDOT standards.

Bicycle Facilities

The District of Columbia 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 generally has adequate access to bicycle facilities. While facilities in the immediate vicinity are limited, connections to local and regional bicycle facilities are available within a short distance of the site. The Metropolitan Branch Trail is approximately 0.3 miles to the east of the site. Additionally, a southbound bicycle lane on 8th Street provides connections to destinations to the south including the Takoma Metro Station and the Walter Reed site.

There is one Capital Bikeshare station about 0.25 miles to the west at the intersection of Eastern Avenue and 13th Street. This station has 15 docks.

The Applicant proposes 88 long-term bicycle parking spaces in excess of the 71 required by District code. The Applicant also included 20 short-term bicycle parking spaces in the approved public space plans, which will provide plentiful bicycle parking to residential visitors and retail patrons.

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 one intersection within the study area that has a crash rate of 1.0 Million Entering Vehicles (MEV) or higher. This intersection is only slightly above the elevated crash threshold. Total crashes are relatively low, and no crashes involving pedestrians were recorded.

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
Georgia Avenue & Geranium Street NW	1.03	3	1	0	12	7	0	3	3	0	0	1	0	0	1	31
		10%	3%	0%	39%	23%	0%	10%	10%	0%	0%	3%	0%	0%	3%	

Figure 5 Intersection Safety (Source: Gorove/Slade)

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.

Operations

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.

As noted earlier, the Applicant proposes to install signage to restrict rights out of the parking garage onto westbound Kalmia Road. This is expected to increase vehicle delay at the Georgia Avenue/Alaska Avenue/Kalmia Road intersection by adding additional volume on an already impacted intersection. Accordingly, DDOT does not support the proposed signage or restriction. The parking garage should operate with full access in order to distribute site traffic and reduce impacts to the Georgia Avenue/Alaska Avenue/Kalmia Road intersection.

Signalization and Intersection Design Changes

The Applicant suggests a combination of signal changes and physical improvements to address vehicle impacts at three intersections – 16th Street & Kalmia Road, Alaska Avenue & Kalmia Road, and Georgia Avenue & Geranium Street. The proposed improvements are discussed below:

- 16th Street & Kalmia Road

The Applicant proposes to shift a few seconds of green time from 16th Street to Kalmia Road. Adjustments to signal timings to improve the side street (Kalmia) will impact the main arterial (16th), as well as intersections up- and down-stream. Thus, it is recommended that the Applicant fund the installation of a traffic camera in this location for integration into the DDOT traffic management program to reduce congestion and provide real-time traffic signal updates.

- Alaska Avenue & Kalmia Road

The Applicant proposes to remove parking along the north side of Kalmia Road to create two eastbound approaches at the intersection of Alaska Avenue and Georgia Avenue. DDOT has reviewed this proposal and agrees that this change would improve operations of the intersection. However, the proposal would result in the elimination of approximately 3-4 metered parking spaces. The Applicant must define the parking impacts, provide more detailed concept drawings showing the proposal, and perform additional community outreach to better

understand community impacts. Additional design work is also required to ensure that Kalmia Road is sufficiently wide to accommodate a three lane cross section.

The Applicant proposes adding a northbound left-turn phase at the intersection of Kalmia Road & Alaska Avenue, which is linked with the adjacent Kalmia & Georgia Avenue intersection. In conjunction with this improvement, the signal infrastructure should be upgraded, including the installation of a traffic camera for integration into the DDOT traffic management program to reduce congestion and provide real-time traffic signal updates.

All aspects of changes must meet DDOT standards, and conformance with these standards is not known at present time. Accordingly, this mitigation should be made a condition subject to DDOT approval.

- Georgia Avenue & Geranium Street

The Applicant offers traffic signal modifications as mitigation of site impacts at the intersection of Georgia Avenue & Geranium Street. However, any adjustments to signal timings to improve the side street (Geranium) will impact the main arterial (Georgia), as well as intersections up- and down-stream. Thus, it is recommended that the Applicant fund the installation of a traffic camera in this location for integration into the DDOT traffic management program to reduce congestion and provide real-time traffic signal updates.

Transportation Demand Management

As part of all major development review cases, DDOT requires the Applicant to produce a comprehensive 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 and provide TDM marketing materials to new residents;
- Unbundle parking costs from the price of lease and set the price at no less than the charges of the lowest fee garage located within a quarter-mile of the site;
- Work with DDOT to dedicate two parking spaces within public space to a carsharing service;
- Install a transportation information screen in the residential lobby that will display real-time transportation alternative information; and

- Supply 88 long term and 22 short-term bicycle parking spaces.

DDOT objects to the TDM element to identify carsharing spaces within the public space. DDOT awards curbside space for carsharing via a contract, and additional spaces cannot be added via a PUD TDM plan.

DDOT finds the TDM plan to be lacking and needs to be strengthened to achieve the non-auto mode splits assumed for the residential and grocery uses:

- Dedicate two parking spaces in the parking garage for car sharing services to use with right of first refusal;
- Install a transportation information screen in the grocery store;
- Provide showers and changing facilities for grocery store employees; and
- Offer each unit's incoming residents an annual carsharing membership or an annual Capital Bikeshare membership for a period of three years.

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