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: October 26, 2015

SUBJECT: **ZC Case No. 15-23** – 10 Van Street, SE

PROJECT SUMMARY

Square 700 Trust, LLC (the "Applicant") requests an area variance from the lot occupancy requirements (11 DCMR §634 1) and loading requirements (§2201 1) to allow the construction of a new residential building in the Capitol Gateway (CG) Overlay and CR Zone District (11 DCMR §§1604, 1605, and 1610) located at 10 Van Street, SE (Square 700, Lot 48) This project consists of

- 170 dwelling units,
- 92 vehicular parking spaces; and
- 60 long-term and 16 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 DDOT finds.

Site Design

- The missing sidewalk link on the west side of Van Street to M Street will be completed,
- Loading and parking access is proposed to occur from a single curb cut on Van Street, and
- Truck access will utilize backing movements in public space

ZONING COMMISSION
District of Columbia
CASE NO.15-23
EXHIBIT NO.13

Travel Assumptions

- The site is well served by both Metrorail and Metrobus; and
- The action is expected to generate a moderate number of new vehicle and transit trips.

Analysis

- The Applicant utilized sound methodology to perform the analysis,
- The Applicant provides a loading management plan that appropriately addresses DDOT's concerns regarding backing movements,
- Existing transit service should have capacity to accommodate future demand, and
- The Transportation Demand Management (TDM) measures are appropriate to support the projected mode split

DDOT has no objection to the requested approval.

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 DDOT will not support any projections on Van Street if they impede a minimum eight-foot pedestrian clear sidewalk space, and
- DDOT is planning a major project on South Capitol Street Construction schedules and access may need to be coordinated.

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 Applicant previously was approved for an adjacent office and retail property (ZC Case No 15-11) and submitted a Comprehensive Transportation Review (CTR) as a part of that zoning action that analyzed the transportation impacts of both projects A memo was provided to the District Department of Transportation (DDOT) updating elements of the previously submitted CTR These two projects consist of a total of:

- 115,858 square feet of office space,
- 4,851 square feet of retail,
- 170 dwelling units,
- 219 vehicular parking spaces (127 spaces for the office and retail building and 92 spaces for the residential building), and
- 60 long-term and 16 short-term bicycle parking spaces for the residential building, in addition to the 48 long-term and six short-term bicycle parking spaces for the office and retail building.

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 Applicant proposes all vehicular access to the site on Van Street, which is a short local roadway between Half Street SE and South Capitol Street that connects M and N Streets. As shown in Figure 1, one curb cut is proposed to provide vehicular access, both parking and loading, to the residential building.

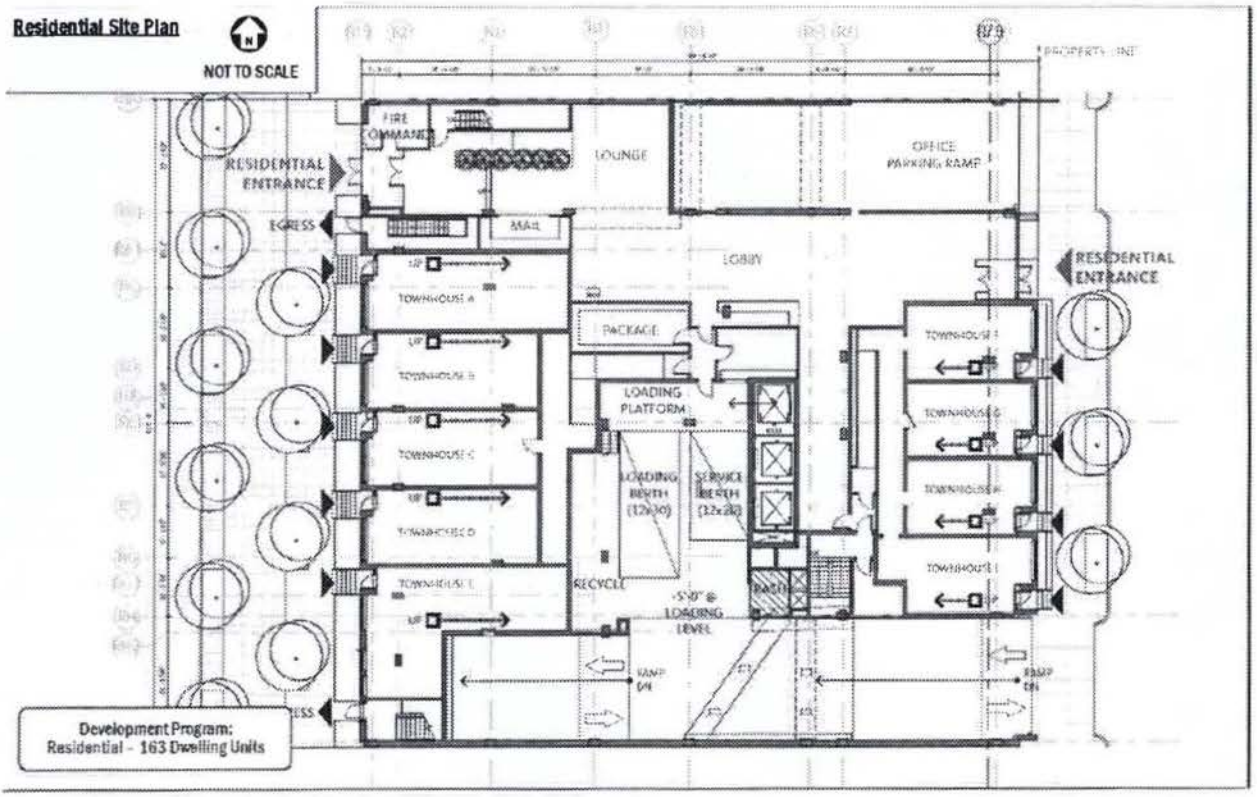

Figure 1 Site Design and Access (Source: Grove/Slade Associates)

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 proposes providing one 30-foot loading berth and one 20-foot service, one 200-foot loading platform, and delivery space for the residential building Zoning requires providing one 55-foot loading berth, one 200-foot loading platform, and one 20-foot service and delivery space However, due to size constraints of the site, the Applicant is not able to accommodate all truck turning maneuvers on-site

Since loading cannot be accessed through an alley and back-up maneuvers will occur in the public realm, the Applicant agreed the following loading management plan as a part of ZC 15-11

- All deliveries will be permitted between 7:00 AM and 4 00 PM, seven days per week, except when events occur at Nationals Park Deliveries cannot be scheduled for the period between two hours when an event begins and one hour after an event is completed, including during the event itself
- A representative of Building Management will supervise all trucks using the loading facilities (this does not apply to delivery vans) This person must also manage vehicular traffic entering and exiting the parking garage while trucks are maneuvering to ensure that trucks are able to complete maneuvering into the loading berth without delay
- All move in/move out activity must be scheduled with Building Management to ensure that the dock capacity is not exceeded Building management will not schedule deliveries during Nationals Park events as defined above when there could be heavier than typical pedestrian traffic on Van Street
- A flagger will be present whenever a vehicle is entering or exiting the loading dock to ensure pedestrian, bicycle, and vehicle safety with truck back-in and exiting maneuvers.
- Building management will post a sign in a highly visible location within the loading area that states that all tenants are required to schedule move activities that utilize the loading dock using a truck 20' in length or larger
- Trucks using the loading dock will not be allowed to idle and must follow all District guidelines for heavy vehicle operation including but not limited to DCMR 20 – Chapter 9, Section 900 (Engine Idling), the regulations set forth in DDOT's Freight Management and Commercial Vehicle Operations document, and the primary access routes listed in the DDOT Truck and Bus Route Map (godcgo com/truckandbusmap)

DDOT finds the proposed loading facilities and loading management plan appropriate for this site considering the location and constraints of the site

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 Various site plans submitted show the property line on Van Street at different locations DDOT expects to maintain a minimum of an eight-foot (8) clear pedestrian path on Van Street, although 10-foot clearance is preferred As such, no projections will be permitted through the public space permitting process if they impede on the eight-foot clear path Additionally, special paving will only be permitted at the primary building entrance to extend one-third the distance from the property line to the curb and not to exceed twice the doorway width, as well as a band around the building of no greater than two-foot width

The Applicant must work closely with DDOT and the Office of Planning to ensure that the design of the public realm meets current standards and will substantially upgrade the appearance and functionality of the streetscape for public users needing to access the property or circulate around it In conjunction with the District of Columbia Municipal Regulations, DDOT's *Design and Engineering Manual* 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 Seven entitled projects with an origin or destination within the study area were included in the analysis

DDOT also requires applicants account for regional growth This can be done by assuming a general growth rate or by evaluating growth patterns forecast in MWCOG's regional travel demand model The Applicant's analysis used MWCOG's model, and Figure 2 summarizes the background growth rates used by the Applicant. DDOT agrees with the proposed growth rate

Road & Direction	Proposed Annual Growth Rate		Total Growth between 2015 and 2018	
	AM Peak	PM Peak	AM Peak	PM Peak
South Capitol St NB	0.25%	0.32%	0.8%	1.0%
South Capitol St SB	0.77%	0.56%	2.3%	1.7%
M Street EB	0.95%	0.25%	2.9%	0.8%
M Street WB	0.25%	0.25%	0.8%	0.8%

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.

While this application is only for the residential building, the CTR evaluated the parking and transportation impacts of both buildings. 219 off-street parking spaces are proposed for the site – 92 spaces for residential use and 127 spaces for office and retail uses accessed from a separate garage on Van Street. Zoning requires a total of 127 spaces for all uses in the two buildings – 68 spaces for office, 2 spaces for retail, and 57 spaces for residential. The amount of vehicle parking remains well above the zoning requirement. This amount of parking is higher than what DDOT expects to see in this area and will encourage excessive vehicle trips.

In addition, DDOT finds that parking demand for the residential building could be lower than the proposed project anticipates. Vehicle trips could increase if office and retail tenants are permitted to park in the residential parking garage since office and retail uses generate more vehicular trips than residential uses. Such additional trips will exacerbate impacts to intersections. As such, the Applicant has agreed to prohibit office and retail employees and retail customers from parking in the residential parking garage per ZC Case No. 15-11.

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: Apartment (Code 220)
- Retail: Shopping center (Code 820)
- Office: General office building (Code 710)

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 based on the retail mode split used for

the December 2012 CTR for the site The auto mode split for the office component was further reduced based on the proposed amount of parking

	Office	Residential	Retail
Automobile	55%	45%	40%
Transit	39%	43%	40%
Bike	2%	4%	5%
Walk	4%	8%	15%

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 for the office, retail, and residential buildings as a part of the CTR for ZC Case No 15-11, as shown in Figure 4 Since the submission of the CTR, the proposed residential building was increased by five residential units As a result, trip generation for the residential building increased, as shown in Figure 5

Mode	Land Use	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Apartments	8 veh/hr	30 veh/hr	38 veh/hr	32 veh/hr	17 veh/hr	49 veh/hr
Auto	Retail	1 veh/hr	1 veh/hr	2 veh/hr	3 veh/hr	3 veh/hr	6 veh/hr
Auto	Office	104 veh/hr	15 veh/hr	119 veh/hr	19 veh/hr	95 veh/hr	114 veh/hr
Auto	**Total**	**113 veh/hr**	**46 veh/hr**	**159 veh/hr**	**54 veh/hr**	**115 veh/hr**	**169 veh/hr**
Transit	Apartments	8 ppl/hr	33 ppl/hr	41 ppl/hr	34 ppl/hr	18 ppl/hr	52 ppl/hr
Transit	Retail	2 ppl/hr	2 ppl/hr	4 ppl/hr	6 ppl/hr	7 ppl/hr	13 ppl/hr
Transit	Office	83 ppl/hr	12 ppl/hr	95 ppl/hr	16 ppl/hr	76 ppl/hr	92 ppl/hr
Transit	**Total**	**93 ppl/hr**	**47 ppl/hr**	**140 ppl/hr**	**56 ppl/hr**	**101 ppl/hr**	**157 ppl/hr**
Bike	Apartments	1 ppl/hr	3 ppl/hr	4 ppl/hr	3 ppl/hr	2 ppl/hr	5 ppl/hr
Bike	Retail	0 ppl/hr	0 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr
Bike	Office	4 ppl/hr	1 ppl/hr	5 ppl/hr	1 ppl/hr	4 ppl/hr	5 ppl/hr
Bike	**Total**	**5 ppl/hr**	**4 ppl/hr**	**9 ppl/hr**	**5 ppl/hr**	**7 ppl/hr**	**12 ppl/hr**
Walk	Apartments	2 ppl/hr	6 ppl/hr	8 ppl/hr	6 ppl/hr	4 ppl/hr	10 ppl/hr
Walk	Retail	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	3 ppl/hr	6 ppl/hr
Walk	Office	9 ppl/hr	1 ppl/hr	10 ppl/hr	2 ppl/hr	7 ppl/hr	9 ppl/hr
Walk	**Total**	**12 ppl/hr**	**8 ppl/hr**	**20 ppl/hr**	**11 ppl/hr**	**14 ppl/hr**	**25 ppl/hr**

Figure 4 Weekday Peak Hour Vehicle Trip Generation for ZC Case No. 15-11 (Source: Grove/Slade Associates)

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Original One M Street Overlay Review (Residential Component)						
Auto	8 veh/hr	30 veh/hr	38 veh/hr	32 veh/hr	17 veh/hr	49 veh/hr
Transit	8 ppl/hr	33 ppl/hr	41 ppl/hr	34 ppl/hr	18 ppl/hr	52 ppl/hr
Bike	1 ppl/hr	3 ppl/hr	4 ppl/hr	3 ppl/hr	2 ppl/hr	5 ppl/hr
Walk	2 ppl/hr	6 ppl/hr	8 ppl/hr	6 ppl/hr	4 ppl/hr	10 ppl/hr
Updated 10 Van Street Plans						
Auto	8 veh/hr	31 veh/hr	39 veh/hr	32 veh/hr	18 veh/hr	50 veh/hr
Transit	8 ppl/hr	34 ppl/hr	42 ppl/hr	35 ppl/hr	19 ppl/hr	54 ppl/hr
Bike	1 ppl/hr	3 ppl/hr	4 ppl/hr	3 ppl/hr	2 ppl/hr	5 ppl/hr
Walk	2 ppl/hr	6 ppl/hr	8 ppl/hr	6 ppl/hr	4 ppl/hr	10 ppl/hr
Net Change in Auto Trips	0 veh/hr	1 veh/hr	1 veh/hr	0 veh/hr	1 veh/hr	1 veh/hr
Net Change in Non-Auto Trips	0 ppl/hr	1 ppl/hr	1 ppl/hr	1 ppl/hr	1 ppl/hr	2 ppl/hr

Figure 5 Weekday Peak Hour Vehicle Trip Generation for Residential Component Only (Source: Grove/Slade Associates)

In total, the proposed office and retail building and residential building are expected to generate a combined 160 AM and 170 PM peak hour vehicle trips, 141 AM and 159 PM peak hour transit trips, 20 AM and 25 PM peak hour pedestrian trips, and 9 AM and 12 PM peak hour bicycle trips. The office component generates the majority of vehicle trips. Trips for both buildings are combined as a means to compare trip generation for the proposed project to the original proposal for this site as a part of ZC Case No. 09-22.

Vehicular trip generation has been reduced from the original proposal for this site as a part of ZC Case No. 09-22. In DDOT's report for that zoning case, DDOT recommended a vehicle trip cap of 125 total trips in both the AM and PM peak hours in order to minimize impacts to the transportation network. That report recommended removing 100 of the 310 parking spaces and committing to a robust vehicle monitoring and TDM program to reduce peak trips. While a trip cap is no longer necessary, the vehicular trip generation of this project is still high; delay and congestion are expected as a result of this site. However, mitigations provided as a part of the approved ZC Case No. 15-11 and TDM for the residential building are appropriate.

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 office, retail, and residential trips. The Applicant distributed the vehicle trips throughout the study area intersections. DDOT is in agreement with the methodology used to determine trip distribution.

Study Area and Data Collection

The Applicant identified 11 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 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 Thursday, May 15, 2014 and Tuesday, April 28, 2015 from 6 30 AM to 9.30 AM and from 4.00 PM to 7:00 PM, while Congress and DC Public School 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

Significant capacity impacts are shown at M Street and South Capitol Street northbound during the morning peak hour and M Street and Van Street during the afternoon peak hour. Additionally, queuing analysis shows queues greater than the available storage length due to site-generated traffic at N Street and South Capitol Street during the afternoon peak hour and M Street and South Capitol Street southbound during the morning and afternoon peak hours (the morning and evening 50% queue) However, no mitigation measures are proposed.

DDOT finds that operations on South Capitol Street will be addressed by DDOT's proposed improvements for the corridor Analysis of right-in, right-out (RIRO) configuration at M Street and Van Street is shown to dramatically improve future LOS and would improve vehicular and pedestrian safety by reducing the number of conflicting movements The Applicant has agreed to configure that intersection for RIRO movements per ZC Case No. 15-11

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 250 feet from the Navy Yard Metro Station entrance and is well-served by 13 different bus lines (i e , 74, A9, A42, A46, A48, P6, P17, P19, V7, V8, V9, W9, and W13) and the Union Station-Navy Yard Circulator route The Circulator bus service operates with 10-minute frequency, whereas the other bus lines operate with headways in the range of approximately 5 to 30 minutes In addition, transit accessibility to the site is excellent An office building located in such a

transit rich area of the City 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

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 A continuous sidewalk from M Street along Van Street to the site does not currently exist As per ZC Case No 15-11, the Applicant plans to improve the pedestrian infrastructure and streetscape in front of their site, along South Capitol Street, M Street, and Van Street The Applicant will be required to install a streetscape plan per DDOT standards

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.

Several dedicated bicycle lanes exist in the vicinity of the subject site along First Street SE, 4th Street SE and SW, and I Street SE and SW In addition, the Anacostia Riverwalk Trail is located south of the subject site As part of the South Capitol Street Corridor Improvements, South Capitol Street is envisioned as a boulevard to the US Capitol with a shared-use path

The closest Capital Bikeshare station is located several blocks from the site at 1st Street and N Street and three additional Bikeshare stations are located within 1/2 mile from the site One is located north of the site at 1st Street and K Street, the other two are east of the site, at M Street and New Jersey Avenue and on 3rd Street and Tingey Street

The Applicant proposes 60 long-term bicycle parking spaces for residents in a secure room within the first level of the residential parking garage This is in addition to the 48 long-term bicycle spaces in the office and retail building The Applicant proposes 16 short-term bicycle parking spaces for the residential building in addition to the six short-term bicycle parking spaces for the office and retail building, for a total of 22 short-term bicycle parking spaces, location to be worked out during the public space permitting process The amount of bicycle parking is appropriate for this site and necessary to reduce the site generated vehicle impacts on the transportation network The provision of this bicycle parking will accommodate demand and reduce site generated vehicle trips

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, which is not uncommon at signalized intersections.

The Applicant's crash data analysis does not propose mitigation measures at the intersection of South Capitol Street and M Street. However, the proposed development impacts capacity and queueing at this intersection during the AM and PM peak hours. The intersection configuration will be improved due to the South Capitol Street Corridor Improvements project.

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
South Capitol Street & N Street	1.35	1	3	0	33	7	0	0	0	0	0	2	0	0	2	48
		2%	6%	0%	69%	15%	0%	0%	0%	0%	0%	4%	0%	0%	4%	
South Capitol Street & M Street	2.32	12	16	1	16	12	0	0	2	0	0	2	0	0	1	62
		19%	26%	2%	26%	19%	0%	0%	3%	0%	0%	3%	0%	0%	2%	
N Street & Van Street, SE	2.14	0	1	0	0	0	0	0	1	0	0	2	0	0	0	4
		0%	25%	0%	0%	0%	0%	0%	25%	0%	0%	50%	0%	0%	0%	

Figure 6 Crash Type Breakdown (Source: Grove/Slade Associates)

DDOT is concerned about the potential for safety issues at the intersection of M Street and Van Street SE as the square develops and traffic increases. This intersection is located approximately equidistant between South Capitol Street and Half Street SE such that signalization is not possible, and DDOT is concerned about the level of traffic making left turn movements at this intersection. Left turns from M Street to Van Street and from Van Street to M Street could lead to a potentially dangerous scenario with many trips crossing multiple travel lanes unprotected. As such, the Applicant has agreed to restrict northbound left turns on Van Street at M Street and install signage for a right-turn in, right-turn out (RIRO).

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.

In addition to the TDM measures outlined below, the Applicant agreed the following mitigations per ZC Case No. 15-11:

- Restrict northbound left turns on Van Street at M Street and install signage for a right-turn in, right-turn out (RIRO), and
- Prohibit office and retail employees and retail customers from parking in the residential parking garage

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

- Provide 60 long-term bicycle parking spaces for the residential building, three more spaces than zoning requires,
- Unbundle the cost of residential parking from the cost of lease or purchase,
- Appoint a TDM Leaders (for planning, construction, and operations) at the residential building The TDM Leaders will work with residents in the building to distribute and market various transportation alternatives and options, and
- Provide a public transit information screen, showing real-time information on nearby transit services, in the residential and office building lobbies

DDOT finds the above TDM measures sufficiently robust to address the impacts expected from the project

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