

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Sara Bardin
Director, Office of Zoning

FROM: Jamie Henson
Manager, Systems Planning

DATE: October 14, 2016

SUBJECT: ZC Case No. 16-07 – 810 O Street, NW

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PROJECT SUMMARY

W-G 9th & O, LLC (the “Applicant”) seeks approval of a Consolidated Planned Unit Development (“PUD”) and Zoning Map Amendment from C-2-A to C-2-B in order to construct a residential and retail building at 810 O Street, NW. The site is bounded by 9th Street to the west, O Street to the north, a public alley to the east, and commercial buildings to the south (Square 399, Lot 66). The PUD includes:

- 66 residential units
- 6,879 square feet of retail
- 66 vehicle parking spaces (61 for residential and 5 for retail)
- 23 long-term bicycle parking spaces

SUMMARY OF DDOT REVIEW

The District Department of Transportation (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 existing 10-foot public alley adjacent to the site is proposed to be widened to 20-feet along the site in order to enable front-in and front-out loading and vehicle parking, which meets DDOT standards; and
- The amount of the loading facilities is appropriate.

Travel Assumptions

- The residential vehicle parking ratio of 0.92 for this project is significantly higher than other recent developments near transit centers; and
- The proposed auto mode split and trip generation is low given the high vehicle parking ratio, but is appropriate if supported by a robust Transportation Demand Management (TDM) plan.

Analysis

- The proposed TDM plan is not sufficiently robust to support the mode split and trip generation assumptions. Additional TDM measures are necessary;
- The amount and location of long-term bicycle parking is appropriate; and
- The amount of short-term bicycle parking is not specified.

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

Mitigations

- The Applicant agreed to provide the following TDM mitigations, which DDOT agrees with:
 - Provide each unit's incoming residents a one-year membership to Capital Bikeshare for the first year following the Certificate of Occupancy;
 - Provide a bicycle repair station in the bicycle storage room;
 - Provide a bicycle cleaning facility in the bicycle storage room;
 - Provide a cargo bicycle will be made available for residents;
 - Identify TDM Leaders (for planning, construction, and operations). The TDM Leaders will work with residents and employees in the building to distribute and market various transportation alternatives and options;
 - Provide TDM materials to new residents in the Residential Welcome Package materials;
- The Applicant agreed to fund the installation of a new Capital Bikeshare station up to \$80,000 as a part of their TDM plan. DDOT requests the mitigation is updated to the following:
 - Fund the installation and first year's operation expenses of a new Capital Bikeshare station located within the boundaries of ANC 6E;
- Provide a TransitScreen in the residential lobby;
- Unbundle parking from leases of all units and charge market rate, defined as the average cost for parking within a quarter-mile of the site on a weekday; and
- Provide 6 short-term bicycle spaces (3 racks).

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; and

- DDOT recommends that the Applicant provide two 240-volt electric car charging stations for residents.

TRANSPORTATION ANALYSIS

DDOT guidance suggests that a Comprehensive Transportation Review (CTR) be completed if various thresholds for added traffic are met, which could signify the potential for impacts to the surrounding street network. Based on this project's anticipated level of trip generation, a comprehensive vehicle traffic analysis is not required, as thresholds are not met and impacts to the surrounding vehicle network are expected to be minimal. However, the Applicant conducted a vehicle parking occupancy study and evaluated the bicycle, pedestrian, and transit network surrounding the site, which met DDOT's parameters and is consistent with the scale of the action.

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 an existing 10 foot public alley to the east of the site, and the Applicant proposes to widen the alley by 10 feet to 20 feet immediately along their site. Vehicular, loading, and bicycle access is proposed via this public alley.

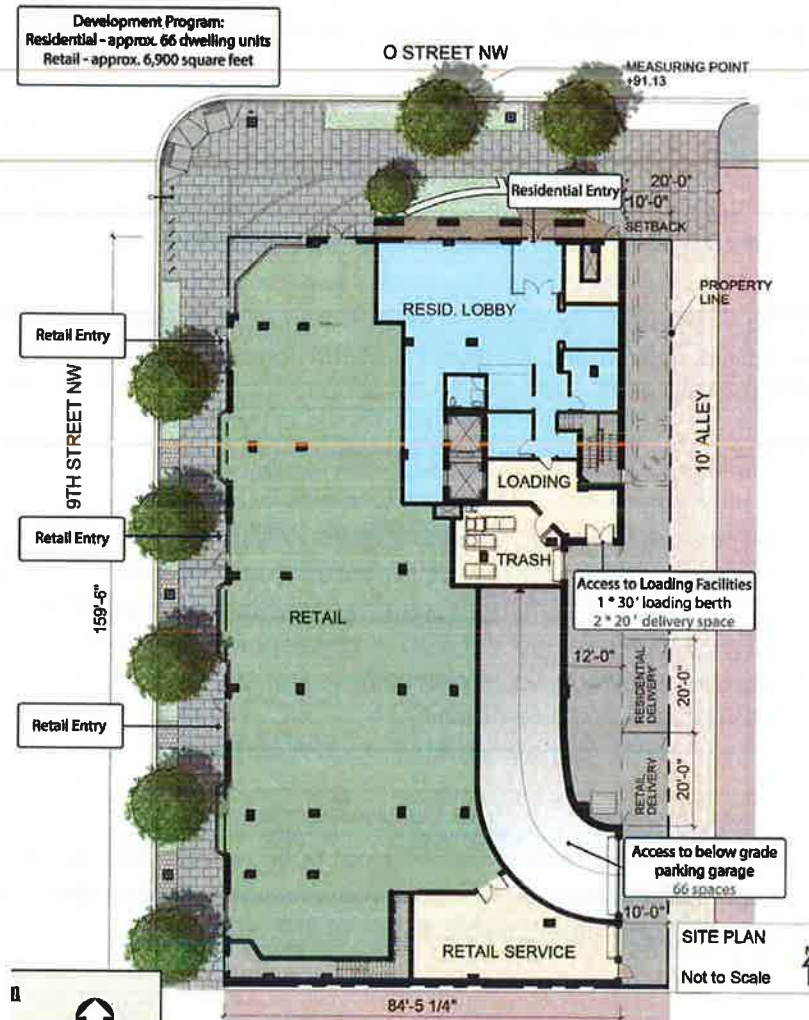


Figure 1: Site Design and Access (Source: Gorove/Slade)

Loading

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

Zoning requires one 55-foot loading berth, one 30-foot loading berth, one 200 square foot platform, and one 20-foot service and delivery space. The Applicant proposes one 30-foot loading berth, one 400 square foot platform, and two 20-foot service and delivery spaces (one for the residential component and one for the commercial component). The loading facilities are located off of the alley network, and no back-up maneuvers will occur in public space. DDOT finds that this is an appropriate number and size of loading facilities in an appropriate location. Trucks larger than 30-feet are not anticipated for use at this site due to the size of the residential units. If larger loading vehicles are needed for move-ins, building management or residents will need to apply for an Emergency No Parking permit to load curbside.

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 that the Applicant 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.

Sustainable Transportation Elements

Sustainable transportation measures target the promotion of environmentally responsible types of transportation in addition to the transportation mode shift efforts of TDM programs. These measures can range anywhere from practical implementation 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 and type of the proposed development and the number of vehicular parking spaces, DDOT recommends that the Applicant provide two 240-volt electric car charging stations for residents.

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.

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.

Zoning requires the provision of 27 off-street vehicle parking spaces (22 for residential and 5 for retail). The Applicant proposes 66 vehicle parking spaces (61 for residential and 5 for retail). The parking ratio of 0.92 for this project is significantly higher than other recent developments near transit centers.

Trip Generation

The Applicant provided trip generation estimates utilizing the following Institute of Traffic Engineers (ITE) Trip Generation Manual land use codes in their trip generation estimation: Residential-Apartments (Code 220) and 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 assumed a 50% auto mode split for residential use and 20% auto mode split for retail use (see Figure 2) based on WMATA's 2005 *Development-Related Ridership Survey* and the US Census data. While the auto mode split may be low given the high vehicle parking ratio, DDOT finds it is appropriate if it is supported by a robust TDM plan.

Land Use	Mode			
	Auto	Transit	Bike	Walk
Residential	50%	30%	5%	15%
Retail	20%	55%	5%	20%

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

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

Mode	Land Use	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Residential	4 veh/hr	14 veh/hr	18 veh/hr	14 veh/hr	7 veh/hr	21 veh/hr
	Retail	1 veh/hr	1 veh/hr	2 veh/hr	3 veh/hr	3 veh/hr	6 veh/hr
	Total	5 veh/hr	15 veh/hr	19 veh/hr	17 veh/hr	10 veh/hr	27 veh/hr
Transit	Residential	3 ppl/hr	9 ppl/hr	12 ppl/hr	10 ppl/hr	4 ppl/hr	14 ppl/hr
	Retail	4 ppl/hr	3 ppl/hr	7 ppl/hr	12 ppl/hr	14 ppl/hr	26 ppl/hr
	Total	7 ppl/hr	12 ppl/hr	19 ppl/hr	22 ppl/hr	18 ppl/hr	40 ppl/hr
Bike	Residential	1 ppl/hr	1 ppl/hr	2 ppl/hr	2 ppl/hr	1 ppl/hr	3 ppl/hr
	Retail	1 ppl/hr	0 ppl/hr	1 ppl/hr	2 ppl/hr	1 ppl/hr	3 ppl/hr
	Total	2 ppl/hr	1 ppl/hr	3 ppl/hr	4 ppl/hr	2 ppl/hr	6 ppl/hr
Walk	Residential	2 ppl/hr	4 ppl/hr	6 ppl/hr	5 ppl/hr	2 ppl/hr	7 ppl/hr
	Retail	2 ppl/hr	1 ppl/hr	3 ppl/hr	5 ppl/hr	5 ppl/hr	10 ppl/hr
	Total	4 ppl/hr	5 ppl/hr	9 ppl/hr	10 ppl/hr	7 ppl/hr	17 ppl/hr

Figure 3: Weekday Peak Hour Vehicle Trip Generation (Source: Gorove/Slade)

The proposed action is expected to generate a low number of vehicular trips. This project is projected to generate a total of 19 vehicle, 19 transit, 1 bike, and 5 walk trips during the AM peak hour and 27 vehicle, 40 transit, 5 bike, and 17 walk trips in the PM peak hour. DDOT requires a capacity analysis

when a development's projected number of peak hour vehicle trips in the peak direction equals or surpasses 25 vehicle trips. This project does not surpass DDOT's threshold; therefore, a capacity analysis was not required.

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.

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 proposed project is located 0.3 miles from the Mount Vernon/7th Street-Convention Center Avenue Metro Station on the Yellow and Green Lines. Additionally, the site is well-served by high-frequency bus routes, which operate with headways in the range of approximately five to 35 minutes. Bus routes include: 64, 70, G2, and G8 lines. A residential building located in such a transit rich area of the District should achieve high transit ridership.



Figure 5: Existing Transit Service (Source: Grove/Slade)

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 Applicant performed an inventory of the pedestrian infrastructure in the vicinity. The existing pedestrian facilities within one-quarter mile of the site meet 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.

Many bicycle facilities are located near the site, including dedicated bicycle lanes along 5th Street, 7th Street, 10th Street, 11th Street, 12th Street, 13th Street, Q Street, R Street, and New York Avenue. There are four Capital Bikeshare stations located within one-quarter mile of the site supplying a total of 71 bicycle docks. The nearest station is located at the intersection of O Street and 8th.

The Applicant proposes 23 long-term bicycle parking spaces, which meets the zoning requirement. The Applicant proposes short-term bicycle parking spaces, but did not specify the amount. DDOT requires a minimum of 6 short-term bicycle parking spaces (3 racks); the location will be worked out during the public space permitting process.

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.

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 initially proposed the following TDM strategies:

- Contribute up to \$80,000 to DDOT for the installation of a new Capital Bikeshare station located within the boundaries of ANC 6E and in a mutually acceptable location to the Applicant and DDOT;
- For the first year following the Certificate of Occupancy, each unit's incoming residents will be offered a one-year membership to Capital Bikeshare;
- Bicycle repair station in the bicycle storage room;
- Bicycle cleaning facility in the bicycle storage room;
- A cargo bicycle will be made available for residents;
- Identify TDM Leaders (for planning, construction, and operations). The TDM Leaders will work with residents and employees in the building to distribute and market various transportation alternatives and options; and
- The Applicant will provide TDM materials to new residents in the Residential Welcome Package materials.

These TDM measures are not sufficient to support the proposed mode split and trip generation given the high parking ratio. Therefore, additional TDM measures are necessary. The TDM plan should be updated to the following:

- Fund the installation and first year's operation expenses of a new Capital Bikeshare station located within the boundaries of ANC 6E;
- Provide each unit's incoming residents a one-year membership to Capital Bikeshare for the first year following the Certificate of Occupancy;
- Provide a bicycle repair station in the bicycle storage room;
- Provide a bicycle cleaning facility in the bicycle storage room;
- Provide a cargo bicycle will be made available for residents;
- Identify TDM Leaders (for planning, construction, and operations). The TDM Leaders will work with residents and employees in the building to distribute and market various transportation alternatives and options;
- Provide TDM materials to new residents in the Residential Welcome Package materials;
- Provide a TransitScreen in the residential lobby; and
- Unbundle parking from leases of all units and charge market rate, defined as the average cost for parking within a quarter-mile of the site on a weekday.

DDOT finds these additional TDM measures appropriate to support the mode split given the high parking ratio from the project.

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