

# Government of the District of Columbia


## Department of Transportation



### d. Planning and Sustainability Division

#### MEMORANDUM

**TO:** Sara Bardin  
Director, Office of Zoning

**FROM:** Anna Chamberlin, AICP  
Associate Director 

**DATE:** October 16, 2020

**SUBJECT:** ZC Case No. 20-18 – 1319 South Capitol Street SW

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#### PROJECT SUMMARY

1319 South Capitol Owner LLC (the “Applicant”) has requested approval of a Design Review application to construct a 11-story residential building. The project is located on a 37,453 SF site in Square 653 on the southwest corner of N Street and South Capitol Street SW. With this application, the Applicant proposes the following development programs:

- 302-320 Residential Units;
- 3,479 SF Retail/Restaurant;
- 180 Vehicle Parking Spaces;
- One (1) 30-foot loading berth and one (1) 20-foot delivery space; and
- 110 long-term and 17 short-term bicycle parking spaces.

#### SUMMARY OF DDOT REVIEW

The District Department of Transportation (DDOT) is committed to achieving an exceptional quality of life in the nation’s capital by encouraging sustainable travel practices, constructing safer streets, and providing outstanding access to goods and services. As one means to achieve this vision, DDOT works through the zoning process to ensure that impacts from new developments are manageable within, and take advantage of, the District’s multimodal transportation network.

The purpose of DDOT’s review is to assess the potential safety and capacity impacts of the proposed action on the District’s transportation network and, as necessary, propose mitigations that are commensurate with the action. After an extensive review of the case materials submitted by the Applicant, DDOT finds:

### Site Design

- All vehicle parking and truck access will be via two (2) public alleys serving the site. There is a 16-foot public alley at the rear from N Street and a 10-foot private/public alley one-way westbound from S. Capitol Street SW;
- The townhouse on Lot 54 will be demolished to create a pull off-area adjacent to the east-west alley for pick-ups and drop-offs since no standing or stopping is allowed on S. Capitol Street;
- A 12-foot north-south private easement is proposed along the back side of the townhouses to remain along S. Capitol Street so they can access the 10-foot public alley;
- DDOT requests this easement area extend northward to Lot 830 so that Lots 830/829 can access the alley when and if those parcels redevelop. Also provide an easement on the private portion of the 10-foot alley (Lot 831) so the townhouses can exit out the 16-foot public alley;
- The project meets the ZR16 minimum requirements for loading facilities (1 loading berth, 1 delivery space, and a loading platform);
- All loading operations and maneuvers will occur within the public alley or on private property with head-in and head-out movements at the alley entrances to N Street and S. Capitol Street, consistent with DDOT standards;
- No off-street vehicle parking is required because the site is in the CG-2 zone. The Applicant is proposing 180 parking spaces, which is just below the ZR16 maximum of approximately 200 spaces;
- For a site so close to a Metrorail station (less than ¼ mile from Navy Yard-Ball Park), DDOT would expect to see a much lower parking supply closer to the 90-100 space range;
- The presence of additional parking has the potential to induce more demand for driving on the roadway network, especially since it is a permanent feature of the site. The Applicant proposed an “Enhanced Tier” TDM Plan as mitigation, which DDOT finds is not robust enough to offset the impacts of the additional parking (see below for TDM measures requested by DDOT);
- The project meets the ZR16 minimum requirement for short-term bicycle parking (17 spaces) and exceeds ZR16 for long-term bicycle parking (110 spaces vs 77 required);
- Four (4) electric vehicle charging stations are proposed consistent with DDOT’s recommendation of at least 1 per 50 parking spaces; and
- UFD identified two (2) Special Trees near the bend in the alley that will require a permit for removal.

### Travel Assumptions

- The CTR assumed an automobile mode split of 35% and 65% non-auto for the residential component of the project. For neighborhood serving retail/restaurant, only approximately 10% of patrons are expected to arrive by car. DDOT concurs with these assumptions;
- Based on the assumed mode split, the project is expected to generate 54 vehicle trips, 81 transit trips, and 56 bicycle/walking trips in the evening commuter peak hour; and
- The transportation network can handle the additional site-generated auto and non-auto trips with the requested mitigation implemented (see below for specifics).

### **Multi-Modal Evaluation**

- The site is located less than ¼ mile (2 blocks) from the Navy Yard-Ball Park Metrorail Station and ½ mile (6 blocks) from the Waterfront Metrorail Station;
- There is no bus service along S. Capitol Street but there are several lines along M Street SW/SE including the DC Circulator. The 74 bus serves the residential neighborhood behind the project;
- The pedestrian network is mostly complete surrounding the site, however there are missing curb ramps and high visibility crosswalks at the intersections of Delaware Avenue at Canal Street SW and O Street at Canal Street SW, three blocks west of the site and along the walking route to the 74 bus and waterfront amenities. DDOT requests the Applicant include these upgrades in the TDM Plan;
- There are no bicycle lanes or trails in the vicinity of the site. There are several DDOT projects at varying levels of design and implementation to provide protected bike lanes in the area;
- There are no Capital Bikeshare stations in the immediate vicinity of the site. There is one on the other side of Nationals Park, one on Potomac Avenue near Audi Field, and one at M and 1<sup>st</sup> Street SW; and
- Given the projected bike trip generation and shortage of capacity in Southwest DC, DDOT requests the Applicant include two 4-dock expansion plates in the proposed TDM plan for locations to be determined later within ANC 6D.

### **Traffic Impact Analysis**

- To present a more conservative or “worst case” projection of traffic impacts, the analysis assumed traffic from a higher number of residential units (341 units) than currently proposed due to the flexibility requested in the number of units;
- The CTR indicated that four (4) of the study intersections would unacceptably degrade in level of service or worsen intersection queueing due to the addition of site-generated vehicle trips;
- Queueing impacts on the eastbound approach of P Street SW at S. Capitol Street can be partially remedied through use of striping to delineate between left- and right-turning vehicles. Instead of making this change which could encourage faster moving traffic and more vehicle activity on the corner, the Applicant should implement additional TDM measures and non-auto upgrades;
- For the remainder of the impacted intersections, the CTR proposes implementation of signal timing adjustments to improve vehicle LOS; and
- In lieu of signal adjustments that would have upstream and downstream signal implications, DDOT requests the Applicant strengthen the TDM plan with additional pedestrian and bicycle network improvements and other TDM strategies that would encourage non-auto travel and reduce the demand for driving.

### **Mitigations**

- The Applicant’s proposed TDM plan in the September 11, 2020 CTR is not sufficiently robust to reduce auto travel through intersections identified to have LOS and queueing impacts or to offset potential induced demand for driving due to the site’s high parking supply; and
- DDOT has requested specific additional measures to improve the TDM plan’s effectiveness and encourage non-automobile access to the surrounding transportation network, such as

expansion of bikeshare in ANC 6D, installation of missing curb ramps and high visibility crosswalks, and increased years of Capital Bikeshare memberships.

## **RECOMMENDATION**

DDOT has no objection to approval of this Design Review application with the following conditions:

- Extend the proposed 12-foot easement northward to the edge of Lot 830 to allow for access to Lots 829/830 when those properties redevelop. Also, provide an easement across the private portion of the 10-foot alley (Lot 831) so that the rowhouses can exit out the 16-foot public alley. A copy of the easement(s) should be provided to DDOT Planning and Sustainability Division when it is signed by all parties; and
- Implement the Transportation Demand Management (TDM) Plan proposed in the Applicant's September 11, 2020 CTR, for the life of the project, unless otherwise noted, with the requested additions noted in more detail at the end of this report:
  - Funding two 4-dock expansion plates for Capital Bikeshare stations in ANC 6D, locations to be determined by DDOT during permitting;
  - Funding and installing missing curb ramps and high visibility crosswalks at two (2) intersections in the surrounding residential neighborhood;
  - Increase the number of years of annual Capital Bikeshare memberships for new residents from one (1) year to three (3) years.

## **CONTINUED COORDINATION**

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

- Public space, including curb and gutter, street trees and landscaping, streetlights, sidewalks, curb ramps, and other features within the public right-of-way are expected to be designed and built to DDOT standards;
- The Applicant will be required to obtain public space permits for all elements of the project proposed in public space. DDOT has several comments on the Applicant's initial public space design which are noted later in the Streetscape and Public Realm section and can be resolved during the public space permitting process;
- The Applicant should participate in a Preliminary Design Review Meeting (PDRM) to discuss the public space design with DDOT and OP;
- The CTR also identified queueing issues on the northbound approaches at intersections along S. Capitol Street due to illegal left-turns onto side streets. During public space permitting, continue this discussion with PSD, TESD, and TOSD on strategies to alleviate the queueing or better enforce left-turn restrictions;
- During public space permitting, include plans for the missing curb ramps and high visibility crosswalks at the intersections of Canal Street at Delaware Avenue SW and Canal Street at O Street SW; and
- Coordinate with DDOT's Urban Forestry Division (UFD) and the Ward 6 arborist regarding preservation of the Heritage Tree, removal of Special Trees on-site, preservation and protection

of existing small street trees, as well as the planting of new street trees, in bioretention facilities or a typical expanded tree planting space.

## **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 five categories: site design, travel assumptions, multi-modal evaluation, traffic impact 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, vehicle parking, 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

Pedestrian access to the multi-family building and retail unit are proposed via entrances off S. Capitol Street SW. First floor townhouse units facing N Street and S. Capitol Street SW will have individual entrances. Vehicular access to the underground parking garage and loading/trash area are proposed via the 16-foot rear public alley from N Street SW. Additionally, there is an existing 10-foot public/private alley that connects to South Capitol Street SW (western half is private on Lot 831 and eastern half is public). The Applicant is proposing to expand the eastern portion of the east-west 10-foot alley onto private property (townhouse to be demolished on Lot 54) for a total effective width of 20-feet. This is to create a pull off area to accommodate vehicular pick-up/drop-off since stopping and standing is not allowed on S. Capitol Street SW. The private western portion of the alley is planned to remain 10-feet wide. Given the 10-foot alley is only wide enough for one (1) vehicle, it should be signed as one-way westbound from S. Capitol Street SW.

The Applicant is proposing a 12-foot wide north-south private easement so that a connection from the rear of the rowhouses along S. Capitol Street SW, owned by others, will be provided to the east-west public alley. DDOT recommends this easement be extended to the edge of Lot 830 so when Lots

829/830 redevelop both curb cuts can be closed (the existing curb cut on S. Capitol to Lot 830 does not meet DDOT’s driveway spacing standards). An easement should also be provided on the private portion of the east-west alley (Lot 831) to connect the two public alleys and give the townhouses an opportunity to exit out to N Street since the entrance from S. Capitol Street is one-way inbound.

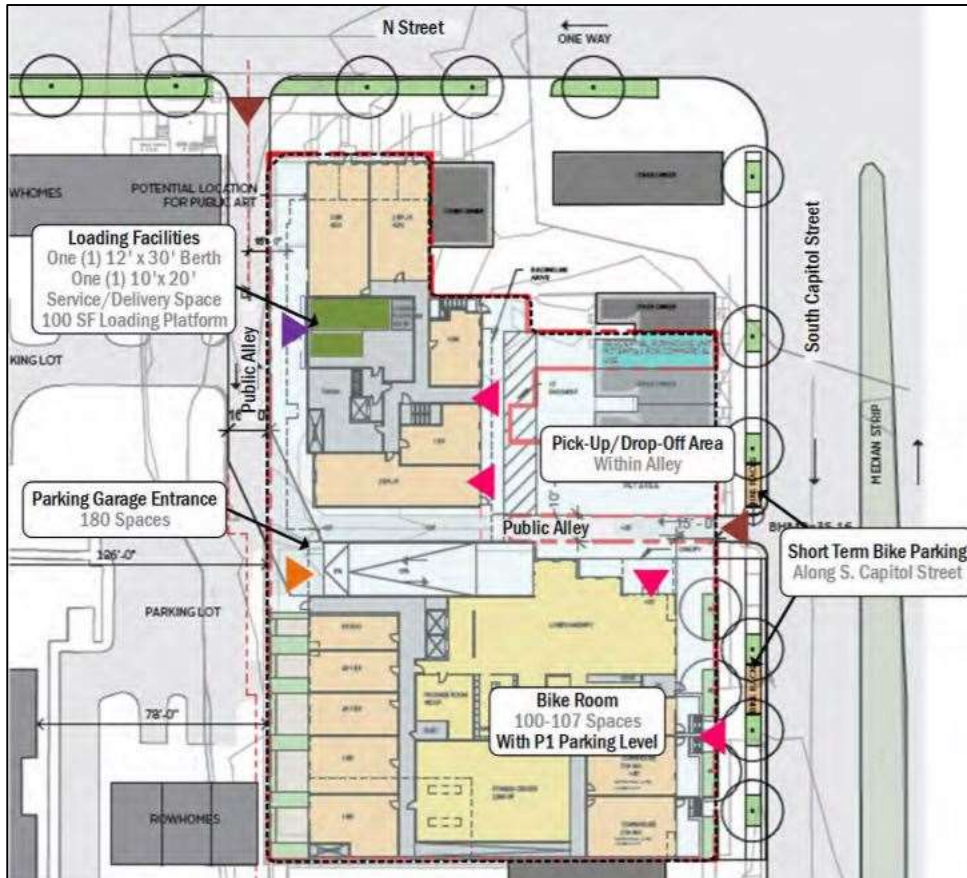


Figure 1 – Site and Access Plan (Source: Gorove/Slade CTR, Figure 7, 9/11/2020)

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.

The site is proposed to have one (1) 30-foot loading berth with a platform and one (1) 20-foot delivery space, consistent with Subtitle C § 901.1 and § 901.4 of the 2016 Zoning Regulations (ZR16). Access to the loading berth and trash area are via the rear 16-foot alley connecting to N Street NW. All trash and delivery trucks are proposed to enter head-in and exit head-out to the public right-of-way with all turning maneuvers taking place on private property or within the public alley. Since no zoning or design relief is being sought for the loading facilities and there are no negative impacts to DDOT public space, a Loading Management Plan (LMP) is not required by DDOT.

### Vehicle Parking

The overall parking demand created by the development is primarily a function of land use, development square footage, 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, proximity to transit, connectivity of bicycle and pedestrian facilities within the vicinity of the development, and the demographic composition and other characteristics of the potential residents.

There is no minimum off-street parking requirement because the site is located in the CG-2 zone. The Applicant is proposing to provide 180 parking spaces in the underground garage (0.60 spaces/unit), which meets the ZR16 minimum and is near the maximum allowed. Since the site is located less than ¼ mile from a Metrorail Station (Navy Yard-Ball Park), DDOT prefers minimal amount of parking be provided. According to the off-street parking guidelines in DDOT's June 2019 *Guidance for Comprehensive Transportation Review*, approximately 90 spaces (0.30 spaces/unit) would be more appropriate for this site. Research has shown that the presence of additional parking has the potential to induce more driving on the roadway network. As such, the Applicant has proposed an "Enhanced Tier" Transportation Demand Management (TDM) plan to help mitigate the higher parking ratio. As discussed later in this report, DDOT requests additional items be included, such as not leasing out any extra parking spaces to anyone outside the building (e.g., employees, residents, or ball park goers), providing additional years of bikeshare memberships, and expanding nearby bikeshare stations.

### Bicycle Parking

Per ZR16 Subtitle C § 802.1, the Applicant is required to provide a minimum of 77 long-term and 17 short-term bicycle parking spaces for 302 residential dwelling units and 3,479 SF retail/restaurant. The Applicant is proposing to meet or exceed these requirements with a total of 110 long-term and 17 short-term spaces. Long-term bicycle parking spaces are shown in a storage room located on the first parking garage level (P1) near an elevator. The short-term bicycle parking spaces are shown in public space around the perimeter of the site, but final locations will be determined during permitting. Short-term bicycle racks should be of an inverted-U design.

### 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, streetlights, sidewalks, and other appropriate features within the public rights of way bordering the site.

The Applicant must work closely with DDOT and the Office of Planning (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 Titles 11, 12A, and 24 of the DCMR, DDOT's 2019 version of the *Design and Engineering Manual (DEM)* and the *Public Realm Design Manual* will serve as the main public realm references for the Applicant. Public space designs will be reviewed in further detail during the public space permitting process. DDOT staff will be available to provide additional guidance during these

processes and encourages the Applicant to participate in a Preliminary Design Review Meeting (PDRM) to address design related comments provided by DDOT and OP.

While the preliminary public space plans, shown above in Figure 1, are generally consistent with DDOT standards, there are several considerations that need to be reviewed in greater detail during the public space permitting process:

- Close the existing curb cut to S. Capitol Street SW just south of the east-west alley;
- Ensure the sidewalk along the both N Street and S. Capitol Street frontages line up straight with the sidewalks of adjacent properties and are of the same width;
- Install signage along the public and private portions of the 10-foot alley clarifying the circulation is one-way westbound;
- Ensure all building entrances are at-grade with the sidewalk to avoid unnecessary stairs and ramps in public space;
- Ensure any bollards in the off-street pick-up/drop-off concept are behind the property line and not within DDOT's alley or South Capitol Street right-of-way;
- Fences and gates may only be a maximum of 42 inches tall and of an open design;
- DDOT appreciates the creativity with the proposed alley design and pull of area. The non-standard materials will require a covenant of maintenance and the Applicant will be responsible for maintaining it;
- Any café patio seating will require a separate public space occupancy permit; and
- Determine final locations for the short-term bicycle spaces (inverted U-racks) in adjacent public space near building entrances.

#### 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.

The Applicant's CTR states that four (4) electric vehicle (EV) charging stations will be provided in the parking garage. This is consistent with DDOT's recommendation for 1 EV station for every 50 parking spaces.

#### Heritage, Special, and Street Trees

Heritage Trees are defined as a tree with a circumference of 100 inches or more and are protected by the Tree Canopy Protection Amendment Act of 2016. With approval by the Mayor and DDOT's Urban Forestry Division (UFD), Heritage Trees might be permitted to be relocated. As such, the Applicant may be required to redesign the site plan in order to preserve the Non-Hazardous Heritage Trees.



UFD did not identify any Heritage on the property but noted two (2) Special Trees (44+ inches) located near the bend in the alley that will require a permit in order to remove. Additionally, two (2) street trees north of the alley entrance to S. Capitol Street SW should be preserved. The Applicant should file permit applications with UFD for removal of special trees and work with the Ward 6 Arborist regarding implementation of a tree preservation plan.

**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.

Mode Split and Trip Generation

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, proximity to transit options, availability and cost of vehicle parking, among many others.

The study assumed the mode splits for each proposed land use as shown in Figure 2 below. The mode split assumptions were based on a variety of sources, including WMATA ridership data and census data. The parking ratio and proximity to Metrorail stations were also factored into the assumed mode splits.

Land Use	Mode			
	Drive	Transit	Bike	Walk
Residential	35%	45%	10%	10%
Retail	10%	5%	10%	75%

Figure 2 – Mode Split Assumptions (Source: CTR, Gorove/Slade, Table 3, 9/11/20)

Trip generation estimates were developed using the rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10<sup>th</sup> Edition* (Land Use Code 221 Multi-Family Mid-Rise and Code 820 Shopping Center) and the assumed mode-split to convert base vehicular trips to base person trips using average auto occupancy data and then back to vehicular, transit, bicycle, and pedestrian trips. Since the Applicant is requesting flexibility in the number of dwelling units, the trip generation analysis was conducted for the ‘worst-case’ scenario from a traffic standpoint and assumed 341 units. Figure 3 below shows the predicted number of weekday peak hour trips generated by each development program. The development is projected to generate a moderate amount of non-auto and vehicle trips during the highest of the weekday commuter peak hours (up to 191 person trips and 54 vehicle trips). The site is currently occupied by a surface parking lot and several rowhouses which are not currently generating much traffic.

Mode	AM Peak Hour			PM Peak Hour			Saturday Peak Hour			Daily Total
	In	Out	Total	In	Out	Total	In	Out	Total	
<b>Residential (341 Units)</b>										
Auto (veh/hr)	11	32	43	32	21	53	19	18	37	650
Transit (ppl/hr)	17	48	65	49	31	80	28	29	57	986
Bike (ppl/hr)	4	11	15	11	7	18	6	7	13	219
Walk (ppl/hr)	4	10	14	11	6	17	6	7	13	219
<b>Neighborhood-Serving Retail (3,479 SF)</b>										
Auto (veh/hr)	0	1	1	1	0	1	1	0	1	13
Transit (ppl/hr)	0	0	0	1	0	1	1	0	1	12
Bike (ppl/hr)	0	0	0	1	1	2	1	1	2	24
Walk (ppl/hr)	4	0	4	8	11	19	10	8	18	178
<b>Total</b>										
Auto (veh/hr)	11	33	44	33	21	54	20	18	38	663
Transit (ppl/hr)	17	48	65	50	31	81	29	29	58	998
Bike (ppl/hr)	4	11	15	12	8	20	7	8	15	243
Walk (ppl/hr)	8	10	18	19	17	36	16	15	31	397

Figure 3 – Multi-Modal Trip Generation Summary (Source: CTR, Gorove/Slade, Table 4, 9/11/20)

### Multi-Modal Network Evaluation

#### Pedestrian Facilities

The District is committed to enhancing 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 is well connected to major transit hubs on M Street and neighborhood amenities via a complete and mostly up to standards sidewalk network. As part of this project, the Applicant will upgrade the sidewalk area on both N Street and S. Capitol Street SW. There were no identified missing gaps in the sidewalk network or substandard curb ramps along S. Capitol Street, as shown below in Figure 4.

However, it is noted that in the graphic below, curb ramps and high visibility crosswalks are not shown as missing at the T-intersections of Delaware Avenue at Canal Street SW and O Street at Canal Street SW, three (3) blocks west of the site. DDOT requests the Applicant include the funding and installation of them in the TDM plan as mitigation to offset the intersection impacts and induced demand for driving from the high parking supply. These are along a critical walking path from the site to the Route 74 bus stops located adjacent to those two intersections and other waterfront amenities to the west.

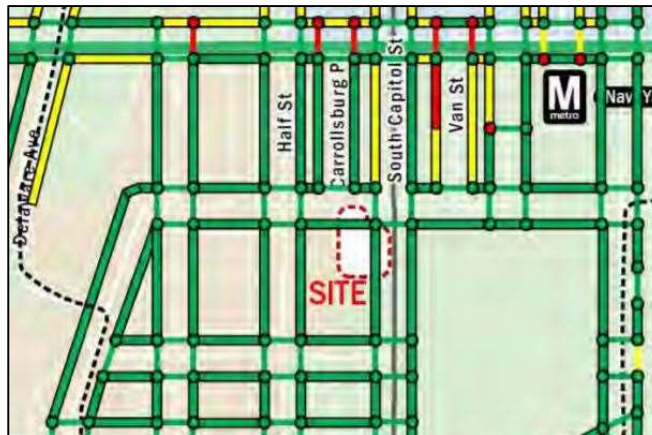


Figure 4 – Pedestrian Facilities (Source: CTR, Gorove/Slade, Figure 27, 9/11/20)

Bicycle Network

The District is committed to enhancing 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.

As shown below in Figure 5, there are currently no bike lanes in the immediate area. East of the site, on N Street SE, are bike lanes connecting through the Navy Yard neighborhood by the Nationals Park. West of the site, DDOT is currently designing a cycletrack on 4<sup>th</sup> Street and P Street SW. There is a Capital Bikeshare station approximately four (4) blocks north and west of the site and another one on the opposite side of Nationals Park. Given the projected amount of bicycle and pedestrian trips to the site, identified impacts in the LOS analysis, and high parking ratio, DDOT requests the Applicant add to the TDM plan the funding and installation of eight (8) Capital Bikeshare docks (i.e., two 4-plate expansions), at locations in ANC 6D to be determined by DDOT at a later date.



Figure 5 – Existing Bicycle Facilities (Source: CTR, Gorove/Slade, Figure 29, 9/11/20)

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 less than 1/4 mile southwest of the Navy Yard-Ball Park Metrorail Station and 1/2 mile southeast of the Waterfront Metrorail Station which are both served by the Green Line, as shown in Figure 6 below. There are currently no bus stops or transit service provided along South Capitol Street, however there are several stops on M Street SW (one block north) served by both WMATA buses and DC Circulator. Additionally, the 74 bus has a route through the residential neighborhood at the rear of the site. Pedestrians can access bus stops for this route by walking down O Street, Canal Street, and Delaware Avenue SW.



Figure 6 – Transit Service (Source: CTR, Gorove/Slade, Figure 25, 9/11/20)

### Traffic Impact Analysis (TIA)

To determine the proposed development’s impacts on the transportation network, the Applicant completed a Traffic Impact Analysis (TIA) as part of the CTR study, prepared by Gorove/Slade, dated September 11, 2020 which includes an extensive multi-modal analysis of existing conditions (2020 Existing), future with no development (2024 Background) and future conditions with development (2024 Future) scenarios. As previously noted, since the Applicant is seeking flexibility in the number of approved dwelling units, the traffic analysis was based on the highest amount under consideration (341 units) to present the most conservative analysis.

#### Background Developments and Regional Growth

As part of the analysis of future conditions, DDOT requires applicants to account for future growth in traffic on the network or what is referred to as background growth. The Applicant coordinated with DDOT on the appropriate background developments to include in the analysis. Traffic volumes from 19 other nearby projects were taken into account as anticipated to be constructed and open by 2024.

DDOT also requires Applicants account for regional growth through the build-out year of 2024. 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 coordinated with DDOT on an appropriate measure to account for regional growth that accurately accounted for background growth on the network. A maximum annually compounding regional background growth rate of 0.5% was assumed in the study area, differing by roadway and adjusted downward due to the significant number of background projects account for.

DDOT also requires applicants to consider future changes to the roadway network. It was determined in coordination with DDOT staff that the only planned background transportation network improvements would be on M Street SE at 1<sup>st</sup> Street and Half Street by 2024. As part of the DDOT M Street priority bus and bike lane project, several lanes throughout the corridor would be restriped. Phase 2 of the South Capitol Street project, which will include a redesign of interchanges from O Street north to I-695, is not currently funded for construction and likely more than 10 years away. Therefore, it was not included in

the analysis. Phase 1 of this project includes changes to South Capitol Street south of O Street and is funded for constructed over the next several years. Since there are no planned lane use changes (i.e., reduction of lanes), the planned redesign will not impact the traffic analysis associated with this land development proposal.

#### Study Area and Data Collection

The Applicant in conjunction with DDOT identified 16 existing intersections (including alley entrances) where detailed vehicle counts would be collected 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 with the greatest potential to see impacts 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 would realize new trips. However, DDOT expects minimal to no increase in delay outside the study area as a result of the proposed action.

Given the unique circumstances of the COVID-19 pandemic, fresh new commuter peak hour traffic counts were not able to be collected at study area intersections. Any counts that would have been collected during this time period would not have been reflective of typical commuting patterns. Instead, DDOT worked with the Applicant to develop an alternate methodology. The Applicant was able to obtain vehicular traffic counts for nearby intersections from various other studies conducted in the area. Gaps in traffic count data were filled using Streetlight© cell phone data to create anticipated 2020 conditions had the disruptions from the pandemic not occurred. Projected site-generated traffic volumes from the trip generation analysis were then assigned to the roadway network and added to Background 2024 volumes to create Total Future 2024 conditions. Volumes from each of these scenarios were then evaluated in the roadway capacity and operations analysis, as discussed below.

#### 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.

The roadway capacity analysis provided in the CTR demonstrated that three (3) study intersections would have at least one approach that degrades in Level of Service (LOS) or queue lengths that meet DDOT's threshold for mitigation during a commuter peak hour due to the addition of site generated traffic. The impacted intersections identified in the analysis included: 1 and 2) South Capitol Street and M Street SE/SW (both ramps), 3) South Capitol Street and N Street SE/SW, and 4) South Capitol Street and P Street SW.

To improve future LOS, the study recommends signal timing adjustments at South Capitol Street and N Street and no mitigation at South Capitol Street and M Street since it will be redesigned as part of Phase 2 of the South Capitol Street project. It is noted that DDOT does not make signal timing adjustments at individual intersections in conjunction with a specific land development project because most signals are in coordinated networks that would have implications to upstream and downstream signals. Instead, DDOT recommends implementing additional TDM strategies and physical bike and pedestrian network

improvements in the neighborhood around the site to encourage more usage of non-auto modes and reducing driving through the impacted intersections (see specific TDM strategies in Mitigations section below).

At the intersection of South Capitol Street at P Street, the study demonstrated that delineating between left- and right-turn lanes with striping on the eastbound P Street approach could improve vehicle queueing. Currently, the eastbound lane approaching the intersection is treated as a single lane in the analysis but is wide enough to accommodate two travel lanes. Instead of implementing this improvement, which could encourage faster moving vehicles and more vehicular activity on the corner (i.e., right-on-reds, blocking crosswalk), the Applicant should strengthen the TDM plan. When and if the properties on the two corners redevelop, DDOT will work with those properties to straighten the curb line and narrow the crossing distance for pedestrians.

### **Mitigations**

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's 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, a reduction in parking and implementation of 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 turn-lane striping discussed in the Roadway Capacity subsection above, the following is a discussion of TDM mitigations to be included as conditions in the Zoning Order:

#### Transportation Demand Management

As part of all major development review cases, DDOT requires the Applicant to develop 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 proposed the following TDM Plan for each of the in the September 11, 2020 CTR:

- Unbundle the cost of vehicle parking from the lease or purchase or lease agreement for each residential, retail, and office unit and charge a minimum rate based on the average market rate within a quarter mile.
- Identify Transportation Coordinators for the planning, construction, and operations phases of the office units within the development. There will be a Transportation Coordinator for each retail and office tenant and the entire residential component/building. The Transportation Coordinators will act as points of contact with DDOT, goDCgo, and Zoning Enforcement.
- Will provide Transportation Coordinators' contact information to goDCgo, conduct an annual commuter survey of employees on-site, and report TDM activities and data collection efforts to goDCgo once per year.
- Transportation Coordinators will develop, distribute, and market various transportation alternatives and options to the employees, including promoting transportation events (i.e., Bike to Work Day, National Walking Day, Car Free Day) on property website and in any internal building newsletters or communications.
- Transportation Coordinators will receive TDM training from goDCgo to learn about the TDM conditions for this project and available options for implementing the TDM Plan.
- Transportation Coordinator will subscribe to goDCgo's residential newsletter.
- Post all TDM Commitments on website, publicize availability, and allow the public to see what commitments have been promised.
- Provide a free SmartTrip card to every new resident and a complimentary Capital Bikeshare coupon good for one ride.
- Provide residents who wish to carpool with detailed carpooling information and will be referred to other carpool matching services sponsored by the Metropolitan Washington Council of Governments (MWCOG) or other comparable service if MWCOG does not offer this in the future.
- Provide welcome packets to all new residents that should, at a minimum, include the Metrorail pocket guide, brochures of local bus lines (Circulator and Metrobus), carpool and vanpool information, CaBi coupon or rack card, Guaranteed Ride Home (GRH) brochure, and the most recent DC Bike Map. Brochures can be ordered from DDOT's goDCgo program by emailing [info@godcgo.com](mailto:info@godcgo.com).
- Install a Transportation Information Center Display (electronic screen) within the lobby, containing information related to local transportation alternatives. At a minimum the display should include information about nearby Metrorail stations and schedules, Metrobus stops and schedules, car-sharing locations, and nearby Capital Bikeshare locations indicating the availability of bicycles.
- Will be exceeding the ZR16 short- and long-term bicycle parking requirements by providing 110 long-term and 17 short-term bicycle parking spaces. Long-term bicycle storage will be provided free of charge to residents.
- Provide a bicycle repair station in each long-term bicycle parking storage room.

- Long-term bicycle storage rooms will accommodate nontraditional sized bikes including cargo, tandem, and kids bikes.
- Following the issuance of a certificate of occupancy for the Project, the Transportation Coordinator will submit a letter to the Zoning Administrator, DDOT, and goDCgo every five (5) years (as measured from the final certificate of occupancy for the Project) summarizing continued compliance with the transportation and TDM conditions in the Order.
- To encourage teleworking, a business center will be provided on-site and available for free to residents 24 hours per day, 7 days per week. Access to a copier and internet services will be included.
- Offer an annual CaBi membership or SmartTrip card pre-loaded with \$85 for all new residents or employees for the first year after the building opens.
- Will hold a transportation event for residents, employees, and members of the community once per year for a total of three (3) years. Examples include resident social, walking tour of local transportation options, goDCgo lobby event, transportation fair, WABA Everyday Bicycling seminar, bicycle safety/information class, bicycle repair event, etc).

DDOT finds the proposed TDM plan is not sufficiently robust to offset potential induced demand for driving from the high parking ratio or to mitigate LOS impacts at several intersections. DDOT requests the following additional strategies be included in the TDM Plan to encourage additional walking and bicycling and reduced demand for driving:

- Increase the number of an annual Capital Bikeshare memberships or \$85 SmartTrip passes from one (1) to three (3) years after the building is occupied;
- Fund and install two (2) four-dock Capital Bikeshare expansion plates at a station(s) within ANC 6D in locations to be determined by DDOT at a later date. If DDOT is not ready for the installation or has not chosen a location at the time of Certificate of Occupancy, then the Applicant should instead contribute \$16,000 to the DDOT Transportation Mitigation Fund to upgrade pedestrian, bicycle, or transit facilities in ANC 6D; and
- Fund and install missing curb ramps and high-visibility crosswalks at the intersections of O Street at Canal Street SW and Delaware Avenue at Canal Street SW, subject to DDOT approval.

Additionally, the TDM Plan should include the following strategies that DDOT requires of all Enhanced TDM plans:

- Will not lease unused parking spaces to anyone aside from tenants of the building (i.e., will not lease to other nearby office employees, single-family home residents, or sporting events).
- Provide one (1) collapsible shopping cart (utility cart) for every 50 residential units, for a total of six (6) to encourage residents to walk to the grocery shopping and run errands.
- Following the issuance of a certificate of occupancy for the Project, the Transportation Coordinator shall submit documentation from DCRA summarizing compliance with the transportation and TDM conditions of the Order (including, if made available, any written confirmation from the Office of the Zoning Administrator) to the Office of Zoning for inclusion in the IZIS case record of the case.



- Revise this bullet: Transportation Coordinators will develop, distribute, and market various transportation alternatives and options to the ~~employees~~ residents, including promoting transportation events (i.e., Bike to Work Day, National Walking Day, Car Free Day) on property website and in any internal building newsletters or communications.

AC:az