

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: District of Columbia Board of Zoning Adjustment

FROM: Samuel Zimbabwe 
Associate Director

DATE: November 6, 2015

SUBJECT: BZA Case No. 19103 – 5th and I Streets Hotel and Residential

PROJECT SUMMARY

Application of TPC 5th & I Partners, LLC (the “Applicant”), pursuant to 11 DCMR §§ 3103.2 and 3104.1, for variances from the rear yard requirements under § 774, the closed court requirements under § 776, the minimum parking requirements under § 2101.1, and the parking access requirements under § 2117, and a special exception from the roof structure requirements under § 770.6 (b) and § 411.3, pursuant to § 411.11, to construct a mixed-use building in the DD/C-2-C/MVT District located on the northeast corner of the intersection of 5th Street and I Street NW. This project consists of:

- 48 dwelling units;
- 175 room hotel;
- 6,450 square foot restaurant;
- 91 vehicular parking spaces minimum accessed via two mechanical lifts; and
- 28 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

- Loading and parking access is proposed to occur from an existing alley accessed from I and K Streets;
- All vehicle parking access is proposed to be managed by valet operators, who will access the parking garage from the alley through two mechanical lifts;
- Valet staging is proposed to occur on I Street;
- A layby is proposed on I Street;
- Private space in the loading dock area can accommodate 10 vehicles queuing to enter the parking lift, but queuing will block access to the loading space; and
- Long term bicycle parking is proposed for vehicle parking garage.

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

- There is potential for double stacking vehicles into the vehicle travel lane on I Street while vehicles queue for valet service;
- It is unlikely that vehicle queuing for the use of the parking lifts will prevent alley access for neighboring properties;
- The design and location of the long-term bicycle parking may be prohibitively difficult for bicyclists to access their bicycles;
- On-street vehicle parking supply is available within the vicinity to address the project's parking demand; and
- The Transportation Demand Management (TDM) plan submitted to the BZA is not sufficient to support the projected mode split. However, the Applicant has coordinated with DDOT to reach an agreeable TDM plan.

Mitigations

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

- Provide a loading management plan to address conflicts between valet queuing off of the alley and the loading area;
- The Applicant should commit to a minimum of seven valet operators during peak operations as noted in their report dated November 5, 2015 to minimize potential I Street conflicts;
- Clarify how long term bicycle parking will access the site in a manner consistent with District regulations. This may include provision for valet parking of bicycles or notation of how bicycles will be required to access the proposed parking location;
- Amend the TDM plan, as verbally agreed, to include the following:
 - Provide all hotel guests free Capital Bikeshare passes upon request for the life of the hotel project and actively promote this incentive through the marketing plan outlined by the Applicant; and
 - Provide a one-year bikeshare membership, carshare membership or \$100 SmarTrip card to all lessees on a yearly basis for a total of 10 years or a three-year membership at the initial sale of units.

Continued Coordination

Given the complexity of the project, the Applicant is expected to continue to work with DDOT outside of the BZA process on the following matter:

- 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.
- Other public space elements such as a sidewalk cafe, building canopies, trellis, and planters are subject to a public space permit.
- Careful attention should be paid to the pedestrian clear path adjacent to the site.
- In general, DDOT is opposed to laybys as they degrade the quality of the streetscape. DDOT would prefer to use curb space to manage passenger loading and valet activities. A valet staging zone, as proposed, requires Public Space Committee approval. DDOT is not opposed to a valet staging zone at this location but details of the size, location, and design of the curb space should be addressed through the public space permitting process.

TRANSPORTATION ANALYSIS

DDOT requires applicants requesting an action from the Zoning Commission or Board of Zoning Adjustment complete a Comprehensive Transportation Review (CTR) in order to determine the action's impact on the overall transportation network. Accordingly, an applicant is expected to show the existing conditions for each transportation mode affected, the proposed impact on the respective network, and any proposed mitigations, along with the effects of the mitigations on other travel modes. A CTR should be performed according to DDOT direction. The Applicant and DDOT coordinated on an agreed-upon scope for the CTR that is consistent with the scale of the action.

The review of the analysis is divided into four categories: site design, travel assumptions, analysis, and mitigations. The following review provided by DDOT evaluates the Applicant's CTR to determine its accuracy and assess the action's consistency with the District's vision for a cohesive, sustainable transportation system that delivers safe and convenient ways to move people and goods, while protecting and enhancing the natural, environmental, and cultural resources of the District.

Site Design

Site design, which includes site access, loading, and public realm design, plays a critical role in determining a proposed action's impact on the District's infrastructure. While transportation impacts can change over time, the site design will remain constant throughout the lifespan of the proposed development, making site design a critical aspect of DDOT's development review process. Accordingly, new developments must provide a safe and welcoming pedestrian experience, enhance the public realm, and serve as positive additions to the community.

Site Access

The Applicant proposes off-street parking and loading access to the site through an existing public alley that connects to K Street and I Street. No curb cuts are proposed for the site (see Figures 1 and 2). All vehicle parking access is proposed to be managed by valet operators, who will access the parking garage from the alley through two mechanical parking lifts.

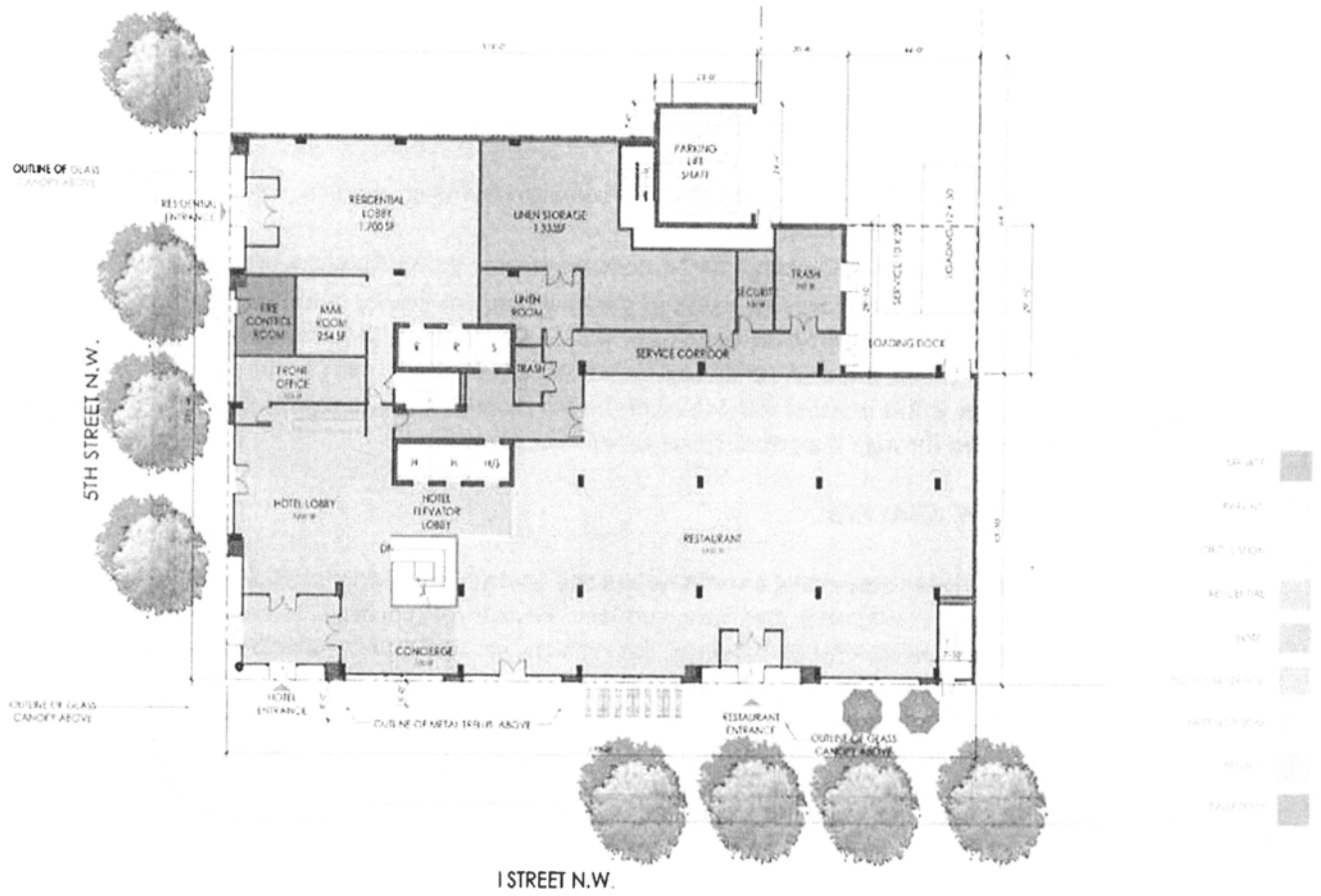


Figure 1: Site Design and Access (Source: Grove/Slade Associates)

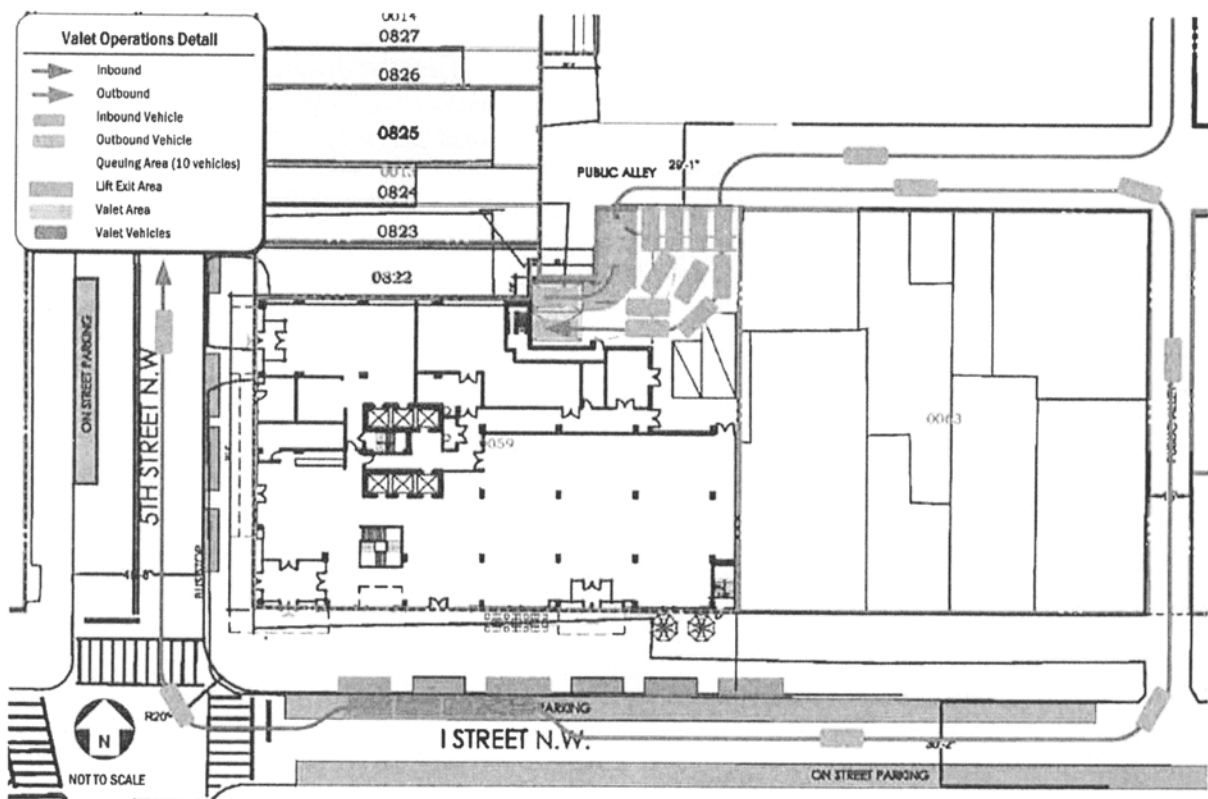


Figure 2: Valet Operations (Source: Grove/Slade Associates)

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 100-foot loading platform in conformance with the zoning requirements. No back-in maneuvers will occur on public space. The location of vehicles queuing to enter the parking garage via the mechanical parking lifts is in front of the loading area, which results in blocking access to the loading space (see Figure 2). This queuing location will not prevent access for neighboring properties that utilize the alley. While DDOT finds the vehicle queuing location appropriate, a loading management plan is necessary to address conflicts between valet queuing and the loading area.

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.

Valet staging is proposed to occur on I Street. While a valet staging zone requires Public Space Committee (PSC) approval, DDOT is not opposed to a valet staging zone at this location. Details, including the length and exact location, will be worked out during the public space permitting process. Additionally, the proposed sidewalk café on I Street will require PSC approval.

DDOT expects the Applicant to design and build the streetscape surrounding the property to current DDOT standards, including building canopies, trellis, and planters as noted on site plans. The proposed site plans also show a layby on I Street, which DDOT is unlikely to support during the public space permitting process. Since the Applicant intends to reserve curbside parking spaces for a valet staging zone, a layby is not necessary, reduces the clear pedestrian path in the sidewalk, which is vital with valet staging, and reduces the number of street trees. In lieu of a layby, the curb and gutter should be maintained and street trees planted at the curb.

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.

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, proximity to transit, connectivity of bicycle and pedestrian facilities within the vicinity of the development, composition of nearby land-uses, and the demographic composition of the potential residents and patrons.

Zoning requires the provision of 137 parking spaces, and the Applicant proposes a minimum of 92 parking spaces. On street parking occupancy data was collected on Tuesday, September 15, 2015 from 5:00 pm to 11:00 pm. Street sweeping was not scheduled for this or the following day. The analysis found unused nearby on-street parking that would meet the proposed project's parking demand, with 164 spaces available during peak weekday demand in the study area from 8:00 pm to 9:00 pm (see Figures 3, 4, and 5). DDOT finds that the available parking spaces within the vicinity of the site will accommodate the expected peak hour site generated parking demand.

	5PM	6PM	7PM	8PM	9PM	10PM
Occupancy	274	313	399	452	434	404
Total Spaces	616	616	616	616	616	616
Available	342	303	217	164	182	212
Utilization	44%	51%	65%	73%	70%	66%

Figure 3: Weekday Parking Occupancy and Utilization (Source: Grove/Slade Associates)

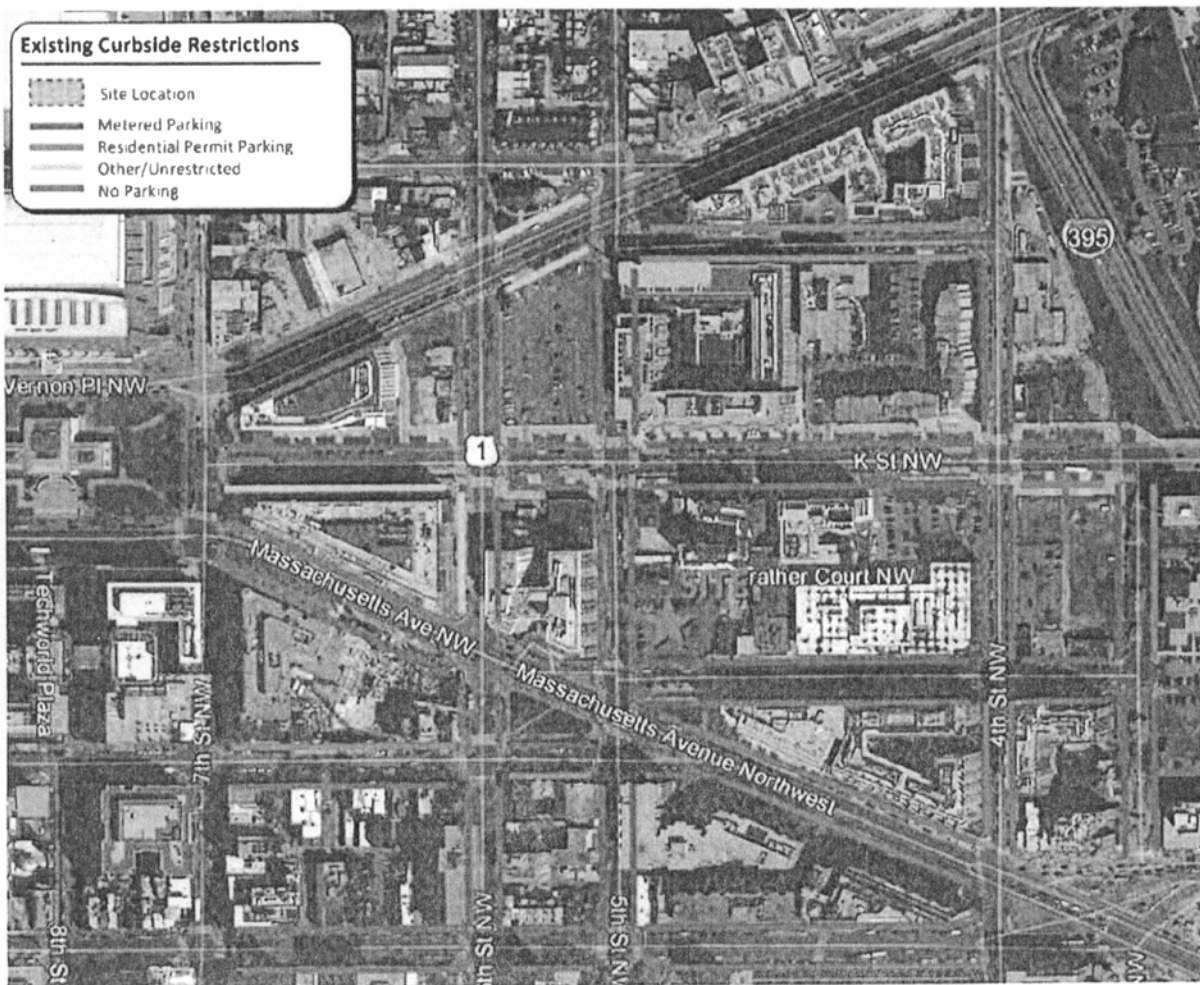


Figure 4: Parking Restrictions (Source: Grove/Slade Associates)

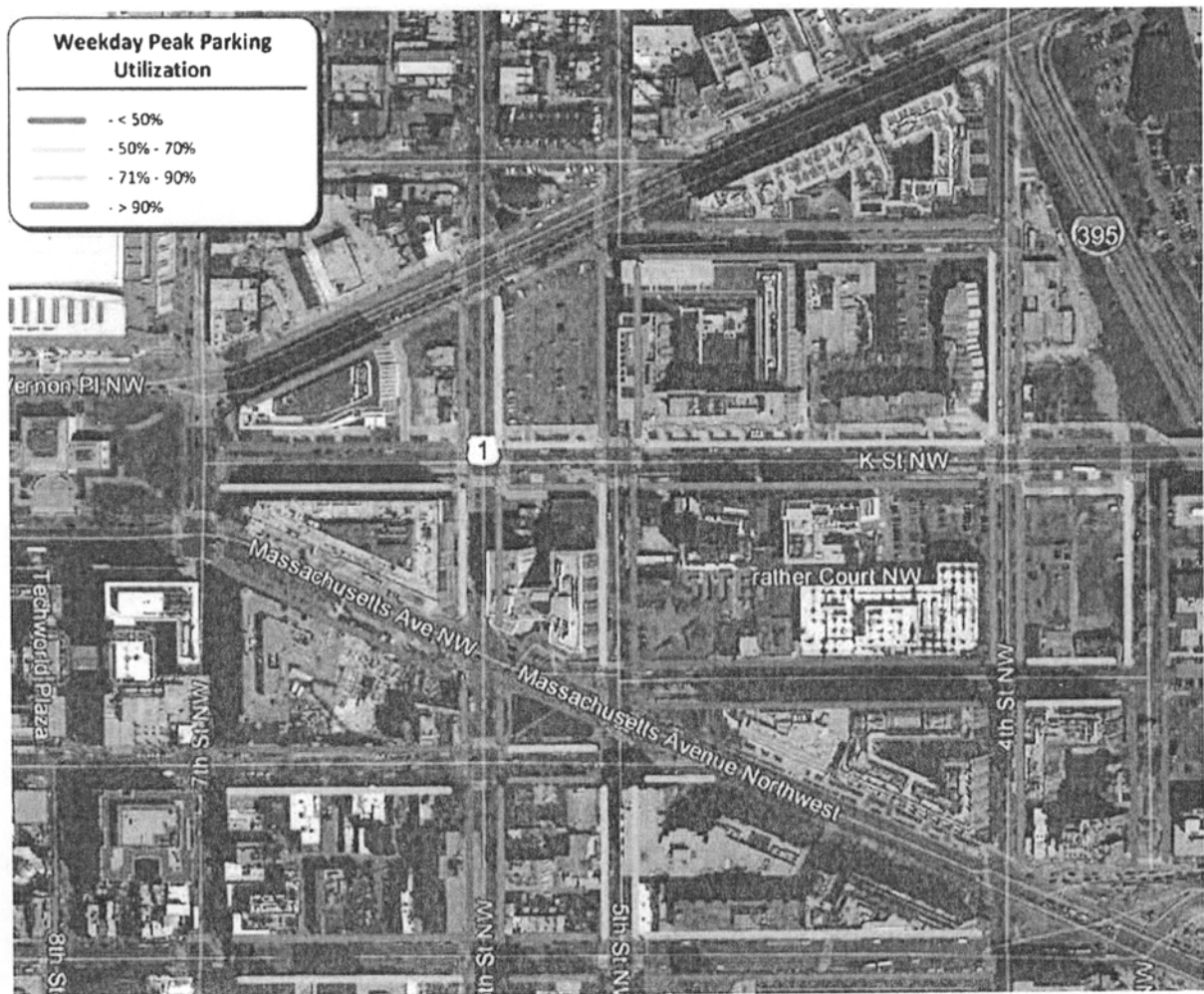


Figure 5: PM Weekday Peak Parking Occupancy (Source: Grove/Slade Associates)

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: Apartment (Code 220), Hotel (Code 310), and Restaurant (Code 931).

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 and DDOT agreed to the following mode split assumptions informed by WMATA's 2005 *Development-Related Ridership Survey*, the U.S. Census data, and based on the luxury nature of the development (see Figure 6).

	Hotel	Residential	Restaurant
Automobile	25%	30%	20%
Uber/carshare	10%	10%	10%
Transit	40%	25%	45%
Bike	10%	10%	5%
Walk	15%	25%	20%

Figure 6: Mode Split

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 hotel, restaurant, and residential (see Figure 7). 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. In total, the proposed site is expected to generate a combined 48 AM and 72 PM peak hour vehicle trips, of which 14 AM and 21 PM trips will be pass-by through the use of Uber and other carsharing operators and 34 AM and 54 PM trips will generate by way of off- and on-street parking.

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	18 veh/hr	16 veh/hr	34 veh/hr	30 veh/hr	21 veh/hr	51 veh/hr
Carpool/Uber	8 veh/hr	6 veh/hr	14 veh/hr	13 veh/hr	7 veh/hr	21 veh/hr
Transit	55 ppl/hr	42 ppl/hr	97 ppl/hr	90 ppl/hr	67 ppl/hr	157 ppl/hr
Bike	15 ppl/hr	11 ppl/hr	26 ppl/hr	21 ppl/hr	15 ppl/hr	36 ppl/hr
Walk	23 ppl/hr	20 ppl/hr	43 ppl/hr	43 ppl/hr	28 ppl/hr	71 ppl/hr

Figure 7: Weekday Peak Hour Vehicle Trip Generation (Source: Grove/Slade Associates)

Analysis

The Applicant completed their analysis based on the assumptions described above.

Valet and Parking Lift Operations

On November 5, 2015, the Applicant submitted information on valet and parking lift operations requested during DDOT's scoping process but not provided in the CTR. The analysis in this section reflects that additional information provided.

As previously noted, all vehicle parking access is proposed to be managed by valet operators, who will access the parking garage from the alley through two mechanical parking lifts. Valet staging is proposed to occur on I Street. To minimize impediments to traffic operations as vehicles queue to be dropped off or picked up, the Applicant proposed queuing up to 10 vehicles in front of the loading area in private space (see Figure 2). The parking garage can hold a minimum of 92 vehicles, which will be accommodated among 46 striped parking spaces through the use of individual space parking lifts holding two cars each (see Figure 8).

The two mechanical lifts accessing the garage can accommodate a total of 80 vehicles per hour (40 entering and 40 exiting) with each lift taking three minutes to complete a cycle of up and down. As previously noted, a conservative estimate of 51 vehicles could enter or exit the site during the PM peak hour. With the use of these two types of parking lifts (i.e., the lifts accessing the parking garage and the lifts within the parking garage) and travel time to and from the valet staging area, the Applicant predicts

that each valet will take 11 to 12 minutes to make one roundtrip valet operation (i.e., park one car and retrieve one car), or approximately five to six roundtrips per hour. At peak PM operation, this would require a staff seven or eight valets and a valet manager for continuous operation. The Applicant has also stated that the arrival of vehicles in significant numbers is not expected for any uses on site, including the ballroom. In the event that a significant number of vehicles depart within a short period, the Applicant has agreed to manage valet operations so as not to block the alley or through lanes along I Street. DDOT will not permit double stacking vehicles on I Street impeding traffic operations as vehicles queue for valets or valets queue for pickup. Therefore, the Applicant should commit to a minimum of seven valet operators during peak operations as noted in their report dated November 5, 2015.

The location of vehicles queuing to enter the parking garage via the mechanical parking lifts is in front of the loading area, which results in blocking access to the loading space (see Figure 2). This queuing location will not prevent access for neighboring properties that utilize the alley. While DDOT finds the vehicle queuing location appropriate, a loading management plan is necessary to address conflicts between valet queuing and the loading area.

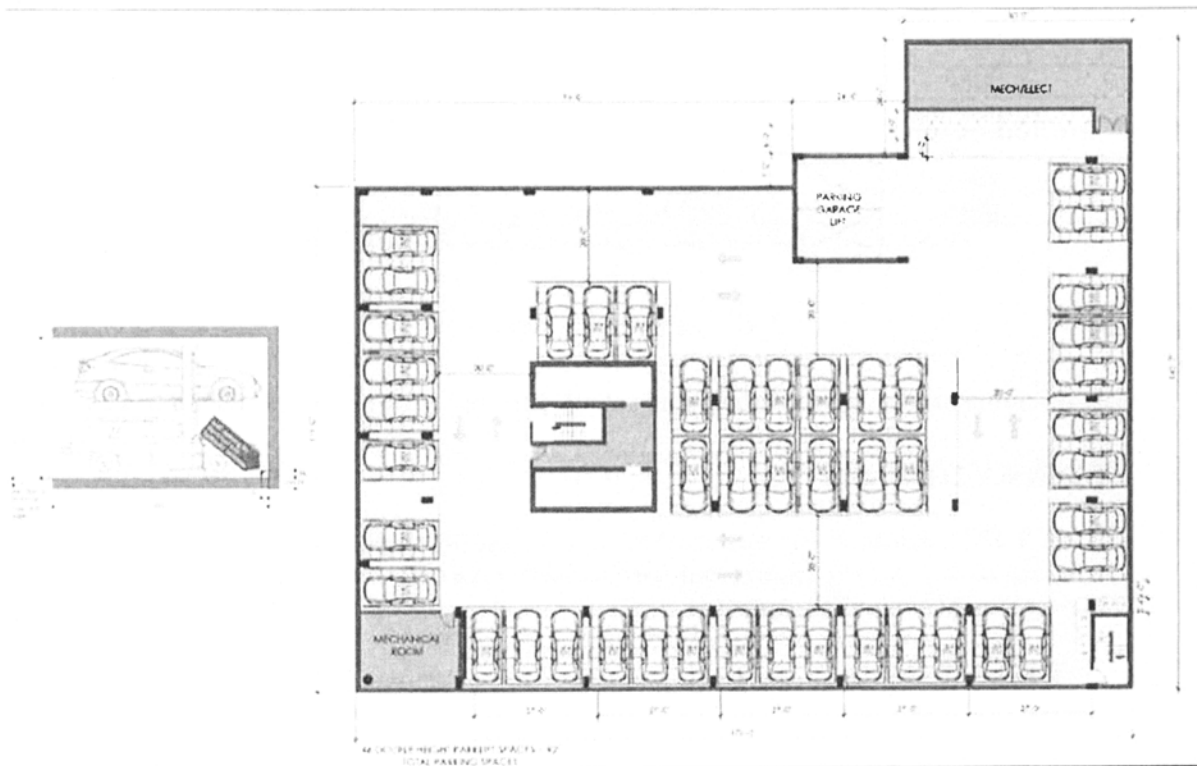


Figure 8: Parking Level Layout and Parking Space Lift (Source: Grove/Slade Associates)

Transit Service

The District and the Washington Metropolitan Area Transit Authority (WMATA) have partnered to provide extensive public transit service in the District of Columbia. DDOT's vision is to leverage this investment to increase the share of non-automotive travel modes so that economic development opportunities increase with minimal infrastructure investment. Transit is expected to be an important mode of transportation for this development.

The proposed project is approximately one-quarter mile from the Gallery Place-Chinatown Metro Station entrance, and one-third mile from the Mount Vernon Square-Convention Center Metro Station and Judiciary Square Metro Station. It is also well-served by eight different bus lines (i.e., 70, 74, 79, 80, D4, P6, X2, and X9) and the Union Station-Georgetown Circulator route. The Circulator bus service operates with 10-minute frequency, whereas the other bus lines operate with headways in the range of 6 to 30 minutes. In addition, transit accessibility to the site is excellent.

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. All of the sidewalks immediately surrounding the site meet DDOT standards. Only a few sidewalks a few blocks to the northwest of the site do not meet DDOT's width requirements.

Bicycle Facilities

The District of Columbia is committed to enhance bicycle access by ensuring consistent investment in bicycle infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including bicycling trips.

The Applicant proposes 28 long-term bicycle parking spaces in the parking garage. The amount of bicycle parking is required for this site and necessary to meet the proposed mode split. However, DDOT finds that the design and location of the long-term bicycle parking may be prohibitively difficult for bicyclists to access their bicycles. These spaces are located below-grade on the B3 level, which is only accessed via lifts operated solely by the valets, elevator, or stairs. DDOT is not clear on how the proposed spaces will be accessed. The Applicant should clarify how long term bicycle parking will be accessed in a manner consistent with District regulations. This may include provision for valet parking of bicycles or notation of how bicycles will be required to access the proposed parking location. Alternately, the Applicant could provide a storage room on the ground floor of the building.

All of the streets in the vicinity of the site, except H Street, 4th Street, K Street, and Massachusetts Avenue, provide either on-street bike lanes or feature good or fair cycling conditions. Cycle tracks closest to the site are located on E Street (south of the site) and 7th Street (west of the site).

The closest Capital Bikeshare station is located less than 200 feet away from the site at 5th Street and Massachusetts Avenue. Three additional Bikeshare stations are located within 1/3 mile from the site. One is located north of the site at 5th Street between New York Avenue and K Street, another is located south of the site at 5th Street and F Street, and one is southeast of the site, at H Street and 3rd Street.

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.

Physical and Operations Improvements

The Applicant should provide the following physical and operations improvements to mitigate loading and valet conflicts, prevent the alley and through streets from being blocked by valet queuing, and ensure that residents and employees will have convenient access to bicycles to meet the proposed mode split:

- Provide a loading management plan to address conflicts between valet queuing off of the alley and the loading area;
- The Applicant should commit to a minimum of seven valet operators during peak operations as noted in their report dated November 5, 2015 to minimize potential I Street conflicts; and

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 and DDOT agreed to the following TDM strategies, some of which have not previously been submitted to the BZA by the Applicant:

- Appoint a TDM Coordinator will work with residents, hotel guests, and employees to distribute and market various transportation alternatives and options;
- Provide a public transit information screen, showing real-time information on nearby transit services, in the residential and hotel lobbies;
- Provide all hotel guests free Capital Bikeshare passes upon request for the life of the hotel project and actively promote this incentive through the marketing plan outlined by the Applicant;

- Provide a one-year bikeshare membership, carshare membership or \$100 SmarTrip card to all lessees on a yearly basis for a total of 10 years or a three-year membership at the initial sale of units; and

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

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