GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION

d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Sara Bardin
Director, Office of Zoning

FROM: Samuel Zimbabwe
Associate Director

DATE: January 26, 2016

SUBJECT: **Zoning Commission Case No. 15-12** – 1401 Pennsylvania Ave SE

PROJECT SUMMARY

J River 1401 Pennsylvania Avenue, LLC (the "Applicant") seeks approval of a consolidated Planned Unit Development ("PUD") to permit construction of a multi-family residential building with ground floor retail at premises 1401 Pennsylvania Avenue SE (Square 1065, Lots 31-33, 142, and 820). The development program includes 174 residential units, 23,502 square feet of ground floor retail, and 58 below-grade vehicle parking spaces in lieu of the zoning required 86 spaces, and 218 long-term bicycle parking spaces. The Applicant is seeking relief from the 55-foot loading berth and the two 20-foot service space requirements and instead proposes two 30-foot berths.

SUMMARY OF DDOT REVIEW

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, multi-administration review of the case materials submitted by the Applicant, DDOT finds:

Site Design

- Vehicle, loading, bicycle, and trash access is proposed via the alley, and is in keeping with DDOT's approach to site access;

- The proposal to widen the east-west segment of the alley from 10 feet to 20 feet using private space will facilitate loading access to the site;
- The added truck traffic on a narrow 14th Street cartpath has the potential to cause conflicts between trucks and vehicles, which the Applicant proposes to address through site level truck time-of-day restrictions as part of a Loading Management Plan. DDOT finds Loading Management Plan appropriate; and
- Access and preliminary public space plans for the proposed development will not conflict with intersection designs being considered as part of DDOT's Pennsylvania and Potomac Avenues SE Intersection Improvement Project ("Penn-Potomac"), which is adjacent to the development site.

Travel Assumptions

- The Applicant utilized sound methodology and assumptions to perform the analysis; and
- Future residents and retail visitors are likely to utilize transit, walking, and bicycling at high rates, thus auto use is likely to be low.

Analysis

- The action is projected to minimally increase vehicle travel delay and queues in the area;
- Existing pedestrian infrastructure, bicycle infrastructure, and transit service can accommodate additional project demand;
- The proposed on-site parking provision of 58 spaces is 28 fewer than required by current zoning regulations, but exceeds the approved but not implemented zoning regulations by 22 spaces;
- The on-site vehicle spaces are apportioned in the following manner: 50 spaces for residential and 8 spaces for retail;
- The Applicant's parking occupancy inventory found parking availability in the vicinity;
- The Applicant proposes restricting residents from RPP program eligibility; and
- The Applicant proposes a TDM plan sufficient to encourage non-auto travel and support the on-site parking provision; and
- The Applicant proposes to provide showers, a changing facility, at least 20 short-term bicycle parking spaces, and at least 218 long-term bicycle parking spaces, which greatly exceeds current requirements.

Mitigations

DDOT has no objection to the requested PUD.

Continued Coordination

The Applicant is expected to continue to work with DDOT on the following matters:

- Design of the public realm, including utility vault location and treatment, sidewalk café areas, and special paving;
- Coordinate with DDOT as the Penn-Potomac and development timelines are better defined to determine how the Applicant should rebuild the public space; and
- A curbside management and signage plan, possibly including multi-space meter installation at the Applicant's expense, consistent with current DDOT policies to facilitate new curbside uses made possible by curb cut closings associated with the development.

TRANSPORTATION ANALYSIS

DDOT requires applicants who request PUD approval from the Zoning Commission perform a Comprehensive Transportation Review (CTR) in order to determine the PUD'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

Vehicular, loading, bicycle, and trash access are proposed via the rear alley in compliance with DDOT's approach to site access. The alley connects from 14th Street SE to Ives Place SE. The Applicant proposes to widen the east-west segment of the alley adjacent to their site from 10 feet to 20 feet wide to facilitate multi-modal access to the site.

Pedestrian access to the residential component of the project will be from Pennsylvania Avenue. Retail entrances are proposed from Pennsylvania Avenue and 14th Street.

Loading

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

The Applicant proposes two 30-foot loading berths in lieu of the required two 30-foot berths, one 55-foot berth, and a 20-foot service delivery space.

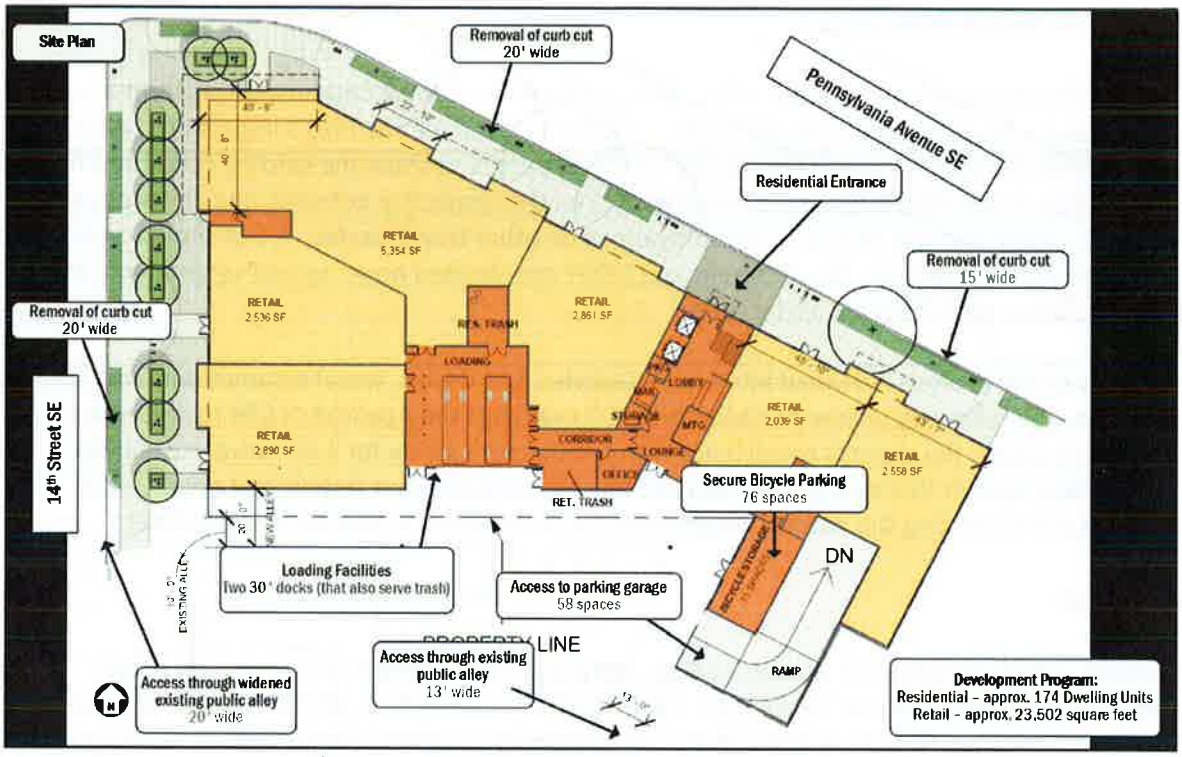

Figure 1 - Site Design and Access (Source: Gorove/Slade)

Trucks routing to and from the site will utilize 14th Street, which connects the site to Pennsylvania Avenue. The 14th Street cartpath is approximately 30 feet wide and operates with one lane of vehicular travel in each direction and parking on both sides. With parking lanes occupying approximately 7-8 feet each, this leaves about a 14-16 foot drive aisle to accommodate two-way traffic, which is unlikely to be able to accommodate simultaneous opposing vehicle and truck traffic without requiring the vehicle and truck to stop, slow down, defer, or otherwise negotiate the tight geometry. The Applicant's analysis predicts approximately 15 truck trips per day, mostly generated by the retail uses. The added truck traffic on 14th Street has the potential to exacerbate conflicts between trucks and vehicles in a narrow driving lane. The Applicant proposes to manage potential conflicts between trucks and vehicles though operational restrictions memorialized in a Loading Management Plan, which is discussed in the Mitigations section.

An initial site plan provided to DDOT (Figure 1) did not show a continuous corridor connecting the loading facilities with the retail bays at the east end of the site (Retail E and Retail F). The Applicant has provided updated plans (Figure 2) showing the creation of a loading corridor. This update will provide direct access to all retail bays and residential areas to the loading facilities.

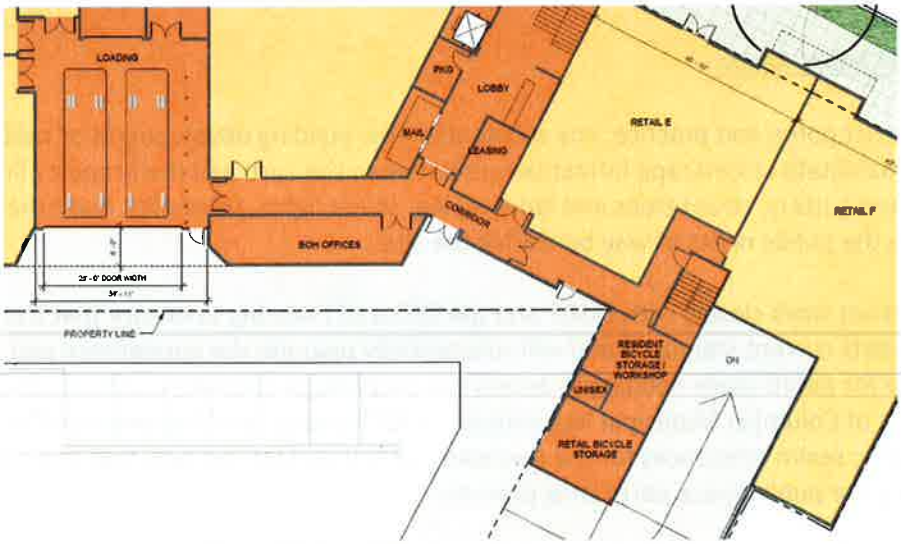

Figure 2 Updated Site Plan with Loading Corridors

Curbside Management

Under current conditions, curb cuts associated with the site on Pennsylvania Avenue and 14th Street limit the available curbside space for parking and other uses. The Applicant proposes to modify existing curbside uses as seen in Figure 3. The Applicant's proposal would add approximately 20 metered parking spaces adjacent to the site. The proposal is generally consistent with DDOT's expectation for curbside uses, but a final curbside management and signage plan, possibly including multi-space meter installation at the Applicant's expense, consistent with current DDOT policies will be required during permitting.

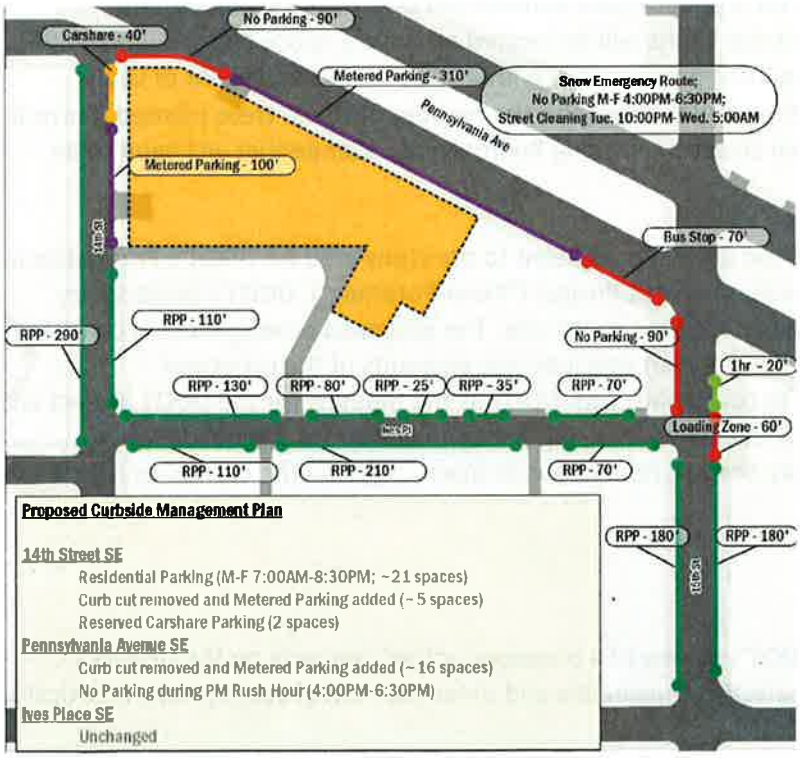

Figure 3 Proposed Curbside Management Plan (Source: Gorove/Slade)

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.

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.

While the preliminary public space plans are mostly consistent with DDOT standards, there are several elements that will need to be adjusted to come into compliance during the public space permitting process.

- Special paving: The amount of special paving in front of the main residential entrance and along 14th Street exceeds the amount of special paving that is typically permitted and will need to be reduced (to a maximum of twice the width of the front door and one-third the distance between the property line and the curb for the main residential entrance and a 2 to 3-foot ban around the building on 14th Street).
- Sidewalk café: DDOT generally supports the inclusion of sidewalk cafés. However, where there is a "public parking" area like on 14th Street, this area should be designed for its intended use as a primarily landscaped area until such time that a café-eligible retail tenant is secured. The retail tenant would be able to apply for a public space permit from DDOT for a sidewalk café.
- Vaults: DDOT expects that electrical vaults will be located on private space and will work with the Applicant through the permitting process on the final location and treatment of vaults.
- Street trees: The Applicant is expected to maximize the number of street trees planted. Current plans show a large gap between street trees along Pennsylvania Avenue that will need to be revised.

As is discussed in greater detail below, the project is adjacent to the study area for DDOT's Pennsylvania and Potomac Avenues SE Intersection Improvement Project ("Penn-Potomac"). DDOT's project may alter the curbline for Pennsylvania Avenue adjacent to the site. The proposed development is consistent with DDOT project, and the DDOT project does not preclude any elements of the proposed development. The Applicant will need to coordinate with DDOT as the timeline for the DDOT project and development are better defined to determine how the Applicant should rebuild the public space. Depending on timing, the Applicant may need to rebuild public space based on the current or future curbline.

Travel Assumptions

The purpose of the CTR is to inform DDOT's review of a proposed action's impacts on the District's transportation network. To that end, selecting reasonable and defensible travel assumptions is critical to developing a realistic analysis.

Background Developments and Regional Growth

As part of the analysis of future conditions, DDOT requires applicants to account for pipeline developments in the study area and future growth in traffic on the network. The Applicant coordinated with DDOT on the appropriate methodology to include in the analysis.

Roadway Network

The site is located immediately adjacent to the study area for DDOT's Penn-Potomac Project. The project proposes to enhance safety at these street intersections for neighborhood pedestrians and transit users of the Potomac Avenue Metro Station and the numerous area bus stops by removing conflicting pedestrian crossings and replacing them with more direct routes for pedestrians and transit users. A draft Environmental Assessment (EA) that explores three alternative designs for the intersection is in currently process. Because a preferred alternative has not yet been identified, DDOT instructed the Applicant to assume the existing roadway network configuration for all development scenarios.

Trip Generation

The Applicant provided trip generation estimates utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual, the Census, and the assumed mode split to convert base vehicular trips to base person trips using average auto occupancy data and then back to vehicular trips. DDOT finds this method appropriate.

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, and transit. The means of travel is referred to as a 'mode' of transportation. A variety of elements impact the mode of travel, including density of development, diversity of land use, design of the public realm, availability and cost of parking, among many others. Mode split assumptions used in the subject analysis were informed by WMATA's *2005 Development-Related Ridership Survey*.

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	6 veh/hr	23 veh/hr	29 veh/hr	24 veh/hr	13 veh/hr	37 veh/hr
	Retail	4 veh/hr	3 veh/hr	7 veh/hr	13 veh/hr	13 veh/hr	26 veh/hr
	Total	**10 veh/hr**	**26 veh/hr**	**36 veh/hr**	**37 veh/hr**	**26 veh/hr**	**63 veh/hr**
Transit	Residential	10 ppl/hr	41 ppl/hr	51 ppl/hr	41 ppl/hr	23 ppl/hr	64 ppl/hr
	Retail	8 ppl/hr	4 ppl/hr	12 ppl/hr	23 ppl/hr	24 ppl/hr	47 ppl/hr
	Total	**18 ppl/hr**	**45 ppl/hr**	**63 ppl/hr**	**64 ppl/hr**	**47 ppl/hr**	**111 ppl/hr**
Bike	Residential	1 ppl/hr	4 ppl/hr	5 ppl/hr	4 ppl/hr	2 ppl/hr	6 ppl/hr
	Retail	1 ppl/hr	1 ppl/hr	2 ppl/hr	4 ppl/hr	4 ppl/hr	8 ppl/hr
	Total	**2 ppl/hr**	**5 ppl/hr**	**7 ppl/hr**	**8 ppl/hr**	**6 ppl/hr**	**14 ppl/hr**
Walk	Residential	2 ppl/hr	10 ppl/hr	12 ppl/hr	10 ppl/hr	5 ppl/hr	15 ppl/hr
	Retail	9 ppl/hr	5 ppl/hr	14 ppl/hr	26 ppl/hr	28 ppl/hr	54 ppl/hr
	Total	**11 ppl/hr**	**15 ppl/hr**	**26 ppl/hr**	**36 ppl/hr**	**33 ppl/hr**	**69 ppl/hr**

Figure 4 Weekday Peak Hour Trip Generation by Mode (Source: Gorove/Slade)

Study Area and Data Collection

The Applicant in conjunction with DDOT identified 17 intersections where detailed vehicle counts would be conducted and a level of service analysis would be performed. These intersections are immediately adjacent to the site and include intersections radially outward from the site that have the greatest potential to see 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.

The Applicant collected weekday intersection data on between 6:30AM-9:30AM and 4:00PM-7:00PM on May 19, 2015. DDOT agrees with the time frame and collection date.

Analysis

To determine the action's impacts on the transportation network, a CTR includes an extensive multi-modal analysis of the existing baseline conditions, future conditions without the proposed action, and future conditions with the proposed development. The Applicant completed their analysis based on the assumptions described above.

Roadway Capacity and Operations

DDOT aims to provide a safe and efficient roadway network that provides for the timely movement of people, goods and services. As part of the evaluation of travel demand generated by the site, DDOT requests analysis of traffic conditions for the agreed upon study intersections for the current year and after the facility opens both with and without the site development or any transportation changes.

Analysis provided by the Applicant shows that all intersections and movements operate at acceptable rates as measured by Level of Service (LOS) for all development scenarios except for Potomac Avenue & Pennsylvania Avenue SE (southeast node). While the northbound movement at this intersection operates at failing levels during both the AM and PM peak periods under existing conditions and future background conditions, the overall LOS degrades from a LOS D to LOS E as a result of the project.

Queuing analysis found that queues at six nodes exceed available storage capacity under existing conditions and are expected to nominally lengthen as a result of the subject development:

- 13th Street & Potomac Avenue & I Street
- Potomac Avenue & Pennsylvania Avenue (Northern Node)
- Potomac Avenue & Pennsylvania Avenue (Northwestern Node – Northwestbound)
- Potomac Avenue & Pennsylvania Avenue (Northwestern Node – Southeastbound)
- Potomac Avenue & Pennsylvania Avenue (Southeastern Node – Southeastbound)
- Potomac Avenue & Pennsylvania Avenue (Southeastern Node – Northwestbound)

These intersections are included in DDOT's Pennsylvania and Potomac Avenues SE Intersection Improvement Project, and improvements included in that project will address vehicle operations in the vicinity.

Transit Service

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

The site is located approximately 0.1 miles from both the Potomac Avenue Metro Station, roughly a 2 minute walk. The station is served by Metro's Blue, Orange, and Silver lines.

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

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
30N,30S	Friendship Heights-Southeast Line	Weekdays: Eastbount 4:00AM-2:30AM Westbound 4:22AM-2:46AM Weekend: 4:30 AM-2:30AM	15-30 min	0.1 miles, 1 minutes
32,34,36	Pennsylvania Avenue Line	Weekdays: Eastbound 5:12AM-12:05AM Westbound 4:30AM-12:29AM	10-30min	0.1 miles, 1 minutes
39	Pennylvania Avenue Limited Line	Weekdays: Eastbound 3:30PM-6:39PM Westbound 6:00AM-9:04AM	15 min	0.1 miles, 1 minutes
B2	Bladensburg Road - Anacostia Line	Weekdays: Northbound 4:45AM-3:14AM Southbound 4:25AM-2:32AM Weekend: 4:27 AM-1:20AM	10-30 min	0.1 miles, 1 minutes
M6	Fairfax Village Line	Weekdays: Eastbount 5:21AM-1:08AM Westbound 5:00AM-1:17AM Weekend: 4:30 AM-2:30AM	30 min	0.1 miles, 1 minutes
V1	Bennin Heights-M Street Line	Weekdays: Eastbound 2:55PM-7:45PM Westbound 5:04AM-9:37AM	20-30 min	0.1 miles, 1 minutes
V4	Capitol Heights-Minnesota Avenue Line	Weekdays: Eastbound 3:09AM-2:56AM Westbound 4:10AM-2:19AM Weekend: 5:30 AM-1:17AM	15-30 min	0.1 miles, 1 minutes
Circulator	Potomac Avenue Metro - Skyland	Winter: 6:00AM-3:07PM Summer: 6:45AM-8:06PM Saturdays: 7:00AM-9:00PM	10 min	0.1 miles, 3 minutes

Figure 5 Bus Route Information (Source: Gorove/Slade)

The 30s series offers very frequent peak hour headways, and the 39 line provides express service within close proximity (0.1 mile walk) to the site.

In addition, the site is within close proximity of the Potomac Avenue Metro - Skyland DC Circulator line. The closest stop to the site is located at the Pennsylvania Avenue & Potomac Avenue intersection.

Pedestrian Facilities

The District is committed to enhance the pedestrian accessibility by ensuring consistent investment in pedestrian infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including pedestrian trips. Walking is expected to be an important mode of transportation for this development.

The site generally has excellent pedestrian access to nearby destinations and transit. Pedestrian facilities – sidewalks, curb ramps, and crosswalks – are generally in good condition and meet current DDOT standards; however, the Applicant's analysis revealed a missing curb ramp at the southeast corner of the Pennsylvania Avenue & Potomac Avenue intersection. This intersection is a key route for accessing

the Metro station and many bus lines. The Applicant will be required to upgrade this facility if the Penn-Potomac Project is not completed or under construction at the time of the subject site's public space permit review.

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 site is currently well-served by bicycle infrastructure.

15th Street and 11th Street have paired one-way bicycle lanes providing north-south connections to several other bicycle facilities and points of interest throughout the city. Additionally, nearby local, low volume roadways provide a comfortable bicycle routes. Two blocks east of the site is an entrance to the Anacostia Riverwalk Trail, which connects to points along the Anacostia River.

There is one Capital Bikeshare station about 0.1 miles to the west, at the western corner of the intersection of Pennsylvania Avenue & Potomac Avenue. This station has 15 docks.

The Applicant proposes 218 long-term bicycle parking spaces, including 71 spaces on a bicycle room on the ground floor, 61 spaces in a bicycle room in the parking garage, and 86 spaces along the walls of the vehicular parking area. Additionally, the Applicant proposes a shower and changing facility in the ground floor bicycle room. The long-term bicycle parking spaces greatly exceed District requirements and will serve to encourage bicycle use. The Applicant also proposes at least 20 short-term bicycle parking spaces, which will provide plentiful bicycle parking to residential visitors and retail patrons. The exact location of short-term bicycle facilities will be determined during the public space permitting process.

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, 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.

A minimum of 86 vehicular parking spaces are required by zoning, including 58 spaces for the residential component and 28 spaces for the retail component. The Applicant is seeking partial relief from the parking requirement to provide 58 spaces. The proposed on-site parking provision of 58 spaces is 28 fewer than required by current zoning regulations, but exceeds the approved but not implemented zoning regulations by 22 spaces. The Applicant plants to allocate 50 of the spaces for the residential component and 8 spaces for the retail component, specifically for employees of the retail establishments.

The block is currently in the District's Residential Permit Parking (RPP) program and residents of the building would be able to register for Zone 6 RPP permits. The Applicant plans to place a restriction to prohibit future residents from applying for or obtaining RPP and short-term, temporary, or visitor parking passes. This restriction is not a strictly enforceable condition by the District and therefore the restriction may not realize its intended outcome.

The Applicant conducted a curbside parking utilization study in an area surrounding the site to determine the availability of parking. The inventory noted a total of 761 curbside parking spaces within an approximately 500 feet of the site, including about 627 Zone 6 RPP, 43 metered, and 21 unrestricted spaces, and 70 spaces with other designation/restrictions.

The Applicant surveyed parking utilization on a typical weekday during three time periods: afternoon (2:00pm-4:00pm), evening (4:00pm-7:00pm), and night (7:00pm-11:00pm). Occupancies for the overall study area in each time period are shown in Figure 6. The peak period for parking occupancy was found to be from 10:00-11:00pm as shown in Figure 7.

Period	Occupancy
Afternoon (2:00pm-4:00pm)	59%
Evening (4:00pm-7:00pm)	59%
Night (7:00pm-11:00pm)	65%

Figure 6 Overall Parking Occupancy by Time Period

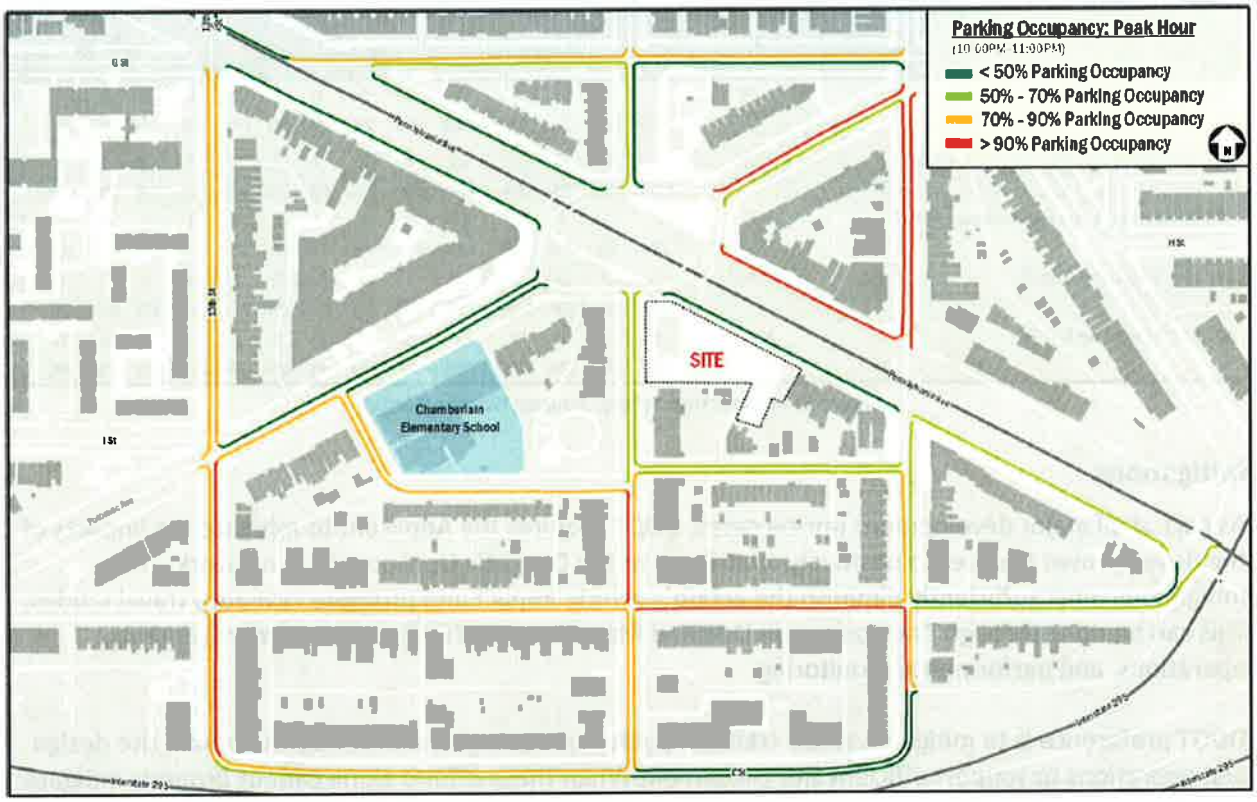

Figure 7: Peak Hour Parking Occupancy (Source: Gorove/Slade)

The Applicant's parking occupancy inventory found that curbside parking availability in the vicinity is adequate to accommodate potential spillover parking from the action. The Applicant proposes a TDM plan, discussed in detail in the Mitigations section of this report, to encourage non-auto modes and reduce demand for parking by future residents, patrons, and employees.

Safety

DDOT requires that the Applicant conduct a safety analysis to demonstrate that the site will not create new, or exacerbate existing safety issues for all travel modes. DDOT asks for an evaluation of crashes at study area intersections as well as a site distance analysis along the public space where there is expected to be conflicts between competing modes (e.g. crosswalks, driveway entrances, etc.).

The Applicant's analysis of DDOT crash data reveals give intersections within the study area that have a crash rate of 1.0 Million Entering Vehicles (MEV) or higher. Of these intersections, Ives Place & 14th Street SE and 14th Street & K Street experience very low traffic volumes, thus elevating the crash rates despite the small number of crashes. 15th Street & Pennsylvania Avenue and Pennsylvania Avenue & Potomac Avenue are within the Pennsylvania and Potomac Avenues SE Intersection Improvement Project area. Improvements as part of that project will focus on safety improvements which are expected to reduce the number of crashes in the vicinity.

Intersection	Rate per MEV	Right Angle	Left Turn	Right Turn	Rear End	Side Swiped	Head On	Parked	Fixed Object	Ran Off Road	Ped. Involved	Backing	Non-Collision	Under/Over Ride	Unspecified	Total
3. Ives Pl and 14th St SE	1.48	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
		0%	*0%*	*0%*	*0%*	*100%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
5. 15th Street and Pennsylvania Ave SE	1.37	6	0	0	7	20	0	0	2	1	1	2	0	0	5	44
		14%	*0%*	*0%*	*16%*	*45%*	*0%*	*0%*	*5%*	*2%*	*2%*	*5%*	*0%*	*0%*	*11%*	
7. Pennsylvania Ave and Potomac Ave SE	1.77	5	2	2	11	34	0	3	4	1	5	1	0	0	3	71
		7%	*3%*	*3%*	*15%*	*48%*	*0%*	*4%*	*6%*	*1%*	*7%*	*1%*	*0%*	*0%*	*4%*	
15. 13th Street and G St SE	1.09	1	0	0	5	27	1	1	0	0	1	1	0	0	0	37
		3%	*0%*	*0%*	*14%*	*73%*	*3%*	*3%*	*0%*	*0%*	*3%*	*3%*	*0%*	*0%*	*0%*	
17. 14th Street and K St SE	2.17	1	1	0	0	2	0	1	0	0	0	1	0	0	0	6
		17%	*17%*	*0%*	*0%*	*33%*	*0%*	*17%*	*0%*	*0%*	*0%*	*17%*	*0%*	*0%*	*0%*	

Figure 8: Intersection Safety (Source: Gorove/Slade)

Mitigations

As part of all major development review cases, DDOT requires the Applicant to mitigate the impacts of the development in order to positively contribute to the District's transportation network. The mitigations must sufficiently diminish the action's vehicle impact and promote non-auto travel modes. This can be done through Transportation Demand Management (TDM), physical improvements, operations, and performance monitoring.

DDOT preference is to mitigate vehicle traffic impacts first through establishing an optimal site design and operations to support efficient site circulation. When these efforts alone cannot properly mitigate an action's impact, TDM measures may be necessary to manage travel behavior and minimize impacts. 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 Transportation Demand Management (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 strategies:

- Designate a TDM coordinator responsible for organizing and marketing the TDM plan;
- Provide at least 218 long-term bicycle parking spaces, 20 short-term bicycle parking spaces, a bicycle repair station, and a shower and changing facility;
- Unbundle parking costs from the price of lease or purchase;
- Unbundle the cost of residential parking from the cost of lease or purchase.
- Provide TDM materials to new residents in the Residential Welcome Package materials;
- Install an electronic display in the residential lobby to display real-time transportation alternative information;
- Offer each unit's incoming residents an annual carsharing membership or an annual Capital Bikeshare membership for a period of three years;
- Offer SmartBenefits for all retail employees regardless of size of business or level of employment (part-time/full-time)
- Make bike showers, changing area, and bike repair station available for retail employees (a rarely offered amenity for retail employees)

DDOT finds the proposed TDM elements are strong and likely to encourage non-auto travel and support the on-site parking provision.

Loading Management Plan

The Applicant proposes a loading management plan to mitigate potential impacts caused by the loading relief and alley constraints that limit trucks accessing the on-site loading facilities to 24 feet in length. The loading management plan includes the following elements:

- Assign an on-site loading management coordinator;
- Require tenants to use the on-site loading facilities for move-in/move-out;
- Restrict tenants from using trucks longer than 30 feet;
- In the event that larger trucks are needed, require tenants to secure Emergency No Parking permits from DDOT;
- Permit commercial deliveries between 9:00am-7:00pm (7 days a week) and discourage deliveries after 4:00pm on weekdays;
- Permit trash trucks between 9:00am-4:00pm (7 days a week)
- Permit residential move-ins/move-outs between 9:00am-4:00pm (Monday-Saturday)

DDOT finds the loading management plan sufficient to mitigate potential loading impacts. As discussed in the Loading section above, added truck traffic on a narrow 14th Street cartpath has the potential to

cause conflicts between trucks and vehicles. Through the Loading Management Plan, the Applicant proposes to address through time-of-day restrictions to truck traffic associated with the site. Both residential and retail truck trips are proposed to be restricted before 9:00am, which generally coincides with the morning peak period. Additionally, residential truck trips are proposed to be restricted and retails trips are proposed to be discouraged after 4:00pm, which generally coincides with the evening peak period. DDOT finds these restrictions sufficient to mitigate potential conflicts between peak vehicle volumes and truck trips, thereby reducing the likelihood of operational problems associated with the narrow cartpath and added truck trips.

SZ:jr