

**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 *JS*
Associate Director

DATE: June 1, 2015

SUBJECT: ZC Case No. 05-38B – View at Waterfront

PROJECT SUMMARY

Mill Creek Residential Trust, LLC (the “Applicant”) seeks to modify an approved Planned Unit Development (“PUD”) (#05-38A) in order to construct two residential buildings on a site together with two existing residential towers. The site is bounded by K St., M St., 6th St. SW (Square 499, Lots 855-859). The Applicant is seeking to retain the approved PUD-related C-3-C zone, but reduce the approved height, density, number of units, lot occupancy and vehicular parking. Vehicle access points would be relocated from 6th Street to the north-south private alley at the rear of the property. The modified PUD includes the following program split between a North Building and South Building on either side of the existing two residential towers:

- 256 existing residential units to remain
- 260 new residential units
- 5,220 square feet of retail
- 290 off-street vehicle parking spaces
- 248 long-term bicycle parking spaces

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 on May 27, 2015 (revised Comprehensive Transportation Review), DDOT finds:

Site Design

- Vehicle site access is greatly improved by relocating access points from 6th Street to the north-south private alley at the rear of the property; and
- As designed, the retail space in the South Building does not have interior access to the loading berth.

Travel Assumptions

- Appropriate travel assumptions were made.

Analysis

- The Applicant utilized sound methodology to perform the analysis;
- The action is expected to generate fewer vehicle, transit, pedestrian, and pedestrian trips than the approved PUD due to the smaller development program and the reduced number of vehicle parking spaces;
- The site is well-served by rail and bus services, as well as a comprehensive network of pedestrian and bicycle facilities;
- The approved PUD's traffic analysis found that the action would have no significant impacts on the study area. This conclusion remains valid for the proposed modification; and
- The proposed Transportation Demand Management (TDM) plan is less robust than the previously approved plan.

Mitigations

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

- Redesign the South Building such that all loading needs be accommodated onsite;
- Provide at least 8 short-term bicycle parking stations in the public space; and
- Offer a onetime, one year Capital Bikeshare membership or one year carshare membership to all new residents of the project for the first three years the building is open.

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, street lights, sidewalks, and other features within the public rights of way, are expected to be designed and built to DDOT standards;
- Utility vaults locations and treatment;
- Short-term bicycle parking locations and treatment; and
- Installation of two 240-volt electric car charging stations in the parking garage.

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 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

This Site is bounded by 6th Street SW on the west, M Street SW on the south, and K Street SW to the north.

The approved PUD featured two curb cuts on 6th Street for parking garage access. The proposed modification relocates the parking garage access to the private north-south alley to the east of the site. This change greatly improves the vehicle site access for the site by eliminating two potential conflict points on 6th Street.

The north-south alley is directly accessible from K Street and an east-west alley spur that connects to 4th Street. The alley network does not yet connect with M Street, but long-term plans include this connection. The connection requires the relocation of an existing Metrorail vent shaft that is proposed to occur in conjunction with the redevelopment of the adjacent parcel that is part of the Waterfront Station PUD (ZC 02-38).

Loading and trash access is proposed via the private north-south alley, and is in keeping with DDOT's approach to site access.

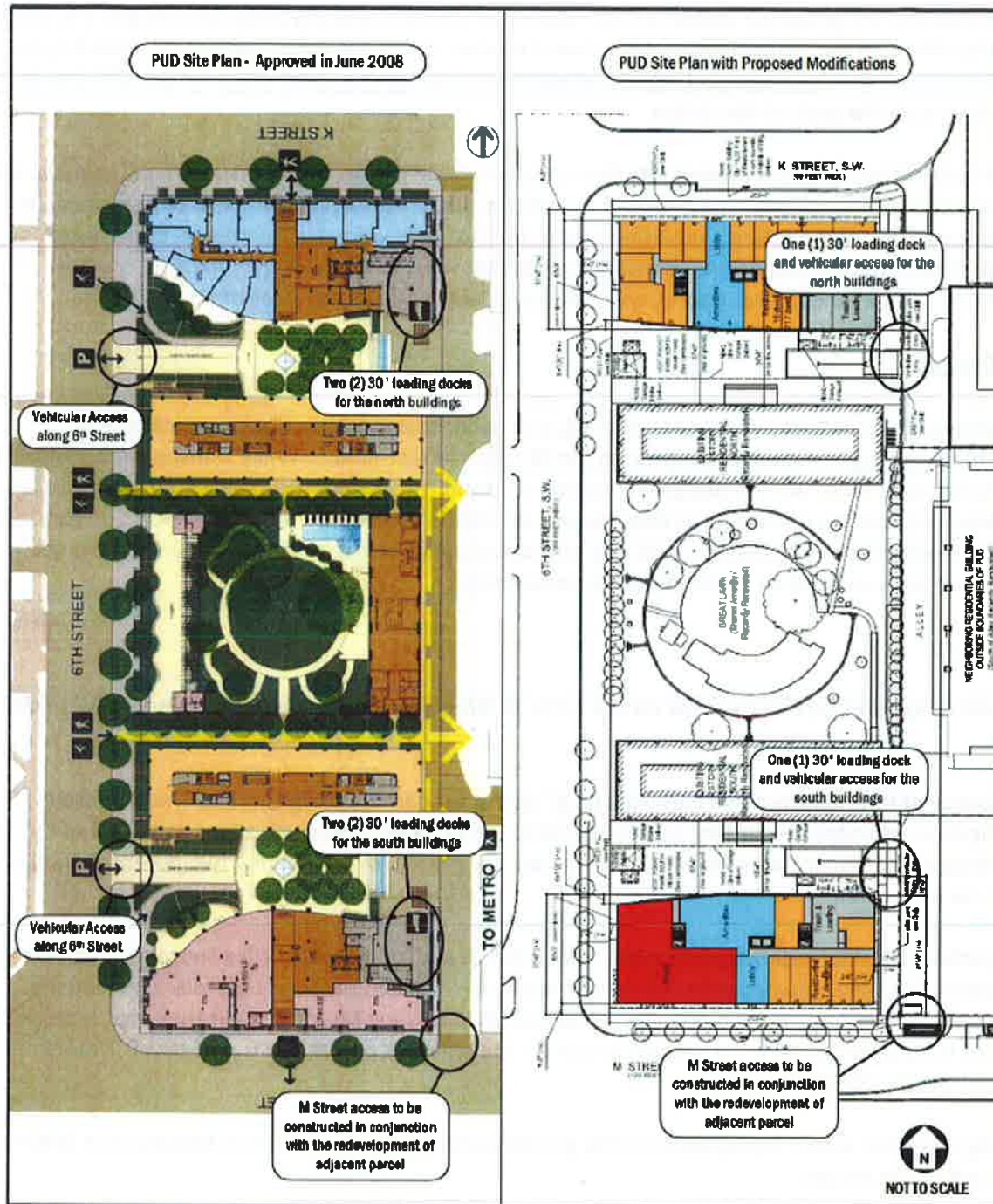


Figure 1 Site Design and Access (Source: Gorove/Slade)

Loading

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

Loading access is proposed from the private north-south alley. Each of the two new buildings included in this modification are proposed to have one 30-foot loading berth at the rear of the building. The loading facilities are designed such that loading is accommodated with front-in/front-out movements in compliance with DDOT standards.

As designed, the retail space in the South Building does not have interior access to the loading berth. The Applicant proposes to handle loading for the retail component on the curbside. All loading and trash activities should be accommodated on-site in order to minimize the impact of loading on the District's transportation network. The retail space does not meet the requirements for a curbside commercial loading zone and a loading zone will not be approved by DDOT. The building should be altered to provide interior access between the loading facilities and the retail space.

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.

Of note, the site currently features a large privacy wall on 6th Street that is likely in public space. This wall, if in public space, does not meet public space standards and should be brought into compliance as part of the subject development. DDOT also expects utility vaults, which are not shown on the site plan, be accommodated on private property. Final design of the public space will be determined during DDOT's public space permitting process.

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.

Based on the size of the proposed development and the number of vehicular parking spaces, DDOT recommends that the Applicant provide at least two 240-volt electric car charging stations in the parking garage.

The Applicant proposes to provide two electric vehicle car charging spaces. DDOT finds this level of charging station provision to be appropriate.

Travel Assumptions

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

Off-Street Vehicle Parking

The overall parking demand created by the development is primarily a function of land use, development square footage, and price/supply of parking spaces. However, in urban areas, other factors contribute to the demand for parking, such as the availability of high quality transit, frequency of transit service, and proximity to transit.

A total of 290 vehicle parking spaces are proposed in a below-grade parking garage in excess of the 175 vehicle parking spaces required by the zoning regulations. The proposed number of parking spaces is a significant drop in the parking provided in the approved PUD. A comparison of approved versus proposed parking is included below:

Land Use	Approved	Proposed	Difference
Residential	556	277	-279
Retail	8	8	0
Shared	5	5	0
TOTAL	569	290	-279

The residential parking provision of about one space per two units is generally consistent with but slightly higher than other recent projects in similar walkable, transit-friendly neighborhoods.

Trip Generation

The proposed change in development program will yield different trip generation results from the approved PUD. To understand the differences in trip generation, the Applicant applied the same trip generation and mode split assumptions from the approved PUD to the proposed modification.

While the proposed action is expected to generate a significant number of auto and non-auto trips, the decrease in the residential land retail program as part of the proposed modification is likely to result in 9 and 29 fewer vehicle trips during the AM and PM peaks, respectively.

		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
2006 Approved PUD							
Residential Apartments	580 Units	55	221	276	210	113	323
65% Alt. Mode Reduction		-36	-144	-179	-137	-73	-210
Retail	8,300 SF	4	3	7	18	23	41
Existing Trips		-12	-23	-35	-17	-22	-39
Total New Trips		11	57	69	74	41	115
2015 PUD Modification							
Residential Apartments	516 Units	51	206	257	196	105	301
65% Alt. Mode Reduction		-33	-134	-167	-127	-68	-195
Retail	5,220 SF	3	2	5	9	10	19
Existing Trips		-12	-23	-35	-17	-22	-39
Total New Trips		9	51	60	61	25	86
Trip Generation Difference		-2	-6	-9	-13	-16	-29

Figure 2 Trip Generation Comparison

Background Growth

The transportation analysis for the approved PUD was based on counts from 2006. To better understand the differences in road network volumes in the study area, the Applicant compared the original study area volumes collected in August of 2006 to updated volumes collected in 2014 and 2015.

The original study area consisted of the following intersections:

1. 7th Street & I Street, SW
2. 6th Street & I Street, SW
3. 4th Street & I Street, SW
4. 6th Street & M Street, SW
5. 4th Street & M Street, SW

The roadway network in the study area differed in 2006 when the original counts were taken. In 2006, the Waterside Mall had not been redeveloped and the 4th Street connection between M Street and I Street did not exist. Under 2006 conditions, the 4th leg of the M Street/4th Street intersection was a parking access to the Waterside Mall. Since 2006, the site has been redeveloped into a multi-use development with 4th Street constructed to improve the overall connectivity of the neighborhood for all modes of transportation. Therefore an exact comparison between volumes cannot be made. Despite this change in the road network, the comparison provide a reasonable understanding that traffic volumes have largely been reduced since the original CTR was performed. Specifically, the following conclusions can be made:

- 6th Street – Volumes generally remained static for all movements during the morning and afternoon peak hours;
- 7th Street - Northbound volumes increased during the morning and afternoon peak hours; southbound volumes increased during the morning peak hour and decreased during the afternoon peak hour;
- I Street – Westbound volumes increased during the morning and afternoon peak hours; eastbound volumes generally increased during the morning peak hour and generally decreased during the afternoon peak hour;
- M Street – Volumes have decreased substantially in both directions during the morning and afternoon peak hours; and
- 4th Street - Traffic patterns along 4th Street have changed as a result of the 4th Street connection.

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 typically 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. However, since the action is a modification of an approved PUD that results in a lower intensity development program and reduced parking, DDOT requested a limited vehicle capacity analysis commensurate with the requested change in the PUD modification.

The CTR completed for the approved PUD found that the original action would have no significant impacts on the study area. Comparisons of trip generation and roadway network system volumes between the approved and proposed conditions coupled with the significant decrease in vehicle parking indicate that the original CTR's finding of no significant impacts is still valid.

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 adjacent to the Waterfront Metro Station, which serves the Green Line. The site is .6 miles, approximately a 12 minute walk, from the L'Enfant Plaza Metro Station, which serves the Green, Yellow, Blue, Orange, and Silver lines.

The site is served by multiple bus routes. Bus routes include:

- 74 – Convention Center-Southwest Waterfront Line
- A9 – Martin Luther King Jr Ave Limited Line
- A42, A46, A48 – Anacostia-Congress Heights Line
- P6 – Anacostia-Eckington Line
- W9 – Minnesota Ave-M Street Line

These bus routes provide service with peak hour headways between 15-30 minutes. The closest bus stops are adjacent to the site on M Street and 6th Street.

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. The Applicant's analysis did not reveal any gaps or major obstacles within the immediate vicinity, however several deficient curb ramps were identified at the intersection of 6th Street and K Street. The Applicant will be expected to upgrade some of these facilities during the public space permitting process.

Bicycle Facilities

The District of Columbia is committed to enhance 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. The Anacostia Riverwalk Trail is located to the east of the site and provides bicycle connections along the Anacostia River. The trail contains several gaps but nonetheless serves as a high quality bicycle route. Bicycle lanes on 4th Street provide north-south connections while I Street bicycle lanes provide east-west connections.

There are two bikeshare stations within close proximity to the site – a station at 6th Street/Water Street provides 19 docks and a station at 4th Street/M Street contains 23 docks for a total of 42 nearby docks.

248 long-term bicycle parking spaces are proposed, including 124 spaces on the first level of each building's parking garage. The approved PUD proffered one bicycle parking space per unit.

The Applicant's analysis noted an unmet demand for short-term bicycle parking spaces in the vicinity as evidenced by bicycles locked to signs and parking meters. The Applicant has not committed to a specific number of short-term bicycle parking spaces. At least 8 short-term bicycle racks should be provided.

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.

The following analysis is a review of the Applicant's proposed mitigations and a description of DDOT's suggested conditions for inclusion in the PUD.

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 TDM plan for the original PUD included the following elements:

- Coordination with a local car-sharing vehicle service to reserve five parking spaces for residents and visitors of this project;
- Provide a one-time membership fee subsidy of \$35 per residential unit for residents to join a local car-sharing service;
- Providing all new residents, upon move-in, a complimentary SmartTrip card with \$20 Metro fare to encourage the use of mass transit;
- Providing an on-site business center to provide residents access to a copier, facsimile machine, and internet services;
- Providing a secure bicycle storage space for each residential unit; and
- Designating a member of building management as a point of contact who is responsible for coordinating and implementing transportation demand management incentives.

The Applicant proposes to replace this TDM plan with the following plan:

- Unbundled on-site parking from the costs of leasing apartments and priced at market rates at minimum, defined as the average cost for parking in a quarter-mile radius from the site;
- Install a transit information screen in each residential lobby; and
- Provide 248 long-term bicycle parking spaces.

DDOT finds the proposed TDM plan less robust than the previously approved plan. Accordingly, the following elements should be added:

- Provide at least 8 short-term bicycle parking stations in the public space. The final design, including location, of short-term bicycle facilities will be determined during the public space permitting process; and
- For the first three years the building is open, provide a onetime, one year Capital Bikeshare membership or one year carshare membership to all new residents of the project. Carshare and bikeshare memberships are substantially more effective than the financial incentive included in the original TDM plan because an annual membership encourages long-term behavioral change.

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