

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 11, 2016

SUBJECT: ZC Case No. 11-03C – The Wharf Parcel 1: Market Square and Market Shed, 1000 Maine Avenue SW

PROJECT SUMMARY

Wharf District Master Developer, LLC (the “Applicant”) seeks second stage approval for a Planned Unit Development (“PUD”) and related map amendment to allow construction of Parcel 1, which includes a 10-story mixed-use building with 254,712 gross square foot of largely office space, with up to 33,626 sf retail space, and a one-story retail building with 3,050 sf of retail. The project is located on the south side of Maine Avenue SW at the Fish Market location in the existing C-3-C zone (Square 473, Lots 854 and 856) (the “Site”). This parcel is part of the overall Southwest Waterfront Wharf redevelopment project.

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.

DDOT’s review responds to the application filed as well as the Comprehensive Transportation Review (CTR), dated December 7, 2015, which provides a comprehensive overall analysis of the proposal. Major elements for Phase 1 of The Wharf’s development have already been determined in prior Stage 2 applications, and these elements and related mitigations also provide support for Parcel 1’s development program.

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 for the current case, DDOT finds:

Site Design

- A robust street network surrounding the Site and within The Wharf provides vehicular, bicycle, and pedestrian circulation;
- Vehicular and loading access to the Site is proposed via a private alley from Maine Avenue SW, which leads to the vehicular parking garage, with 78 dedicated vehicular parking spaces (and overall garage capacity of 1,495), and separate loading area;
- Additionally, approximately 120 short-term and 850 long-term bicycle parking spaces are provided in the parking garage;
- Parcel 1 contains two 30' loading berths, which should be sufficient for the Site; and
- Another entrance is proposed at the front of the building (north side) providing access through to the Fish Market and around the Market Shed and to 11 surface parking spaces.

Travel Assumptions

- The action is expected to generate new vehicle, transit, bicycle, and pedestrian trips in a manner similar to projections;
- The number of vehicle trips generated by the Site is reasonable, and has declined from Stage 1 assumptions due to a slight reduction in development density; and
- Background growth, mode split, and trip generation assumptions proposed by the Applicant and as vetted via prior zoning cases are reasonable considering the transportation network and TDM measures.

Analysis

- The impacts expected as part of Stage 1 for Parcel 1 have been slightly decreased; and
- The Applicant proposes an overall Wharf Transportation Demand Management (TDM) plan intended to promote non-auto trips, which is robust and will encourage travel behavior change.

DDOT has no objection to the requested Stage 2 approval subject to the following condition.

Mitigations

- DDOT asks that the Applicant supplement their TDM measures to include placement of electronic message boards in both buildings, which provide real-time information on nearby transit services.

Continued Coordination

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

- As development continues on The Wharf, DDOT looks forward to working with the Applicant on Stage 2 evaluation of the southern portion of the larger site. As part of the evaluation, DDOT looks forward to receiving a review of the overall site's vehicular parking needs and updated traffic analysis based on more recent conditions;
- Design of the public realm for Parcel 1, including utility vault location and treatment, and bike rack locations, some of which has been already completed. All 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, and will be coordinated during the public space permitting process; and

- The District's long-range planned streetcar network includes a potential corridor using Maine Avenue. Future planning, design, and construction could impact building operations, and future coordination is anticipated, although there is not currently a timeline for these activities.

TRANSPORTATION ANALYSIS

DDOT requires applicants who request PUD approval from the Zoning Commission complete 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

This Site is located along Maine Avenue SW near the location of the historic Fish Market, and at the northwest end of the overall Wharf development. The proposed Site plan is shown in *Figure 1*. Loading vehicles access the Site from the north at an alley off Maine Avenue. Personal vehicles access the Site via the same alley, which leads to an underground parking garage with 78 dedicated vehicular parking spaces for the building (and an overall count of 1,495 parking spaces serving the entire Phase I). An additional driveway provides access around the Market Shed and to the historic Fish Market, and as well to 11 surface parking spaces. The proposed vehicle site access is consistent with DDOT's approach to site access.

Pedestrian access points are found surrounding the main Parcel 1 building, mainly along Market Square. Bicyclists can access via the parking entrance, or park at a rack near the building.

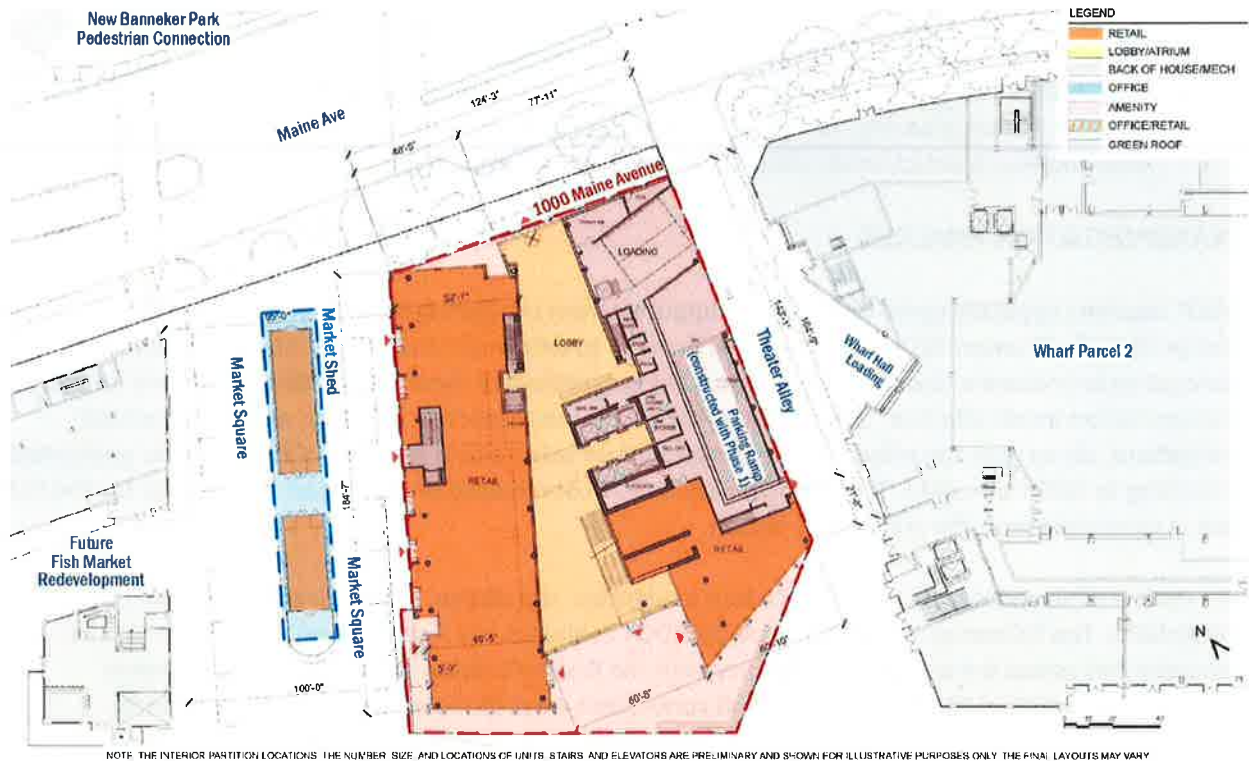


Figure 1. Site Plan (Source: Applicant)

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, which the Applicant proposes here.

Zoning regulations require three 30' loading berths, a 20' service/delivery space, and three 100 sf loading platforms. The project seeks a variance from this requirement, providing two 30' berths and a shared 250 sf loading platform. The Applicant has shown the alley and loading area will accommodate a 30' box truck, with turning maneuver exhibits provided in the application. If any loading requiring larger trucks occurs, this will require a permit for on-street loading. Trash collection will also occur via this same entrance. Loading and trash collection via the Site will allow these activities to occur off the street network. Additionally, surface deliveries and those for the Market Shed could be conducted via Market Square.

DDOT expects the Applicant to comply with DDOT's standards for loading for the entire Site. The Applicant outlines the anticipated loading activity onsite, and based on these assumptions, the loading accommodations should be sufficient to accommodate these buildings. Loading access will again be reviewed as part of the public space permitting process.

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.

DDOT's preference is for electrical vaults to be located on private space. If this option is not feasible, the vaults may be located in an alley if appropriately located. For this building, the vaults should be designed to be in private space.

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. As part of the Phase 1 analysis, background developments and regional growth along with trip distribution and assignment patterns were agreed to.

Trip Generation

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 has provided updated trip generation estimates reflecting the currently proposed building program, but based on the same Phase 1 methodology. Using the mode split assumptions utilized for Phase I and updated development program, the Applicant predicted the following level of weekday peak hour trip generation.

Table 1. Multimodal Proposed Trip Generation Summary (Source: Applicant)

Trip Gen Summary by Land Use/Mode (Stage 2 Application)							
Mode	Land Use	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Office	132 veh/hr	18 veh/hr	150 veh/hr	24 veh/hr	114 veh/hr	138 veh/hr
Auto	Retail	4 veh/hr	3 veh/hr	7 veh/hr	13 veh/hr	13 veh/hr	26 veh/hr
Auto	Total	136 veh/hr	21 veh/hr	157 veh/hr	37 veh/hr	127 veh/hr	164 veh/hr
Transit	Office	179 ppl/hr	25 ppl/hr	204 ppl/hr	32 ppl/hr	156 ppl/hr	188 ppl/hr
Transit	Retail	23 ppl/hr	14 ppl/hr	37 ppl/hr	67 ppl/hr	70 ppl/hr	137 ppl/hr
Transit	Total	202 ppl/hr	39 ppl/hr	241 ppl/hr	99 ppl/hr	226 ppl/hr	325 ppl/hr
Bike	Office	10 ppl/hr	2 ppl/hr	12 ppl/hr	2 ppl/hr	9 ppl/hr	11 ppl/hr
Bike	Retail	4 ppl/hr	3 ppl/hr	7 ppl/hr	12 ppl/hr	12 ppl/hr	24 ppl/hr
Bike	Total	14 ppl/hr	5 ppl/hr	19 ppl/hr	14 ppl/hr	21 ppl/hr	35 ppl/hr
Walk	Office	10 ppl/hr	2 ppl/hr	12 ppl/hr	2 ppl/hr	9 ppl/hr	11 ppl/hr
Walk	Retail	6 ppl/hr	4 ppl/hr	10 ppl/hr	18 ppl/hr	19 ppl/hr	37 ppl/hr
Walk	Total	16 ppl/hr	6 ppl/hr	22 ppl/hr	20 ppl/hr	28 ppl/hr	48 ppl/hr

The proposed action is expected to generate a reasonable number of vehicular and transit trips, as well as some bicycling and walking trips during the morning and evening peak hours.

Study Area and Data Collection

The Applicant in conjunction with DDOT identified 24 intersections where detailed vehicle, bicycle, and pedestrian counts would be conducted and a level of service analysis would be performed as part of the Phase 1 studies. These intersections are immediately adjacent to the Site and include intersections radially outward from the Site that have the greatest potential to see moderate to significant increases 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 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 then updated their traffic analysis with the latest Parcel 1 trip numbers.

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.

Based on the proposed program, two traffic scenarios were assessed for capacity analyses. These scenarios include:

1. Future Conditions (without Parcel 1)
2. Future Conditions (with Parcel 1)

Analysis provided by the Applicant shows that vehicle traffic impacts from the action will mildly impact the operations of intersections in the study area as measured by Level of Service (LOS). Impacted intersections include:

- 9th Street SW & Maine Avenue SW
- Fish Market Driveway #3 and Maine Avenue SW

Based on the results of the analysis above, potential geometric or operational changes may make sense to mitigate the effects of background growth as well as site impacts. The primary cause of the poor LOS is needed retiming due to the changing travel patterns due to this development. Mitigation could include additional modified phasing and/or timing. The Applicant suggests, and DDOT concurs, that no changes should be made until The Wharf development is in operation.

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. Walking is expected to be an important mode of transportation for this development.

The Site has excellent pedestrian access to nearby destinations and transit, and the Applicant proposes to fully construct the surrounding streetscape and pedestrian facilities. A new Banneker Park pedestrian access is also planned, and National Park Service is currently leading an Environmental Assessment to determine the location of this connection. Overall conditions in the area can be considered good, and with this development's improvement, as well as that of other nearby developments and the overall Wharf project, pedestrian facilities will meet the needs for this project's demand.

Bicycle Facilities

The District 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.

This Site has access to several existing and planned bike trails, bike lanes, and bike routes, including via a new cycle track proposed adjacent to the Site. Additionally, it is located in close proximity to three existing and two planned Capital Bikeshare stations.

To serve bicycling needs, the building will provide approximately 120 short-term and 850 long-term bicycle parking spaces in the parking garage. As well, bicycle repair features and services will be provided. The Applicant has also agreed to provide at least 16 short-term bicycle parking spaces serving Parcel 1 within the surrounding streetscape, and this element can be included as a TDM measure.

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 ½ of a mile from both the L'Enfant and Waterfront Metro stations, roughly a 10 minute walk. These Metro stations are served by all of Metro's lines except the Red. The Site is also well-served by high-frequency bus routes. Bus routes include:

- 74 – Convention Center-Southwest Waterfront Line
- A42, 46, 48 – Anacostia-Congress Heights Line
- P6 – Anacostia-Eckington Line
- V1 – L'Enfant Plaza-Coast Guard Limited Line
- W9 – South Capitol Street Limited Line

Additionally, the development is located adjacent to a potential future streetcar route.

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.

The Applicant proposes 78 dedicated vehicular parking spaces for the building within an underground parking garage with (and an overall count of 1,495 parking spaces serving the entire Phase I). Additionally, 11 surface spaces surrounding the Market Shed are proposed.

The overall parking provided within the garage is largely meant to serve all of Phase I. DDOT finds that the provided parking is adequate. Overall Wharf parking needs will be reevaluated as part of Phase II.

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 sight distance analysis along the public space where there is expected to be conflicts between competing modes (e.g. crosswalks, driveway entrances, etc.)

The proposed Site design and operations are not expected to degrade the safety at the study area intersections.

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.

In this case, a robust TDM program and monitoring plan were agreed to as part of prior Phase I applications. These TDM elements will be applicable to Parcel 1, and as per prior agreement, will be modified as necessary per conducted monitoring. In addition to this overall program, the Applicant highlights several TDM measures directly applied to Parcel 1. These include:

- "A member of the property management group will be a point of contact and will be responsible for coordinating, implementing, and monitoring the TDM strategies. This would include the development and distribution of informational and promotional brochures to patrons and employees regarding transit facilities and services, walk and bicycle facilities and linkages, and car sharing.
- The Applicant will post all TDM commitments on-line, publicize availability, and allow the public to see what commitments have been promised.
- The Applicant will install Transportation Information Center Displays (kiosks) within the office lobby containing printed materials related to local transportation alternatives and maintain a stock of materials at all times. The marketing program should also utilize existing resources such as www.goDCgo.com, which provides transportation information and options for getting around the District.

- To encourage transit utilization by both Metrorail and Metrobus, employees may fund a SmarTrip or other transit account with pre-tax dollars from their paycheck.”

Overall, DDOT finds the TDM plan for The Wharf to be robust. The measures mentioned directly for these buildings are also relatively adequate in conjunction with the overall program to encourage non-auto travel and support the non-auto mode split assumed in the analysis. DDOT requests for the Applicant to also include the following added TDM measure for the project:

- Placement of electronic message boards in both buildings, which provide real-time information on nearby transit services.

These TDM measures, if implemented as planned and monitored actively, will encourage the use of alternative modes of transportation.

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