

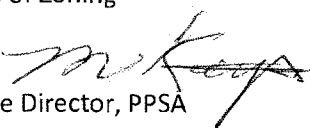
GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

**MEMORANDUM**

**TO:** Jamison Weinbaum  
Director, Office of Zoning

**FROM:** Maurice Keys   
Acting Associate Director, PPSA

**DATE:** July 11, 2011

**SUBJECT:** Zoning Commission Case 11-03  
Hoffman-Struever Waterfront, LLC - First-Stage PUD & Related Map Amendment at the  
Southwest Waterfront

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**Summary Recommendation**

Hoffman-Struever Waterfront, LLC (Applicant), has submitted a Stage 1 Planned Unit Development (PUD) and related map amendments to construct a mixed-use project on several squares west of Maine Avenue, SW, and on piers over the Washington Channel. The site is generally suitable for a Planned Unit Development and the proposed uses, and the development is compatible with District of Columbia plans for the area and city at large (§2403.2).

One of the key inputs required to support the transportation elements associated with the project is the provision of a comprehensive transportation impact study. DDOT acknowledges that the Applicant has delivered a hard copy of its Transportation Impact Study on June 28, 2011 and has determined that a substantial amount of analysis and detailed explanation of the assumptions, technical data, and other material will be required prior to Stage 2 approval.

DDOT is generally supportive of the proposed Southwest Waterfront project on the basis that the Applicant meets the requirements of the Stage 1 PUD regulations outlined in 11 DCMR, Chapter 24, and that the potential transportation impacts including all anticipated infrastructure needs, informational

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EXHIBIT NO. 42

requirements for pedestrians, bicyclists, and motorists, along with mitigation strategies are further addressed in Stage 2 submittals. This includes working with the Applicant to ensure supporting previously documented statements and observations, studies, information, and analyses are provided to DDOT in a timely and complete manner, consistent with a project of this magnitude.

## **Evaluation Process**

The Applicant is pursuing a two-stage PUD approval for the proposed Southwest Waterfront development project. Overall, DDOT's review of the application is to ensure the "impact of the project on the surrounding area and upon the operations of city services and facilities shall not be unacceptable, but shall instead be found to be either favorable, capable of being mitigated, or acceptable given the quality of public benefits in the project" (§2403.03).

In order to ensure these are met, DDOT will identify the critical transportation infrastructure issues related to the proposed development and potential mitigation areas that the Applicant will need to address in more detail. The necessity for likely capital investments along with the need for permits is noted and a comprehensive list of issues will be provided as further detailed analyses are conducted. DDOT expects that these issues and any proposed transportation infrastructure changes will be fully developed by the Applicant in all subsequent Stage 2 applications. As such, the Applicant will be required to provide an updated Traffic Impact Study for each Stage 2 submission and include a cumulative transportation evaluation of the most current plans for the site as a whole.

Further, any transportation improvements deemed necessary to serve specific phases of the development must be executed in advance or at the same time of the relevant phase of construction. All changes to the infrastructure should be constructed to accommodate anticipated build out conditions despite being constructed in relation to a specific phase.

## **Transportation Analysis**

### OVERVIEW

DDOT is committed to achieving an exceptional quality of life in the nation's capital through more sustainable travel practices, safer streets and outstanding access to goods and services. Central to this vision is improving energy efficiency and modern mobility by providing next generation alternatives to single occupancy driving in the city. As one means to achieve this vision, DDOT works through the PUD process to discourage single occupancy vehicle trips while ensuring alternative modes are able to accommodate the new travel demand. This proposed project is likely to change the nature and patterns of the travel demand in the area. It can be expected that facilities which once functioned in a manner similar to automobile dominated suburban arterials will function like a downtown street with many demands and a variety of travel modes.

DDOT is confident that redevelopment of the Southwest Waterfront will bring many benefits to existing and new residents, employees, and visitors. However, it is important to note that the project is likely to

alter the usage of the transportation network. The proposed project will generate a significant number of vehicular, transit, pedestrian, and bicycle trips. As a result of the additional vehicle trips, it seems most likely that the existing, largely commuter driven, travel demand will shift to other facilities on the periphery of the study area or shift modes entirely and trips focused on the site will significantly increase.

The key areas that form the basis of this report include: Strategic Planning; Roadway Capacity and Operations; Safety; Bicycle and Pedestrian Facilities; Transit Service; Site Access and Loading; Parking; Streetscape and Public Realm, and Transportation Demand Management.

### STRATEGIC PLANNING ELEMENTS

The city establishes transportation policy and direction in a variety of planning documents including and not limited to the Comprehensive Plan, Small Area Plans, transportation master plans, corridor plans, and livability studies, amongst others. It is important that any new development consider and reference the primary planning documents relating to both city-wide initiatives as well as more localized issues. Specific documents with particular reference to this area include:

#### *City-wide documents*

- District of Columbia Comprehensive Plan
- Development Plan & Anacostia Waterfront Initiative Vision for the Southwest Waterfront
- DC's Transit Future System Plan
- Bicycle Master Plan
- Pedestrian Master Plan
- DDOT Planning Manual – In progress

#### *Documents related to the immediate area*

- South Capitol Street Corridor FEIS
- DC Circulator Transit Development Plan
- SW Eco District – In progress
- Maryland Avenue SW Small Area Plan – In progress
- M Street SE/SW Transportation Study – Planned

### 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. Analysis provided by the Applicant suggests that the traffic impacts of the project will not produce extreme adverse impacts. Vehicular delay will be notably higher in the immediate area, although the system as a whole is not expected to fail. It should be noted that this conclusion is premised on achieving the mode splits assumed in the Traffic Impact Study.

Specifically, the Applicant has proposed significant changes to DDOT facilities along Maine Avenue. The Applicant has, through their analysis, suggested that a reconfigured Maine Avenue that includes a circle at M Street and a cross-section reduced to two travel lanes in each direction may be able to function in an acceptable manner. The study area of the Applicant's analysis is not adequate to determine if the proposed changes are acceptable.

DDOT expects to initiate its own study of the Near SE/SW area to evaluate current and future transportation needs and propose changes to policy and facilities. The suggested changes proposed by the Applicant, among others, should be included in this study and analyzed in a manner consistent with DDOT practice for significant changes to transportation facilities. This is likely to involve demand modeling and traffic simulation that can determine the direct impacts in the immediate area as well as the impacts to facilities beyond the study area for an opening and forecast year.

Interstate operations shall not in any way be compromised by the project. Detailed analysis must be provided on all potentially impacted Interstate operations. No additional queuing on the mainline of the freeway facility, excessive merging or weaving movements, or any other negative impact shall be allowed. If an impact to Interstate operations is determined, mitigation measures must be provided. If those mitigations change the nature of the ramp or the freeway, an Interstate Modification Report process must be initiated. In Stage 2 submission(s), the Traffic Impact Study will closely analyze ramps and adjacent freeway sections that serve the site.

Overall, DDOT expects that a variety of mitigations will be necessary for the project. However these specific mitigations will need to be developed by the Applicant, in concert with DDOT, during Stage 2 of the PUD process. They may include but are not limited to the construction/ implementation of:

- New/updated traffic control devices
- Vehicular detection devices
- Cameras
- Dynamic message signs
- Lane installation and/or reconfiguration
- Geometric changes to roadway design
- New infrastructure to support planned users (e.g. streetcar, heavy trucks, bicycles)
- Safety upgrades to current standards (refer to Safety section)
- Traffic monitoring infrastructure

#### SAFETY

DDOT will require that the Applicant conduct a safety analysis to demonstrate that the site will not create or exacerbate existing safety issues for all modes of travel. The analysis shall include applicable elements of the Highway Safety Manual and consider at least typical geometry, traffic composition, traffic control, user demographics, and other local conditions.

The analysis may include but is not limited to the evaluation of:

- Pedestrian and bicycle safety challenges
- Vehicle crash patterns in the area in particular focusing on the interface of high speed regional facilities with slower speed local facilities
- Truck routing and access plans for potential safety issues
- Conflicts between streetcars, cyclists, pedestrians and automobiles
- Parking related safety issues
- ADA compliance

In consideration of the proposed shared-use facility along the wharf, DDOT generally agrees that the shared use street is acceptable for a mixture of low speed, low-frequency vehicles, pedestrians, and a transit running way. The Stage 2 submissions should include more details associated with operational attributes of the street, what safety features will be included in the design, and research on similar facilities documenting the level of safety and functionality that can be expected. Appropriate separation of vehicles from pedestrians should be demonstrated along with other necessary safety features. DDOT expects that all proposed safety measures will be consistent with the 'state of the practice' for such facilities.

In addition, information should be provided on the acceptability of streetcar tracks to be provided in a potential flood zone.

#### BICYCLE AND PEDESTRIAN FACILITIES

The District of Columbia is committed to enhancing the walk-ability and bike-ability of the city by ensuring consistent investment in pedestrian and bike infrastructure on the part of both the public and private sectors. DDOT generally expects new developments to serve the needs of all trips they generate, including pedestrian and bicycle trips.

The primary bicycle and pedestrian connections in the area should also be mapped and evaluated. Connecting SWW pedestrian and cycling needs and infrastructure with the surrounding neighborhoods and into the City's overall strategic network plan for cycling, pedestrians and trails is an important aspect of this project. DDOT expects that the Applicant will take all necessary steps to ensure this connectivity occurs as part of the development.

DDOT agrees that off-street bicycle facilities are necessary along the eastern edge of the development adjacent to Maine Avenue. This will be a key piece of the Anacostia River Walk Trail and allow for trail connections to the northwest along Maine Avenue and will separate bicyclists from the streetcar tracks and grates. This section of streetscape should also clearly mark separate areas for bicyclists and pedestrians. All other sidewalks and crossings in the area should be designed for maximum pedestrian access and safety.

It is expected that multiple bike-share stations will be necessary to serve the site; at least one for each phase. Each subsequent Stage 2 application should include an evaluation of the bicycle facility network and Capital Bike-Share data to determine the need for and location of bike-share facilities.

As the development is heavily focused on residential uses, provision must be made for safe cycling and walking to transit facilities, the Downtown business core, as well as other destinations like Near Southeast. Ample bike parking is also required for employees residents and visits.

#### TRANSIT SERVICE

Access to public transit from the site exists though is not adequate for a site of this magnitude. While Metrorail stations are in the immediate vicinity, they are approximately a ten minute walk from much of the site. Additionally, the bus service in the area is too limited when compared to the scale of this project and significant improvements to local serving transit and improved access to the regional transit service are necessary.

The scale of the site necessitates better access to the regional transit system so that residents, employees, and patrons may easily travel to more distant points in the District and region. This is problematic as the most desirable regional transit hub, L'Enfant Plaza, is at least a ten minute walk from much of the site. To reduce the walking travel time, an additional station entrance on the south end of the L'Enfant station should be considered. This will reduce pedestrian travel time by two to three minutes per trip, provide access to three additional Metrorail lines, and remove the need for an additional transfer to patrons utilizing the Waterfront station. The Applicant shall work with DDOT and WMATA to study a new station entrance and any capacity constraints at L'Enfant station resulting from the increased travel demand attributable to the site. Additionally, the Applicant shall also address any public realm issues along pedestrian routes to major transit facilities.

Transit service that move patrons between the proposed site and other neighborhoods is also a considered a key function and is necessary. A frequent high capacity, high quality link should be instituted along the 7<sup>th</sup>/Maine/M corridor consistent with the DC Transit Futures plan. This would accommodate the high level of demand that can be expected to utilize the site and will also encourage a higher transit mode split and improved ride quality. This will ultimately come in the form of streetcar access to the site although temporarily solutions could be provided by buses/shuttles as the streetcar solution is developed.

The SW Waterfront offers logical termini for two streetcar lines: The St. Elizabeth's to Buzzards Point line and the Georgia Ave to Buzzard Point line. The proposed development shows streetcar lines incorporated into the development on Wharf St and on Maine Ave, both of which are consistent with DDOT's vision for the streetcar system. The Applicant can take a number of actions to facilitate the inclusion of streetcar related infrastructure into this development:

- Installation of overhead wire pole foundations: This is a small incremental cost above the installation of standard light pole foundations

- Installation of duct-bank: This allows DDOT to provide more reliable power to the streetcar system
- Installation of track or block-out sections: This would allow DDOT to minimize the disruption to the new development while finishing the streetcar system
- Relocate Utilities: Relocate utilities so they are reserve a travel lane with no below ground utilities. This will minimize service disruption and increase reliability for streetcars and the utilities

In addition to funding streetcar improvements, the Applicant should work with DDOT and WMATA to evaluate bus routing, provide for other smaller scale capital improvements, and identify operational funds necessary to provide adequate service to the site. Potential capital improvements may include, among other items, transit signal priority, station construction, shelters, maps, and electronic displays showing future arrivals. The Applicant shall also consider how operational funding for necessary services will be provided.

#### SITE ACCESS AND LOADING

DDOT strives to accommodate vehicle loading in a reasonable and safe manner while at the same time preserving traffic flow and safety. For a new development, DDOT requires that loading take place in private space and that no back up maneuvers take place in the public realm whether in public space or in areas of private space accessible to the general public. All access facilities should be designed in such a manner as minimize impact residents and patrons.

DDOT expects that all site access, loading requirements and evaluations including heavy infrastructure needs required to support truck access to the site shall be provided. For example when loading and site access is evaluated in Stage 2, turn templates at all access points, intersections, and adjacent ramps for design vehicles should be provided along with a truck and tour bus routing plan.

#### 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. As part of its Stage 2 application(s), the Applicant must study parking demand for comparable developments and provide supporting evidence for the appropriate amount of parking proposed for the Southwest Waterfront. Efforts to “right-size” the amount of parking must be undertaken in each Phase of development and for the site as a whole. In particular, structured parking should be minimized in early phases of development and, where necessary, surface parking provided on future building sites.

The Applicant has proposed shared parking facilities on site to serve the various uses within the development. DDOT generally supports approaches to parking that allow flexibility. However, parking ratios should be calculated by use and time of day in order to ensure that the site is not over-parked or

under-parked. DDOT recommends that these ratios be compared to the Draft parking regulations formulated for the DC Zoning Code update.

DDOT understands that the development could also create spillover pressure on curbside parking in surrounding neighborhoods. The Applicant through DDOT must conduct an analysis of impacts to residential parking and, as necessary, propose a scheme to manage curbsides in light of future conditions. Based on this analysis the Applicant will work closely with DDOT and the Department of Public Works (DPW) Parking Enforcement Administration (PEMA) to implement strategies designed to discourage spillover traffic from impacting local residential streets. For example, DDOT and PEMA currently employ zero tolerance 'Resident Only' Residential Permit Parking (RPP) enforcement in this community through the performance parking pilot zone.

#### STREETSCAPE / 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 gutter, 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 OP to ensure that the design of the public realm meets current standards, and will substantially upgrade the appearance and functionality of the streetscape for public users needing to access the property or circulate around it. Vehicle access to the property must be provided in a manner that is safe. When evaluating vehicle site access DDOT will consider whether access could be provided from alley access, which is the preferred method for access. This reduces vehicle conflicts with pedestrians and other vehicles. If the Applicant believes driveways and curb cuts are needed DDOT will work with the Applicant to ensure access is provided in a safe manner in Stage 2 Submissions. The final details of public space design will be resolved through the public space review and permitting process.

The *DDOT Design and Engineering Manual* and the *Anacostia Waterfront Transportation Architecture Design Standards* will serve as the main public realm references for the Applicant. DDOT staff will be available to provide additional guidance with respect to the Southwest Waterfront.

In addition to meeting transportation needs, public rights of way also serve a critical role in storm water retention and expansion of tree canopy. This function must also be considered in street design and meet best management practices laid out in Green Streets literature and the DDOT Standard Specifications for Highways and Structures (Blue Book).



## TRANSPORTATION DEMAND MANAGEMENT

As part of all major development review cases, and in particular PUD submissions, DDOT requires the Applicant to produce a comprehensive Transportation Demand Management (TDM) plan.

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.

DDOT recommends that the Applicant reference the report entitled *Incorporation of Transportation Demand Management (TDM) into the Development Review Process* located on DDOT's web site. The report contains a set of best practices and a TDM Recommendations Matrix that can provide useful guidance.

## SUMMARY

In summary, DDOT believes that the initial supporting material submitted by the Applicant appears to be sufficient that it is feasible to move forward with Stage 1 of the PUD. However, considerably more work will be necessary to determine the exact nature and design of infrastructure improvements for the site. Moving forward the Applicant will need to:

- Work with DDOT to develop future scopes of work to evaluate the challenges identified in this document and other potential challenges not yet identified. These scopes will include use of DDOT's travel demand model and may also include micro-simulation of select roadway segments
- Provide a complete and updated Traffic Impact Study for each Stage 2 submission and include a cumulative transportation evaluation of the most current plans for the site as a whole at least 45 days before any future hearing
- Fully develop all mitigation strategies for adverse impacts as part of subsequent Stage 2 applications
- Ensure Interstate operations are not compromised by the project and provide detailed analysis to support any mitigations for potential impacts
- Execute any transportation improvements deemed necessary to serve specific phases of the in advance or at the same time of the relevant phase of construction
- Construct all changes to the infrastructure to accommodate anticipated build out conditions despite being constructed in relation to a specific phase
- Work with DDOT and provide all necessary information analyses and data required to facilitate the study of the Near SE/SW area
- Conduct a safety analysis to demonstrate that the site will not create or exacerbate existing safety issues for all modes of travel

- Map and evaluate the primary bicycle and pedestrian connections to ensure connectivity of SWW pedestrian and cycling needs and infrastructure with the surrounding neighborhoods and the City's overall strategic network plan occurs as part of the development
- Work with DDOT and WMATA to study a new station entrance and any capacity constraints at L'Enfant station resulting from any attributable travel demand
- Take a number of actions to facilitate and fund the inclusion of streetcar related infrastructure into this development
- Work with DDOT and WMATA to evaluate bus routing, provide for other smaller scale capital improvements, and identify operational funds necessary to provide adequate service to the site
- Address any public realm issues along pedestrian routes to major transit facilities
- Ensure that the design of the public realm meets current standards and substantially upgrade the appearance and functionality of the streetscape. The final details of public space design will be resolved through the public space review and permitting approval process.
- Conduct an analysis of impacts to residential parking and propose a scheme to manage curbsides in light of future conditions