

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
Department of Energy and Environment



**MEMORANDUM**

**TO:** Anthony J. Hood  
Chairman, DC Zoning Commission

**FROM:** Jay Wilson, DDOE  
Green Building Program Analyst

**DATE:** January 3, 2017

**SUBJECT:** [Z.C. CASE NO.](#) 15-27 KF Morse, LLC (Market Terminal, 300 Morse Street NE)  
@ Square 3587, Lot 805, 814, and 817)

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The District Department of Energy & Environment (DOEE) reviews planned unit development applications for environmental issues that the applicant should be aware of during early stages of planning, as well as to identify opportunities for increasing environmental and urban sustainability benefits during development.

DOEE does not have comments to the applicant's height or setback requests, or for matters that will be fully addressed through any of DOEE's normal regulatory review processes. Rather, the comments contained herein address issues that the applicant should be made aware of in the early stages of design and entitlement. The items mentioned below are by no means comprehensive, but are a summary of specific items related to the site in question and some common issues that come up with many development projects. DOEE is always interested in meeting with developers and construction companies early in the development process in order to identify opportunities and to help avoid future regulatory problems.

The objective of this report is to outline some concerns that the agency has with regard to the level of commitment to sustainability, the design and configuration of the plaza, streetscape and public space, and the schematic design for green area ratio (GAR) and stormwater management for case number 15-27, KF Morse, LLC, also known as Market Terminal at 300 Morse, NE.

DOEE has met with the applicant several times during the last year, and although comments were not filed for the first submission in this case, some concerns were included with the Office of Planning's report and were addressed directly in meetings with the applicant. While some progress has been made and our office is generally supportive of the project, some areas of concern related to their design do remain, as outlined below.

### **Stormwater Management:**

- The revised submission for Market Terminal, Lots 805, 814, and 817 in Record Lot 6 in Square 3587 presents several challenges with respect to the regulations. The renderings, GAR, and stormwater management plan are not consistent, especially in regards to the green roof areas. It is unclear how the GAR and stormwater requirements will be met. Additionally, the street will be required to meet the 1.2" storm event because it is a new private street. There doesn't appear to be sufficient stormwater management practices in the right-of-way to meet the design requirements. As suggested to the applicant, there is immense opportunity to integrate the building and private street within a comprehensive stormwater plan. There is available space in the right-of-way that could be pervious and functional. DOEE has concerns that this project will not meet permit requirements as presently shown. Below are some recommendations to increase stormwater retention and manage runoff:
  - o Reduce the amount of impervious area to create a scenic corridor along which people want to walk. Trees and vegetation provide shade and transpire water which can create a cooler corridor, attracting greater pedestrian traffic. Inspiration could be drawn from the park design leading to the plaza in which walkways are interspersed with pathways.
  - o Large potential for integrated stormwater planning especially since the street is private. Stormwater captured from the rooftops is a resource that can be used for irrigation, water features, or even as a treatment train with bioretention or engineered tree pits on the surface level.
  - o Maximize stormwater management by capturing street runoff in tree boxes that can function as bioretention areas, which will help to meet stormwater regulations and provide attractive space.

### **Paving & Public Space Design:**

- DOEE recently released our Climate Ready DC Plan, which projects the impacts of climate change on the District. One of the most serious and severe impacts is that of urban heat. From a public health perspective, days over 95 degrees heat index are extremely dangerous. We currently see about 30 of those days per year. In the next 30 years, those dangerous days are expected to double and by the 2080s, we could see more than 100 days over 95 degree heat index. Using high albedo (or light color) materials and shading surfaces with trees and vertical greenery is one of the best ways to reduce the urban heat island effect. Buildings A-1 and B both use very dark cladding materials. Although the material is metal (which may reflect some heat), it will also absorb heat and radiate that heat close to the building, creating hot zones near the building. The dark paving, extensive areas of impervious area, and lack of trees will also negatively impact

the environment around these buildings. Since the building materials have been previously suggested to the applicant and have not changed, DOEE would strongly recommend improving the pedestrian zone.

- Alternative surfaces and additional landscaping and trees can improve the streetscape, give a sense of belonging, and provide stormwater management benefits. It appears that many of the grass areas where people congregate shown in the renderings are on adjacent properties. DOEE recommends a re-design of the plaza to include additional landscaped areas that can double as assembly spaces during events. Additional trees should be incorporated lining the street and in the plaza.
- The proposed spray area could include pervious paving so that the water can infiltrate and the surface won't have excessive ponding, which could result in a slippery surface. Permeable pavement could also be used in the proposed sidewalk café area and in parking areas to distinguish those spaces.

#### **LEED and Energy Efficiency:**

- We are glad that the applicant increased their commitment to LEED, and are now projecting certification at the LEED v2009 Gold level. It appears that the greatest opportunity for this increased commitment was in energy efficiency and they are showing about a 5% improvement over the current energy code.
- The 2009 LEED rating system is outdated and no longer accepting new projects. Although this project was previously registered under that platform, we would encourage the applicant to upgrade to the LEED v4 platform which uses the current building codes as the minimum benchmark for energy efficiency. Although this is a stronger platform and without additional improvements, it may mean that the project would only meet a LEED v4 Silver certification, it would also put the project on par with other new developments in the pipeline.
- Given that the District is continuously updating building codes, additional gains in energy efficiency are possible and encouraged. We would encourage that the project maximize all opportunities for increased energy efficiency. While some strategies could have minimal construction cost impacts, it would also decrease utility cost for residents and lessees of the commercial space. Many energy conservation measures including additional insulation, LED lighting and controls, high efficiency mechanical systems, and air sealing have a return on investment within five years and can be financed with no up-front cost through the DC PACE program (see below).
- Given market conditions and the District's goal of net zero energy properties by 2032, it is strongly encouraged that the project team revisit their energy model, commitment to increased energy efficiency, and opportunities to incorporate next generation technology.

#### **Renewable Energy:**

- Per the District's Sustainable DC Plan, one critical goal is to increase the use of renewable energy to make up 50% of the District's energy use. And this is a major priority of the administration, as the Mayor signed legislation this summer to increase the District's Renewable Portfolio Standard (RPS) to 50% with a local solar carve out of

5.0% by 2032. For the business and development community, the ramification of this legislation is that the District has the best financials for solar energy in the country. A power purchase agreement may be executed for leased solar panels with zero up front cost. Also, for owner financed solar panels, which can be financed by DC PACE, the typical return on investment is between two and five years. Through the District's community solar program, the energy generated can be "virtually" net-metered and the residents or commercial tenants can "subscribe" into the system providing mutual benefit for both the property owner and residents. It is strongly encouraged that the project incorporate solar panels that would generate a minimum of 1% of the buildings' total energy use.

**Finance:**

- Financial tools like the DC Property Assessed Clean Energy (DC PACE) program can pay for increases in construction cost for on-site generation, any strategies that increase efficiency above the baseline code requirements, or stormwater management strategies that garner return on investment through the District's Stormwater Retention Credit Trading program. This financing does not increase debt on the property and is repaid over time as a special assessment on the property tax. DOEE recommends that the applicant investigate opportunities to take advantage of financial tools that would allow increased commitment to sustainability.

Increased stormwater retention, better streetscape design that incorporates high albedo materials, additional landscaping and street trees, increased energy efficiency, and integration of on-site renewable energy would help the District meet our sustainability goals and ensure that the project is economically competitive into the future. DOEE is glad to be a technical resource as the project continues forward.