

City of Cambridge
Department of Public Works

Owen O'Riordan, Commissioner

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September 1, 2015

TO: Planning Board

FROM: Katherine F. Watkins, PE
City Engineer

RE: MIT Kendall Square Initiative NOMA Project: PUD Special Permit Application

We are in receipt of the Planned Unit Development Special Permit Application materials for the above mentioned project, dated July 27, 2015. We have reviewed the materials and have presented below some comments related to the interests of the Department of Public Works.

The DPW has met with the Applicant, MIT, and their consultants on numerous occasions to review the proposal for the work proposed north of Main Street. MIT and their consultant team have demonstrated an understanding our Department's requirements for new developments and have continuously expressed willingness to work with the DPW to meet the requirements and to address our concerns. The documents submitted for the first phase of this PUD Special Permit Application are consistent with the discussions that we have had with the MIT Team.

As the project is further developed under the PUD Special Permit process and continuing through the Building Permit Application and review processes the DPW looks forward to working with the Applicant on the details of the development design. At this first review of the PUD Application materials, please find outlined below items related to the DPW's interests that are worth noting at this time.

Public Infrastructure:

- The DPW is currently engaging a consultant team to evaluate the Kendall Square area infrastructure as it relates to the future build out of the area. As the design progresses, the DPW will continue to incorporate the Applicants proposal into the study to evaluate the impacts of the development on the utility infrastructure and the potential mitigation requirements to support the development.
- As the development progresses through the PUD process and eventually the building permit process, we will review the site and utility design related to DPW standards and requirements. The DPW reserves the right to establish appropriate mitigation measures, related to impacts to public utility infrastructure and the public right of way (streets and sidewalks), throughout the process as the design presents the full scope of these impacts.

- The Applicant shall coordinate all water services and connections with the Cambridge Water Department.

Stormwater Management:

- Under the City Land Disturbance Regulations, the Applicant will need to obtain a Stormwater Control Permit from the Department of Public Works, prior to the start of construction. The permit requirements cover the design standards and long term operation and maintenance of a management system for the project site, as well as the construction phase erosion and sedimentation control plans. The permit requirements also include the standard to mitigate the stormwater runoff from the site from the proposed 25-year storm to a rate below the pre-redevelopment 2-year storm event.
- The project is located within the Charles River Watershed for which a Total Maximum Daily Load (TMDL) has been established for Phosphorous, the pollutant of concern. In response to the TMDL the City requires that projects within the watershed treat stormwater to reduce the Phosphorous load by 65% from the existing condition. The Applicant has acknowledged this requirement in the submission materials.
- The Applicant indicates that in addition to low impact development techniques they are reviewing potential of stormwater reuse for purposes of irrigation and/or cooling tower make-up water. The DPW applauds the implementation of LID practices and encourages the continued investigation of stormwater re-use to meet the above outline requirements.

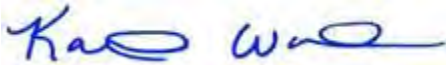
Sanitary Sewer:

- The Applicant presents an estimated sewer flow generation of 56,835 gallons per day from the development. In order to understand the impact that the added flow will have on the capacity of the City infrastructure, the Applicant should anticipate undertaking a capacity study, which includes a metering program, to evaluate current flow conditions in the system. The DPW will work with the Applicant to determine the scope of the study and the specific information that should be evaluated.
- The proposed sewer flow is tributary to the City's combined sewer system and therefore will be required to provide mitigation for the additional flow by reducing the inflow and infiltration (I&I) into the system at rate of 4:1. The DPW will work with the Applicant to evaluate opportunities to address this mitigation requirement.

- The project is proposing a sewer connection to a combined system that is prone to surcharging. To provide building occupants with uninterrupted sewer service in instances of a surcharged system the City requires that a storage tank be provided with the capacity to detain the peak 8 hours of flow from the site. The Applicant acknowledges this requirement in the submission materials. The DPW will work with the applicant on the design and operating procedures for this piece of infrastructure.

We look forward to working with MIT and other City Departments on this project. Please feel free to contact me with any questions or concerns related to the comments or information provided above.

Sincerely,

A handwritten signature in blue ink, appearing to read "Katherine Watkins", is written over a light yellow rectangular highlight.

Katherine F. Watkins, P.E.
City Engineer