

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 SOMA 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 consultant team to review the proposal for the work proposed South 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.

Project Phasing:

The DPW recognizes that the SOMA Development consists of multiple parcels and planned building structures that are reviewed at this stage as a single development. The DPW is encouraged by the potential for creative and sustainable infrastructure and planning opportunities that are created by the PUD process. The DPW also recognizes that the Applicant has begun to outline the phasing and timing of the development build-out in the application package.

We respectfully request that as the timing, sequencing and phasing of the project is further vetted that the Applicant consider the infrastructure planning as integral to the plan. We will require a plan that clearly demonstrates that all DPW permit requirements and mitigation measures be met at each stage of the phased development.

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 2year 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 the stormwater management system will be designed to consider the SOMA Project as a whole as opposed as individual building parcels. The DPW supports this approach as it allows for innovative and sustainable mitigation techniques to meet the above requirements. The Application materials indicate that stormwater collection and re-use for non-potable uses is proposed for the development. The DPW supports the proposal for stormwater re-use but notes as indicated above, that phasing of the implementation of any shared systems will be important for us to understand as the design progresses.

Sanitary Sewer:

- The Applicant presents an estimated sewer flow generation of 220,968 gallons per day from the development, an increase of 160,873 gallons per day over the existing sewer flows from the development parcels. 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 Applicant acknowledges this requirement in the submitted materials and commits to working with the DPW to meet this requirement.

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,

Katherine F. Watkins, P.E.

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City Engineer