



City of Cambridge
Department of Public Works

Owen O'Riordan, Commissioner

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May 31, 2017

TO: Planning Board

FROM: Katherine F. Watkins
City Engineer

RE: Education First Expansion (EF III)

We are in receipt of the Special Permit Application materials, dated May 15, 2017, for the Education First Expansion Project at North Point (EFIII), on the parcel currently addressed 10 North Point Boulevard. We have reviewed the materials and have presented below some comments related to the interests of the Department of Public Works.

Through the previous adjacent developments, the MEPA Process and some initial conversations the Applicant's team is aware of the DPW permitting requirements for the project. The Special Permit Application document acknowledges the requirements and provides some general information related to how the requirements will be addressed by the Development.

The DPW, based on the provided documentation, does not anticipate the project having any issue meeting all of the requirements of the DPW as the project will be subject to thorough and complete engineering review at the time of the Building Permit Application.

Climate Change / Resiliency:

The Applicant has been asked to address flood level impacts and building resiliency associated with increased flood elevations presented in the November 2015 *Climate Change Vulnerability Assessment*. Flood Elevations associated with the 2070 100-year storm events and projected Sea Level Rise have been provided to the Applicant.

As presented in section 3.6 Climate of the Special Permit Application, the Applicant has worked proactively to use the best available information, from both Cambridge and Boston published studies, in the design of the buildings and has committed to resiliency measures. Some of the proposed mitigation measures include:

1. The building finished floor elevation will be designed above the projected 2070 SLR / SS 1% event elevation by over a foot to minimize potential for impacts from future conditions.

2. Critical mechanical and life safety infrastructure will be set above the first floor of the structure.
3. Exterior construction materials will be resistant to saltwater conditions.
4. Site will be designed with future increase in length and intensity of heat events in mind with light color surfaces, shade trees and landscape materials that minimize need for irrigation.

Stormwater Management:

Under the City Land Disturbance Regulations because the project requires a Special Permit from the Planning Board, the Applicant will need to obtain a Stormwater Control Permit from the Department of Public Works. 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 Applicant acknowledges the Stormwater Control Permit Requirements in Section 3.3.3 Stormwater Management of the Special Permit Application and makes a commitment to the following:

1. Design a system that will meet the City of Cambridge standard to reduce the peak rate of runoff from the post development 25-year storm event to the rate of the existing 2-year event.
2. Design a system to include Low Impact Development practices to manage stormwater potentially including a stormwater harvesting systems and infiltration.
3. Make improvements to the quality of the stormwater runoff including an 80% reduction in the amount of Total Suspended Solids and 65% reduction in the Phosphorus load.
4. Provide a plan outlining the long term operation and maintenance procedures of the designed system to ensure sustained operation of the system into the buildings future.

Other Public Infrastructure:

The Applicant commits to working with the City of Cambridge DPW and other departments as the design specifics for the development are progressed. Some additional items worth noting include:

1. The Applicants acknowledges that the project will be required to remove inflow/infiltration (I/I) from the City sewer system at a rate of 4 times the projects wastewater generation. The Applicant is estimating the proposed I/I mitigation at volume of just under 200,000 gallons. The DPW will work with the Applicant to confirm this volume and coordinate the I/I mitigation effort.

2. The Applicant has met with David Lefcourt, the City Arborist, to review existing trees, both on and off-site, and will present proposed landscaping to the Committee on Public Planting. The DPW will work with the Applicant to maintain existing street trees and review the on-site planting plan. Current plan includes in excess of 20 on-site shade trees.

As previously indicated, the Applicant has acknowledged all major requirements of our Department and included general discussion as to how the project will address them. A thorough review of the development during design and construction will be completed by the DPW to ensure that the above items are implemented as described.

Please feel free to contact me with any questions or concerns related to the comments provided above.

Sincerely,

A handwritten signature in blue ink, appearing to read "Katherine Watkins".

Katherine F. Watkins, P.E.
City Engineer