



City of Cambridge
Department of Public Works

Owen O'Riordan, Commissioner

147 Hampshire Street
Cambridge, MA 02139
theworks@cambridgema.gov

Voice: 617 349 4800
TDD: 617 499 9924

March 27, 2018

TO: Planning Board

FROM: Katherine F. Watkins, PE
City Engineer

RE: 50 Rogers / 161 First Street Special Permit Major Amendment and Design Review

We are in receipt of the Planning Board submission for the 50 Rogers Street / 161 First Street project submitted on behalf of Alexandria for a Major Amendment to the Special Permit and Design Review for the 50 Roger Street Building.

The DPW has met with the Applicant on this project and the Applicant was made aware of the comments and requirements below that will need to be addressed by the Development prior to the DPW's approval of the project. The Applicant should have the understanding that the project will be subject to a thorough and complete engineering review at the time of the Building Permit Application.

Stormwater Management and Sanitary Sewer:

1. The submitted documentation includes a letter from Kleinfelder, dated January 29th, 2018 that outlines the projects approach to manage stormwater and mitigate additional sanitary sewer flows. The Project is proposing the following measures, which are consistent with engineering planning efforts associated with the larger Alexandria Development:
 - a. Sewer flows from the proposed building will be less than was anticipated during the planning phases of the development, this infrastructure was sized adequately to support the program.
 - b. A sanitary sewer holding tank will be provided at the 50 Rogers Street site to mitigate sewer flows during surcharge events.
 - c. Infiltration of stormwater runoff volume from the 1-year 6 hour storm will be provided onsite to provide water quality treatment and also some Inflow and Infiltration (I/I) mitigation.
 - d. 4:1 mitigation of I/I is achieved through work completed on other parcels in the overall development. Additional removal as described above, through infiltration, will add to the surplus volume mitigated by the development as a whole.

The above statements acknowledge the requirements of the DPW for the Development. Review and approval of the described design features and systems will be completed at the time of Building Permit Submission.

Climate Change / Resiliency:

The project Parcel has been identified in the November 2015 *Climate Change Vulnerability Assessment*, as one at risk for an increase in future flood elevations associated with increased intensity rain events. Information on the flooding and maps of the various events can be found here: <http://www.cambridgema.gov/Services/FloodMap> . Flood Elevations associated with the 2070 10-year and 2070 100-year storm events and have been provided below.

Location Name	2070 10 yr precip	2070 100yr precip
161 First Street	20.0 CCB	20.5 CCB

With a below grade parking structure now being proposed to support the development, the map and elevations should be evaluated related to the entrances to the below grade spaces. We respectfully request that the Applicant review the elevations provided above and consider the items outlined below:

- a. How the development has been designed to mitigate the potential for impact to the site from surface flooding to the anticipated 2070 10-year storm-event flood depths.
- b. How the development will recover from a surface flooding event consistent with the potential 2070 100-year storm-event flood depths.

This information was provide to the Applicants team at one of the meetings at the DPW. Our Department will continue to work with the Applicant to ensure the final design is meeting the City requirements for building resiliency.

Other Public Infrastructure:

As with all projects, the DPW will review and evaluate all proposed work and impacts in the public right of way, as the design is developed. Some additional items worth noting include:

- 1. Care shall be taken to protect and maintain all existing Public Street Trees during construction and long term. As the design develops the Applicant shall inform the DPW and City Arborist of any potential impacts to a Public Street Tree, as soon as they are identified.

We look forward to working with the Applicant 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.
City Engineer