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Ruthanne Fuller Mayor

## DEPARTMENT OF PUBLIC WORKS **ENGINEERING DIVISION**

OFFICE OF THE CITY ENGINEER 1000 Commonwealth Avenue Newton Centre, MA 02459-1449

April 8, 2019

**Engineering Division Policy** 

Overflow Connections to City Drainage System

Under certain circumstances, the City allows overflow connections into the city's storm water system (drain pipes) provided there is capacity in the system and the system is functioning properly. DPW requires that the applicant retain a professional engineer licensed in Massachusetts to create an existing condition plan and to investigate the possibility of installing an on-site drainage system to receive the flows from a sump pump or by gravity provided the soils are conducive to percolating [leaching] into the soil. The bottom of the proposed recharge system must be a minimum of 2-feet above the seasonal high groundwater elevation, as determined by a Massachusetts licensed Soil Evaluator.

The licensed soil evaluator shall study soils maps and perform on-site soil testing (percolation test(s)) to determine the infiltration rate of the soils as well as determine the seasonal high ground water elevation. The drainage system shall be designed to receive the flow from the sump pump or by gravity, so that water is infiltrated on-site to the maximum extent possible and then an overflow connection may be permitted so long as the system is functioning properly and there is capacity in the City system. The engineer shall provide information that clearly shows that the city's drainage system is suitable to receive the additional flow. All design and calculations shall be submitted to the Permits Engineer for review, comment and possible approval.

If the home is heated with oil heat and an overflow connection is requested, the design shall incorporate an oil/water separator in line with the overflow connection to the City's drainage system. Details are available on the DPW website. If the home has natural gas heat, there is no need for an oil/water separator.

Any overflow connection to the city's drainage system shall require submission of design plans stamped by the engineer. Pre-& Post Closed Circuit Television (CCTV) inspections of the City drain system shall be required. An inspector from the Engineering Division shall be present during the CCTV operations. After installation is complete, but prior to backfill operations, an As-Built plan shall be prepared and stamped by the engineer. The as-built plan shall show the existing footprint of the dwelling the drainage system (underground dry well, chambers, pipes, and all appurtenances). The applicant shall retain a contractor that is properly bonded and insured to install the system and overflow connection. The contractor shall be responsible for obtaining all necessary City permits.

In the event that city drain pipes are not in the vicinity of the dwelling or structure, a main drain extension may be proposed, designed and installed with permission of the City Engineer and approval of the City Council. The costs associated with the design and installation of the main drain extension shall be the responsibility of the Applicant (the Homeowner).

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cc: James McGonagle, DPW Commissioner

Amy Hamel, DPW Chief of Staff

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