

November 2, 2023 Update from the Town of Needham on the August 8, 2023 Weather Event

In recent weeks, staff from the Department of Public Works (DPW), the Town Manager's Office, the Building Department and members of the Select Board have been meeting with residents impacted by the August 8th extreme weather event which resulted in localized flooding and impacted about 220 reported homes and businesses throughout Needham. Through mapping technology, DPW was able to identify 8 neighborhoods where 4 or more homes were impacted and schedule meetings with the property owners to discuss both public and private mitigation strategies that could be deployed to reduce the likelihood of future flooding.

In most of these flooding situations, similarities have been identified. First, most of the properties are located on low ground. When the Town experiences a short duration high intensity rain event, the Town's stormwater system reaches its capacity limit resulting in water naturally seeking the lowest elevation. On August 8th, the Town's system in these areas was surcharged up to a few hours after the rain event and then dissipated. In the time it took for the water to recede, water found its way into the garages and basements of some residents' homes.

Second, many of the impacted properties have a sloped yard from the driveway to the house which channeled water towards the house and, in many cases, towards the garage. Many of these homes are also located in low areas that are in proximity to where stormwater collects in the roads and then flows on to their properties.

In response, the Town has identified some short-term strategies to work with private property owners which includes raising curbs and sidewalks near the affected properties. This will help keep water in the road for as long as possible to limit the water's ability to stream towards the property. As most neighborhoods had water recede shortly after the rain ended, the goal is to protect the properties by allowing enough time from when the rain starts to when the water stops.

The Town has also made the following recommendations to private property owners to help harden their properties:

- 1. Grade your yard to channel water away from your home on the property as this will help redirect water from interior spaces
- 2. Add drainage swales between properties to provide an area for the water to go and drain away from the home
- 3. Install sump pumps in the low points in your home's lower levels and have a backup in place should a pump fail
- 4. Put in window wells for basements
- 5. Build up bulkheads above the water line

Long term, DPW Director Carys Lustig reports that the Town is working on a Stormwater Master plan to help identify systemwide solutions to mitigate the likelihood of future flooding. This plan will plan will be considered for funding at the May 2024 Town Meeting. Lustig reports that the process will take about a year. During this time, several different solutions will be evaluated including identifying areas in flood prone areas where water can be stored on a temporary basis, increasing the size of residential and Town-owned pipes, redirecting water flow from certain low lying areas and bottlenecks and improving capacity as water makes its way to the Charles River.

Additionally, the Town is developing a flooding response dashboard to keep residents informed of action items and their progress as well as information on how the Town anticipates investing resources in the upcoming year to address these issues.

For questions, please contact dpwadmin@needhamma.gov.