# ENGINEERING DEPARTMENT

8 Springfield Avenue · Cranford, NJ 07016 · 709-7219 · www.cranford.com/engineering

## Flood Information

### FLOOD HAZARD AREAS

Flooding is the number one natural disaster in the United States and the Township of Cranford, causing the most property damage. The Township is located in the Rahway River watershed and is traversed by a number of rivers that can cause flooding within the Township including the following:

Rahway River College Branch

Nomahegan Brook Orchard Brook

The <u>Rahway River</u> enters the Township's municipal boundary from the Township of Springfield and flows in a southerly direction to the Township's boundary with the Township of Clark. Tributaries to the Rahway River include the Nomahegan Brook, College Brook and Orchard Brook.

Nomahegan Brook is tributary to the Rahway River and begins in the northern portion of the Township within Nomahegan Park.

<u>College Branch</u> starts within the western portion of the Township and combines with the Rahway River along Park Drive.

<u>Orchard Brook</u> enters the Township's southwestern municipal boundary from the Borough of Garwood and enters the Rahway River along Orchard Street.

Rivers within the Township are limited in capacity and tend to exceed their banks during heavy rainfall events similar to Tropical Storm Floyd on September 16, 1999 and during the "Tax Day Storm" on April 15, 2007. More recently, the Township experienced a major flood event on August 27, 2011 due to Hurricane Irene.

Information on whether your property is in the 100-year floodplain can be obtained by coming into the Cranford Municipal Building and having the Engineering Department help you. Maps are available to look at as well as other flood-related information on the FIRM. The Engineering office can provide technical assistance relating to floodways, flood hazard areas, flood elevations and data on historical flooding, and is available to advise owners of appropriate flood protection measures. Flood depth information may also be available from the Township. The Township also has some Elevation Certificates available. Township staff members are available to undertake site visits, if requested and authorized, to review flood, drainage and sewer issues. Contact the Township Engineering Department at (908) 709-7219 for further assistance.

### FLOOD SAFETY

The following common sense guidelines can help you from the dangers of flooding:

- Do not drive through a flooded area. More people drown in cars than anywhere else. Do not drive around barriers
- Do not walk through flowing water. Currents can be deceptive. Six inches of water can knock you off your feet.
- Stay away from power lines and electrical wires. If your house is about to be flooded, turn off the power at the service box. Electrical current can travel through water. Electrocution is the 2nd leading cause of death during floods.
- Be alert to gas leaks. Turn off the gas to your house before it floods. If you smell gas, report it to a Township official or your gas company. Do not use candles, lanterns or open flames if your gas has been shut off.
- Keep children away from the flood waters, ditches, culverts and storm drains. Flood waters can carry unimaginable items that have dislodged themselves. Culverts may suck smaller people into them rendering them helpless.
- Clean everything that has been wet. Flood water will be contaminated with sewage and other chemicals which pose severe health threats.
- Look out for animals, especially snakes and rodents.
  Small animals that have been flooded out of their home may seek shelter in yours.
- Do not use gas engines, such as generators, or charcoal fires indoors during power outages. Carbon monoxide exhaust can pose serious health hazards.

### PROPERTY PROTECTION MEASURES

If your property is susceptible to flooding, there are many flood damage reduction measures you can employ.

- Install a sump pump system to dispose of infiltrating water to grade outside of the structure
- Watertight seals can be applied to brick and block walls to protect against low-level flooding.
- Utilities such as heating and air conditioning systems, water heaters and other major appliances can be elevated to higher floors in the structure or on raised platforms.

# FLOOD SAFETY TIPS

- Temporary measures such as moving furniture and other valuables to higher floors or sandbagging exterior openings will also help.
- Elevating or relocating the entire structure may also be a feasible option.

The Township's storm preparation addresses known "hotspot" flooding areas and attempts to keep critical roads, buildings and services protected, not to protect every house in town that might flood.

### FLOODPLAIN PERMIT REQUIREMENTS

All development within the 100-yr. floodplain (not just construction of buildings, but filling, excavation, fences, etc.) is required to obtain a Township Permit. Applications must be made prior to doing any work in a floodplain area. Please contact the Township Engineering Department to receive all the information you will need in order to properly develop in the floodplain at (908) 709-7219. You may report any illegal development activities to the above number as well.

### SUBSTANTIAL IMPROVEMENT / DAMAGE

The NFIP requires that if the cost of improvements to a building or the cost to repair damages from any cause to a building exceeds 50% of the market value of the building (excluding land value), the entire building must be brought up to current floodplain management standards. Building improvement projects include exterior and interior remodeling, rehabilitation, additions and repair and reconstruction projects. Please contact the Township Engineering Department at (908) 709-7219 for further information.



### FLOOD INSURANCE

If you do not have flood insurance, talk to your insurance agent. Most homeowner's insurance policies do not cover damage from floods. Flood insurance is only available to those participating communities in the National Flood Insurance Program (NFIP). Because of our floodplain management programs that attempt to protect us from the multiple flooding hazards, Cranford is part of the NFIP and thus, residents are able to obtain flood insurance.

Be sure to check your policy to ensure you have adequate coverage. Usually these policies cover the building structure, but not the contents. Contents coverage can also be obtained by asking. There is a 30-day waiting period before flood insurance coverage becomes effective. Plan ahead; do not wait until a flood is predicted before purchasing flood insurance.

If you are building inside the floodplain, the purchase of flood insurance is mandatory if using a federally regulated/insured bank for a loan.

### **NATURAL & BENEFICIAL FUNCTIONS**

Floodplains play a valuable role in providing natural and beneficial functions to the area around, and including, Cranford. Floodplains that are relatively undisturbed provide a wide range of benefits to both human and natural systems. These benefits provide aesthetic pleasure as well as function to provide active processes such as filtering nutrients. Parts of the Rahway River, Nomahegan Brook, College Branch and Orchard Brook floodplain are used as a means to filter chemical run-off so that these areas can maintain bio-diversity and ecosystem sustainability. The floodplains enhance fish and other wildlife habitats and provide feeding/breeding grounds. And lastly, the floodplains provide natural erosion control and open space so further flooding damage does not occur.

### DRAINAGE SYSTEM MAINTENANCE

As simple as it may sound, simply keeping smaller ditches and stream free of debris can dramatically improve the runoff capacity of low-lying areas, as well as greatly reduce the occurrence blockage that significantly contributes to flooding. It is illegal to dump materials into a waterway and violators may be fined. If you see someone in the act of dumping or see debris in one of our watercourses, please contact the Department of Public Works at (908) 709-7217.

### FLOOD WARNING SYSTEM

Many times, flooding along the Rahway River within Cranford can be predicted days in advance, giving ample warning for preparation and evacuation. However, in the event of a flash flood due to large rain event, you may be the first to notice the oncoming situation and have only hours to execute your plan. Notify the Township



Police/Fire Department. The Township's Emergency Alert System will be activated. Tune your radio to 680AM for local and National Weather Service Updates. You will also see regular interruption on local radio and television stations advising you of the situation.

In addition, please feel free to sign up for emergency text messaging alert through www.nixle.com or the Township of Cranford's website at www.cranford.com. Standard text messaging rates may apply.

### ADDITIONAL INFORMATION

If you should require further or more detailed information regarding flood-related issues in Cranford, here are some additional sources:

- FEMA.gov website
- Cranford Municipal Building Engineering Department (908) 709-7219, 8 Springfield Avenue, Cranford, NJ 07016
- · Floodplain FAQ page on the www.cranford.com website.
- Cranford Public Library