

NYCDOT Solves Localized Flooding Issues with Stormcrete™ Modular Porous Concrete

With roughly 12,000 street corners to manage across the five Boroughs, the New York City Department of Transportation (DOT) has the daunting task of assuring pedestrian safety while meeting the updated standards adopted by the Americans with Disability Act (ADA).

Over the decades, much of the existing stormwater infrastructure is either not adequately sized to handle current runoff or is in some form of disrepair. In many cases, no stormwater infrastructure was ever installed. This has resulted in an infinite amount of localized street flooding issues.

The conventional options of adding pipe and catch basins are typically prohibitive due to a spider web of underground utilities installed over the years. With options limited, the DOT needed to come up with an innovative solution to address their localized flooding issues.

The DOT collaborated with other city departments for suggestions. The Green Infrastructure unit for the New York City Department of Environmental Protection (DEP) recommended that the DOT consider porous pavement. DOT expressed some concerns with pouring pervious concrete in place citing quality control issues, excessive labor costs, limited access to underground utilities and clogging to name a few.

DOT ultimately settled on testing the Stormcrete™ modular porous concrete stormwater system. They selected a bus stop on the corner of Linden Blvd & 204th St in Queens as a test location (see photos).

The Stormcrete™ Modular Precast Porous Concrete System is a truly unique and versatile stormwater solution. Since the slabs are manufactured and pre-cured in a controlled environment, their strength and flow characteristics are consistent. Stormcrete™ can be placed in almost any kind of weather and be driven/parked/walked on immediately. With permanent lifting points in the surface, they are removable and can be easily lifted and reset, providing direct access to the sub-base material for utility repairs or spill clean-ups—providing an extra factor of safety.

Stormcrete™ sidewalks, gutters and parking spaces work to provide runoff reduction by decreasing impervious cover and providing a large infiltrative footprint. This results in reduced flows into the combined municipal stormwater system (CSO). The Stormcrete™ System sub-base can be configured for water quality filtration and/or storage depending on project needs and site specifics.



Localized flooding prior to Stormcrete™ placement



Stormcrete™ after 1.5" rainfall



Stormcrete™ →



Porous Technologies, LLC
8 Blue Moon Drive
North Yarmouth, ME 04097
877.271.9055