

# CASE STUDY

Town Center at Haddon - Underground Storage System - New Jersey, USA



## Project Specification

In an effort to redevelop the Haddon business district, a mixed-use apartment and retail center was constructed in the urban downtown in the hopes of bringing several hundred residents to an area previously sustained by commuters. One of the main challenges to development was the increase of runoff and how to manage its storage and discharge without disrupting the existing infrastructure. The ADS N-12 Pipe retention/detention system was selected to reduce the rate and volume of the discharge. The project required the installation of four rows of 48" HDPE pipes secured with a Platipus 2 Ton Pipe Buoyancy Control system below the new development.

## Solution

An analysis by the geotechnical engineer concluded that the sum of the weight of the soil and pipe was not sufficient to resist the potential vertical hydrostatic uplift force of the underground storage system due to the water table and limited amount of overburden. The structure required 834lbs/ft. to secure the underground system while meeting the required factor of safety of 1.5. The Platipus S8 anchor was selected after a review of the soils indicated a shallow water table and seasonal undrained soils. The contractor installed this solution at each bell end and evenly spaced at 4' increments along the 20' pipes.



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