

CASE STUDY

Florham Park Senior Center Florham Park, New Jersey

Storage Provided:	6,800 cu. ft.
Area:	3,407 SF
Models:	Recharger® 280 HD
Number of Units:	102
Installed:	February 2010
Town Engineer:	Michael Sgaramella, PE Florham Park, NJ
Design Engineer:	Keller & Kirkpatrick Parsippany, NJ
Contractor:	Mark Construction Montville, NJ



Florham Park, N.J., is a small suburban community, located about 30 miles west of New York City, that boasts its own library, swimming pool and other recreational facilities. In February 2010, ground was broken for a new Senior Center, and Florham Park engineers embarked on designing a stormwater system to control runoff and prevent contamination of the tributaries to the Passaic River to the west town border.

The Senior Center was located on a one-acre parcel with a driveway circling the building and a parking lot in the rear. There was not enough available land area for an open detention pond, so the engineers opted for an underground stormwater system as the only available alternative.

The engineers selected CULTEC's Recharger® 280 HD retention chambers to capture the runoff onsite and release it in a controlled manner to an existing underground piped drainage system at the rear of the site. The system allowed for some infiltration into the ground. Each chamber is 47 inches wide, 26.5 inches high and offers 6.08 cubic feet per linear foot of storage capacity. According to CULTEC's sales representative Jonathan Shell of East Coast Associates, the engineers selected the Recharger 280 HD from nine available chamber sizes because it offered the best fit in the given depth-restriction scenario.

The system employed 102 chamber units and 16 HVLV FC-24 feed connectors to provide 6,800 cubic feet of storage. Unlike other systems on the market, CULTEC employs its own in-line side portal manifold eliminating the need for a costly external pipe header. Not only is such a system easier to install than a conventional manifold system, it is

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Florham Park Senior Center

Florham Park, New Jersey *(continued)*

also more cost-effective. The savings to the internal manifold are compounded by the fact that CULTEC systems use less stone than other comparable systems on the market and require no heavy installation equipment.

According to Florham Park Borough Engineer Michael Sgaramella, PE, who inspected the site during the installation, the arch-like shape of the stormwater chambers provided adequate strength to withstand vehicular surcharge loads from the parking lot located above the system. “CULTEC’s system was much easier to install than a pipe system,” said Sgaramella. “When the chambers are installed, they are easily handled by a light-duty backhoe and fit together in an uncomplicated manner.”

It took two hours to put the chambers together in a 3,407-square-foot bed located under the Senior Center parking lot. CULTEC chambers meet H-25 wheel load criteria, are certified by IAPMO R&T and are protected by a 10-year warranty.

For Florham Park’s Senior Center, CULTEC’s system was able to provide a cost-effective stormwater solution that accommodated the site’s high groundwater table and a lack of land for a surface detention basin. It also resulted in a fast and easy installation, helping the project to move speedily toward completion.



CULTEC, Inc.

878 Federal Road • P.O. Box 280 • Brookfield, CT 06804
Phone: 203-775-4416 • Toll Free: 800-4-CULTEC • Fax: 203-775-1462 • Web: www.cultec.com

