



STORMWATER CHAMBERS

SIMPLIFIES INSTALLATION

ORLANDO, Florida - **(May 1, 2014)** - To solve the problem of installing an expansive subsurface storm water management system at varying depths for a new apartment complex here, different sizes of the same chamber were used. Typically, a subsurface stormwater management system design will utilize the single largest chamber size that meets the site's depth constraint. A total of 1,732 chambers were installed in 169 rows across seven beds, occupying 71,273 square feet and providing 169,443 cubic feet of combined storage, including stone. The Alta at Lake Eve apartment complex is a 264-unit luxury apartment community that consists of four 4-storey midrise buildings and two 2-storey carriage home buildings situated on more than nine and half acres. It is located approximately two miles from Walt Disney World.

To address the varying installation depths contractors selected five different models of CULTEC, Inc. (Brookfield, Conn.) underground stormwater management chambers - - the company's Recharger® 900HD, Recharger V8HD, Recharger 330XLHD, Recharger 280HD and the Recharger 150HD.

"It is a distinct advantage for any community," stated Laurie L. Honnigford, managing director of the Stormwater Equipment Manufacturers Association (SWEMA), "especially a luxury complex such as this with resort-style amenities, to have its stormwater management system underground. It allows for a more controlled infiltration of stormwater runoff into the ground, replenishes the surrounding soil and aquifer, eliminates unsightly ponds and sumps which are

also breeding grounds for mosquitoes, avoids overloading and polluting our natural surroundings and resources, and frees up land to preserve green space or allow for further development."

According to Honnigford, the client was able to utilize several different chamber models to accommodate varied site restraints. "These different sized, large chambers helped to fit the system into this footprint, on-site and in a cost-effective way," said Momtaz Barq, P.E., principal engineer, Terra-Max Engineering, Inc. (Orlando, Fla.). "The system was very easy to work with both in terms of design and actual installation. Plus, the company's representatives were accessible throughout the entire process and promptly accommodated even minor design changes." Terra-Max and CULTEC are members of SWEMA.

Each chamber features a patented side portal to allow for internal lateral manifolding of the system. A small chamber is inserted into the side portal of the chamber to create the internal manifold. The inclusion of the side portal feature on every chamber allows for more design flexibility and the ability to promote lateral flow at any point within the system.

The project also used CULTEC's Separator™ Row to help pre-treat runoff. It captures silts and fine particles prior to runoff and overflowing into the rest of the basin and sump. To help maintain the stormwater system, any debris can be easily vacuumed out using a water jet, which pushes water toward the catch basin and sump while removing waste.

Formed in 2008, SWEMA is comprised of industry experts who volunteer their time to develop educational programs, standards, guidelines and best management practices for stormwater treatment and management.

For additional information, go to: www.stormwaterassociation.com.

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