# RESIDENTIAL DEVELOPMENT

## STORMWATER DETENTION BASIN UNDER CAR PARK

**Location:** Pistoia, Italy

**Designer:** Arch. Zuini e Sturlini

**Total project surface:** 30,000 sqyd

**Basin surface:** 1,032 sqyd

**Water storage capacity:** 92,470 gal (USA)

**Load type:** Cat. 3 (cars)

**Product used:** Drening

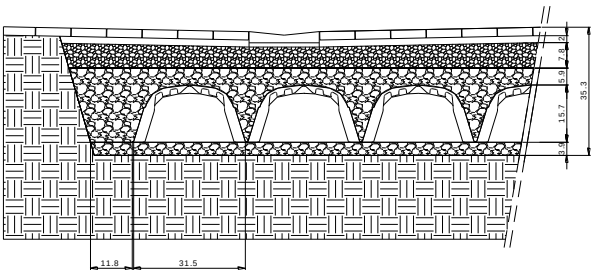


Fig. 1 – System cross-section

Fig. 2
Trench digging

Fig. 3
Detail of the inlet pipes.

Fig. 4
Gravel backfill

Fig. 5
Finished carpark

The local water authority imposed a max. discharge of 2.64 gal/s in the nearby canal. The calculated stormwater runoff of the development was much greater so an attenuation system was mandatory.
Drening was used to create a stormwater detention basin, and its high load-bearing capacity taken advantage of with the creation of a car park above.



**Geoplast U.S. Corp.** Canal Square 1054 31th Street NW - Suite 200 - Washington D.C. 20007-4492 USA
Ph. +1 202 333 1344/3995 – Fax. +1 202 333 1599 – info@geoplast.us – www.geoplast.us