

SEWERAGE BOARD OF LIMASSOL-AMATHUS

ANNOUNCEMENT

RETENTION BASIN

In the framework of the implementation of the Rainwater Management Plan for greater Limassol, with funding from the State and the EU, the Kato Polemidia Retention Basin has been designed and constructed.

The Sewerage Board of Limassol-Amathus (SBLA) promotes modern rainwater management methods through the use of Sustainable Rainwater Management Systems. The Retention Basin is part of the anti-flooding works in western Limassol which were designed and implemented in parallel with the Vertical Road works carried out by the Public Works Department.

The Retention Basin has a capacity of 75,000 m³, it has been constructed on 3.3 hectares of land purchased by the SBLA with State permission and consent. The perimeter and the banks of the basin are almost entirely planted with grass, covering a total area of 19,000m³. Some 1,000 trees and bushes have also been planted around the Lake.

The first rains are diverted to the Retention Basin through the Vertical Road storm drain pipeline, which can carry around 35m³/s. The first flush flow of 2-3m³/s are retained in the basin while remainder continue along the pipeline and into the sea near the port. In cases of heavy rainfall and when the flow is in excess of 35m³/s, the Vertical Road sewer will reach its maximum volume and the entire flow of water is diverted to the Retention Basin and from there to the sea and/or Akrotiri Salt Lake.

When the amount of water in the basin exceeds 9,000 m³, it overflows via two pipes, each with a diameter of Q1000, back to Vertical Road storm drain pipeline. In this way, after every heavy rain storm, the basin will retain only up to 9,000m³ so as to ensure that there is enough room for the next rainfall. If, in the extremely rare case that the basin comes close to its highest planned water level, water will be diverted into the overflow pipe towards the Salt Lake.

Where the water leaves the basin, automatic electric grills have been installed, which prevent any solid waste from entering the overflow pipe and, subsequently, ending up in the Salt Lake or the sea.

This is an important project and a model Sustainable Rainwater Management System for Cyprus, which aims to manage rainwater close to the area in which it falls, taking into consideration not only the quantity but the quality too.

The Retention Basin will bring numerous benefits, including the following:

- Rainwater filtering, since a certain amount will be retained and diverted underground
- Retaining solids and rain pollutants so that they are not carried to the sea or the Salt Lake

- Replenishment of the water table
- Slowing down the rainwater flow and reducing the peak of the flood discharge
- Creation of a green area
- Upgrading of the landscape in the area



