

Rain Water Irrigation in Toronto

Lorne Haveruk, Principal, DH Water Management Services Inc., 75 Lord Seaton Rd,
Toronto, ON M2P1K6, Canada

Bay Blorview Children's Centre is being torn down. New building right from the ground up to the 11 rooftop gardens is coming. An elaborate reclaimed water irrigation system has been designed. All the water will come from rain collected onsite and stored in a 80,000 gallon cistern.

Rooftop gardens will utilize low volume drip tubes controlled by soil moisture sensors. ET data for automatic scheduling will be supplied from a ET station. Trees, watered individually with micro bubblers while strip planter will utilize dripline, mulched to achieve a high retention level resulting in a highly efficient irrigation system.

The irrigation mainline will be connected to the city water supply only to be utilized if the cistern runs dry. The cistern has been sized to be able to supply water up to 90 days before running out.

If there was such a long dryspell, the building automation system would receive a low level signal. This would signal the cisterns pumps to be turned off. The city water supply would be opened when the next watering cycle occurred. A check valve at the cistern would prevent the city water supply from filling the cistern with city water.