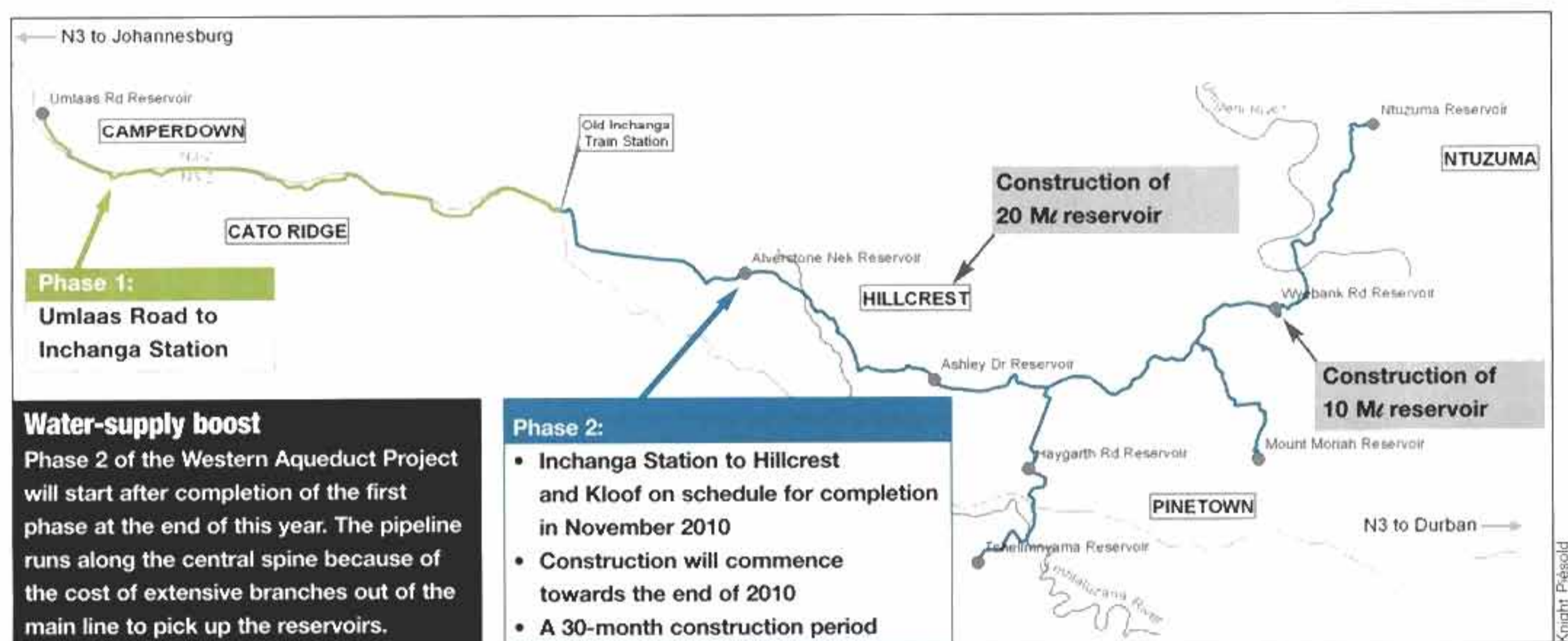


# Evolving demand strategised

Due to growing demand in Ethekwni, a strategised response to bulk-water supply has been adopted. *Karen Eicker* looks at the short-, medium- and long-term interventions planned for the area.



The Western Aqueduct Project was initiated by Ethekwni Water & Sanitation, in the mid-1990s, in response to growing demand in western Durban. This demand was largely stimulated by a general shift from the traditional Durban residential suburbs to a number of housing estates in Drummond, Hillcrest and Kloof.

The water-supply problems resulting from this densification were caused by two factors: capacity, with demand exceeding what could be supplied by pipes that were too small, and the aging of existing infrastructure – as pipes broke, interruptions and water loss were experienced.

Exacerbating the bulk-supply problem was the necessity to supply rural communities, which had never been served by formal water supply, from systems that were already overtaxed. As a result, Pinetown began suffering interruptions in supply because the existing installations were no longer capable of sustaining demand.

Pedro Rodrigues of Knight Piésold explains that, as the Western Aqueduct Project was being investigated, further problems came about to the north of the city. "With the expansion of the northern regions as people moved into the KwaMashu, Inanda and Tafuleni areas, the existing infrastructure couldn't cope. Originally, the project was intended to extend from Umlaas Road to

Pinetown – traversing Drummond, Kloof and Hillcrest – and shedding its load into the existing installations. In response to demand, the system was extended to the north. So the Western Aqueduct, initially intended to be up and running by 2000, started changing character and became bigger."

In 2005, the capital became available for the extended project and work on the pipeline commenced. About a year ago, parts of the aqueduct were again augmented to meet additional demand.

The project is divided into two sections: one which runs into the Durban area, under the control of the Ethekwni Municipality, and another financed by Umgeni Water. Rodrigues confirms that Phase 1 is on schedule for completion in November 2010.

## Along the N3

The project route has been amended to bring it into the spinal feed of the region in order to take water from this line into the existing installations. Rodrigues says that, originally, the pipeline route was planned away from the central developed corridor to avoid impacting the areas under development.

But, as the relevant areas densified, there was a need to access the reservoirs that fed these areas. Economics ruled that the pipeline had to run more along the central spine because of the cost of extensive branches out of the main line to pick up the