



A worker demonstrates the size of the award-winning concrete sleeve constructed on Town Hill to house a new water pipeline for Umgeni Water.

PHOTO:
IAN CARBUTT

Excavator tackles challenging pipe job

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MOTORISTS who may be wondering why an excavator is back working on a site between the N3 north and Old Howick Road can be reassured.

There is no problem and "the excavator is not digging up the work that

was done before".

Umgeni Water spokesman Shami Harichunder said the previous contractor, Esor Limited, "did not mess up", as one driver thought.

In fact, their work won an engineering award.

Some months ago, Esor, a geotech-

nical and civil engineering contractor, jacked 76 metres of concrete pipes under the N3 and Old Howick Road (R103) opposite Queen Elizabeth Park on Town Hill. This created a sleeve to accommodate Umgeni Water's new six-kilometre pipeline from the D.V. Harris water treatment works to the World's View reservoir.

New contractors Icon Construction are on site to lay the water pipes inside these sleeves.

Pipe-jacking involves the use of sophisticated equipment to push sections of pipe into place underground with minimal impact on surface activities.

Harichunder said the project was divided into two phased operations because "pipejacking is a very specialised field and only two service providers in KZN can do it".

Construction of the whole pipeline is due for completion in March 2010.



PHOTO: IAN CARBUTT

The new water pipeline being pipe-jacked into place in the concrete sleeve constructed previously.

PROJECT WINS ENGINEERING AWARD

ESOR Limited's pipe-jacking project under the N3 and R103 for Umgeni Water won the SA Institution of Civil Engineers' technical excellence award for the Pietermaritzburg branch in March. Jeffares and Green was the consulting engineer.

The contractors faced several challenges while excavating under the N3. These included large boulders that had to be drilled and blasted, unexpected things like

pockets of water that had to be drained, an abandoned steel drainage pipe and an old reinforced concrete safety barrier that had to be cleared. They also encountered the old Johannesburg road and had to dig through its surface and supporting layers, which slowed progress briefly.

Pipeline length: six kilometres
Pipe diameter: 1,8 m
Section lengths: 2,5 m
Section mass: about seven tons

