A Second Tender Awarded for Bulk Water Infrastructure in the North

Construction of approximately R250 million worth of urgently needed bulk water infrastructure is now underway to the north of Durban.

Martin Bright, project manager for the Northern Aqueduct Augmentation (NAA) project, confirmed that a second contract was awarded to Esorfranki Construction in August.

This 6km section of the pipeline stretches from Duffs Road to the Phoenix 2 reservoir and is valued at approximately R90 million.

Construction of the first segment of pipeline for the NAA – also by Esorfranki Construction – began in January and 10 kms has already been completed. This segment extends from Phoenix 2 Reservoir in Phoenix to Waterloo and then to Umhlanga with a feed to the planned new Blackburn reservoir. The contract comprises 22km of pipeline valued at R156 million.

Completion of both the first and second contracts is scheduled for the 3nd quarter of 2015.

The tender for construction of the Blackburn reservoir is yet to be awarded.

Bright explained that the Northern Aqueduct comprises seven individual projects. However, the NAA will not be constructed in linear fashion. Segments in areas of critical need will be put in place first which will allow for back feeding of reservoirs in order to guarantee an uninterrupted supply of water to areas that need it most.

"This project will begin to put in place urgently needed bulk water Infrastructure for the rapidly developing northern areas of the city. The current Northern Aqueduct has reached capacity on various sections of the trunk mains as a result of growth in demand. Although eThekwini Water and Sanitation (EWS) has enough water to meet the current demand, it doesn't have the infrastructure or network capacity to deliver it to where it is needed," explained Ednick Msweli, new appointed head of EWS. Bright said that the actual construction process was extremely complex with special measures being taken to accommodate residents, preserve environmentally sensitive flora and rehabilitate excavation sites. It traverses busy residential areas as well as sugar cane fields, crossing busy thoroughfares and even rivers.

The stretch of the pipeline leading from the Phoenix 2 reservoir will be laid in the median (between the two carriage ways) of the busy thoroughfare. The pipe jack crossing this extremely busy road has already been completed and excavation is about to start.

The segment of pipeline running towards the Umhlanga reservoir will cross the N2 highway. Whilst this is underway, erosion control measures have been put in place to minimise the possibility of wash away onto the N2 highway.

Indigenous trees like the Strangler fig tree (*Ficus Natalensis*) along Autumn Drive were pruned rather than moved during construction. The roads are currently being reinstated behind the construction to minimise disruption to residents in the area.

The pipeline construction towards the Waterloo reservoir has been completed to the point where it crosses the Ohlanga River. The flow in the river was diverted to the northern side of the original flow during construction and the width of the working corridor was reduced to minimize the disturbance of the river banks on either side.

The pipeline construction towards the future Blackburn reservoir is also progressing well with the section running through the sugar cane fields having been completed. During the process, 17 large yellowwood trees (*Podocarpus Falcatus*) on the site of the planned reservoir were carefully removed by a specialist landscape company and replanted on a suitable site.

The NAA was designed by the Knight Piésold-Naidu Consulting Joint Venture.