



### Purpose of The Development

Arising from a review of the water supply system for the central parishes of Bermuda two points of weakness were identified.

1. Redundancy in the treatment plant capacity to produce water at all times for customers and key institutions such as the King Edward Memorial Hospital
2. Redundancy in the pumping systems required to deliver the treated water

These deficiencies were further brought to light by the recent the discoloured water situation in the Cedar Park Estates and Frog lane Apartments areas which could only be resolved by using an alternative pipeline with insufficient capacity to meet demand at all times and requiring Frog Lane Water Truck Outlet operation to be severely curtailed...

As part of the improvements works, the Ministry recognised an immediate need to improve the flow and pressure of water to the clients served by the alternative pipeline with the installation of a new pumping system which will have the ability to be powered by a backup generator. The proposed pumping system will ensure that when demand is high, flow to all customers fed through this network of pipes, including the Ministry's biggest single water customer the King Edward Memorial Hospital will have sufficient capacity to meet customer needs at all times.

The networks of pipes have been in existence for decades serviced by structures already in place in the Arboretum (Montpelier Park) with an existing tunnel structure that extends from the main reservoirs under Fort Hill Road into the park. As a cost effective solution the existing pipes will be connected to the proposed pumps which will be automatically controlled to maintain a set pressure and operate in the most efficient manner possible. The option to place the pumps in the existing tunnel was considered but the available area was too small to provide a safe working environment. The proposed structure has been located as close as possible to the existing tunnel structure and has been set back into the hillside to reduce its visual impact. The structure is also to be clad in slate which will weather and again reduce the visual impact.

