

## **Basic Assessment for the Expansion of Bulk Water Supply Drakenstein Prison**

As the legal entity in control of the land the Department of Public Works proposed to upgrade the bulk water storage capacity of the Drakenstein Prison in line with the wishes of the Department of Correctional Services in the Western Cape.

Correctional Services proposes to expand this storage capacity to the recommended 48 hours by constructing an additional reservoir on Farm 1006/2 directly adjacent to the existing reservoir.

It is proposed that a circular reservoir with a diameter of 23 120mm is constructed and recessed into the slope as has been done with the current reservoir. The height of the proposed reservoir will be 4200mm, the concrete flooring will have a building layer of 80mm and a floor thickness of 175mm. Both the roof and the internal floor of the reservoir will have a convex surface with a radial fall of 100mm from the centre of the reservoir to the outside. Drainage points on the roof are located at strategic points and the top edge of the reservoir is shielded with a precast concrete coping. Three air vents will be installed in the roof. Water from the interior of the reservoir will be fed through an outlet pipe a chamber recessed below the level of the floor. The proposed expansion did not require additional pipeline infrastructure either in terms of the water supply or the reticulation to the prison itself on the neighbouring property tied directly into the current supply and reticulation pipelines that service the prison.

The application was successfully concluded and an Environmental Authorisation issued.