

# BULK SERVICES

## PROPOSED DEVELOPMENT FRAMEWORK FOR STIKLAND SOUTH HOSPITAL SITE, ERF 6300

**Civil Engineering Bulk Services Assessment** was conducted by HHO Engineers for the potable water, foul sewer and stormwater infrastructure around the site and the capacity available for the proposed development of Stikland South. The capacity of these services must be confirmed with the City.



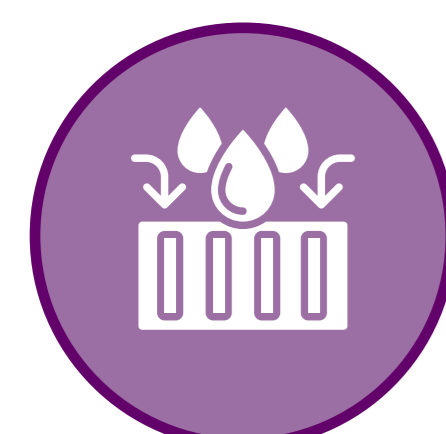
### POTABLE WATER

It was determined that the site is well serviced with water infrastructure. The anticipated annual average daily demand of potable water is 919.18 kl/day. However, the City of Cape Town still needs to determine availability for this development.



### FOUL SEWER

Stikland South is serviced by infrastructure in immediate vicinity and discharges into the Bellville Waste Water Treatment Works, which has a maximum capacity of 15MI per day, with about 15MI available for treatment. It is anticipated that the foul sewer annual average daily demand will be 840.62 kl/day, thus there are no capacity constraints with regards to foul sewer discharge demand and infrastructure.



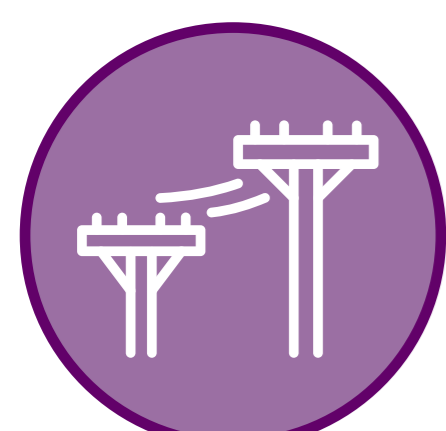
### STORMWATER INFRASTRUCTURE

The proposed development at Stikland will have a notable impact on stormwater management, primarily due to the increase in impervious surfaces and the associated runoff. The development will need to incorporate comprehensive stormwater management systems to mitigate flood risks, improve water quality, and enhance groundwater recharge opportunities. It will require the design of upgraded infrastructure and the integration of sustainable water management practices to align with environmental goals and regulatory standards.



### SOLID WASTE MANAGEMENT

Waste produced from the development is expected to consist of domestic and household waste, business and commercial waste and construction waste during the construction phase of the development. Refuse collection services are currently provided to the area. In terms of cleansing services, the City currently provides services including cleaning of illegal dumping, litter picking, servicing of street litter bins, and street sweeping. The additional demand that will be created by the proposed development, is expected to be accommodated by the Bellville South Landfill, located 8 km away.



### ELECTRICAL INFRASTRUCTURE

The City has limited capacity (11 kiloVolts [kV]) and will not be able to supply the additional capacity required for the proposed development (estimated to be 20.75 Megavolt-Amperes (MVA) based on the City's Design Load Parameters). An appropriate number of switching station sites will be constructed to distribute the electrical supply the proposed development site adjacent to public roads. The proposed site has an existing 22 m servitude, a 66 kV overhead line, which will be upgraded to a 132 kV line in the future by the CoCT.