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Airports Company South Africa

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WATER NETWORK CAPACITY CONFIRMATION LATEST REVISION FOR THE PROPOSED RUNWAY PROJECT, AIRPORT

Background

Airports Company South Africa, Cape Town International Airport, is in the process of undertaking an Environmental Impact Assessment (EIA) for re-aligning their existing main runway. Construction of this runway is only likely to start in 2016, and will take approximately 18 months.

Table 1 represents the flow requirements determined by the Airport Company Engineers.

Table 1: Water Requirements

AADD (kl/day)	Peak Flow (l/s)
1000	14.58

*flows are only required for the project period of 18 months

Construction and the associated water usage will be primarily during day time hours.

Two water extraction methods are proposed:

- 1) Extract water from the 300mm water main currently supplying the airport on the Northern precinct (maximum delivery capacity of approximately 200 kl /hour) either straight into water bowser trucks, or alternatively to water tanks erected on-site.

The current airport demand peaks are between 7am and 9am and again from about 3pm to 5pm, so we would extract outside of these hours.

As a mitigation measure to reduce demand on the City's day time usage

- 2) Extract water during the night time (stored into tanks)

Water Reticulation

East of the Airport is 300mm diameter main supplying the airport. This connection is from the Borchard's Quarry water main. According to the model the main appears to be a 250mm diameter main.

The network has sufficient capacity to supply the proposed peak flows for the project period.

It is preferred that the developer apply the second extraction methodology.

Bulk Water

The City of Cape Town's bulk supply system has sufficient water resource, treatment and bulk storage capacity to supply the estimated annual average daily demand of 1000kl/day for the proposed works for 18 month period. This usage shall be restricted to off-peak periods, preferably methodology 2 (extraction during the night to tanks).

Sewer Reticulation

Not applicable.

Wastewater Treatment

Not applicable.

Conclusion

The Water and Sanitation Department does not have any objection to supply the required water requirements of the project for the 18 month period. However, the methodology that needs to be applied would be option 2, which refers to extraction of water during night time periods (off-peak) into tanks.

General/ Disclaimer

Information provided is based on best available data.

The flows and pressures provided in this comment are theoretical and not measured. The infrastructure as-built information referred to and used in the hydraulic models are based on the GIS asset records, while modelled pressures, flows, velocities, capacities and volumes are based on hydraulic models of current land use and demands. Where appropriate, future land use and demands are considered and the impact of a development compared to that currently planned for the same land and surroundings.

Please note that this letter is not agreement to provide a water or sewer connection to the development. A formal application must be made in this regard to the Reticulation branch, Head of District.

This comment on confirmation of the ability to service the development does not confer any rights of development, which will be determined by the approved land use application process being followed. Any capacity mentioned is only applicable to the final approved term of the

development or at most 5 years and has to be re-applied for, should implementation and taking up of the capacity not have taken place.

Yours Faithfully

2015/02/02

X 

Jaco de Bruyn
Head
Signed by: Jaco de Bruyn

On behalf of

Peter Flower
DIRECTOR: WATER & SANITATION DEPARTMENT
