

This specific bid is for the Design, Supply, of a Sea Water Reverse Osmosis (SWRO) Plant at a Site, or Sites, to Supply SANS 241:2015 Compliant Potable Water to the City of Cape Town at the following sites:

- Granger Bay 8 M₃/d Planning to be 4+4 ML/D, initially - To Suit Desalination Plant Raw Water Flow Requirements: Estimated at 10.0 M₃/day over 24 hours = 116 $\frac{m^3}{s}$ or 417.6 m₃/hr per 4M₃/d plant train
- Hout Bay Harbour, Hout Bay 4 M₃/d, initially - To Suit Desalination Plant Raw Water Flow Requirements: Estimated at 10.0 M₃/day over 24 hours = 116 $\frac{m^3}{s}$ or 417.6 m₃/hr
- Dido Valley / Red Hill, Simons Town 2 M₃/d, initially - To Suit Desalination Plant Raw Water Flow Requirements: Estimated at 5.0 M₃/day over 24 hours = 60 $\frac{m^3}{s}$ or 216 m₃/hr

A new SWRO Process Train complete comprising the following as a minimum:

- Filter feed pumps
- Filters
- Chemical dosing points
- MF feed pumps
- Holding tanks
- UV disinfection units
- RO feed pumps
- RO units
- All MCC boards and all associated electrical and electronic work

Inlet Parameters

Parameter	Unit	Value (estimate)
Algae	mg/L unknown	
K	mg/L	630
Na	mg/L	11222
Ca	mg/L as Ca	530
Mg	mg/L	1314
NH ₄	mg/L as N	4.93
SO ₄	mg/L	2505
Cl	mg/L	19333
Nitrate	mg/L as N	0.1
F	mg/L	0.6
Cond	mg/L	4917
pH		7.6
Al	mg/L	0.01
Ba	mg/L	0.043
B	mg/L	4.22
Fe	mg/L	0.033
Mn	mg/L	0.027
Si	mg/L	13.8
Sr	mg/L	10.3
TDS	mg/L	41533
TSS	mg/L	15 (max)
Temp	min Deg C	10
Temp	max Deg C	20
Heavy metals		Unknown

Outlet Parameters compliant with SANS 241