

Dam: Wolwedans

Country: South Africa

River: Great Brak

34°0'51.64"S 22°13'44.55"E

-34.014343 22.229042

Owner/Client: Department of Water & Sanitation

Designer/Engineer: Department of Water Affairs & Forestry

Contractor: Department of Water Affairs

Purpose (code): W

Site start: 01.11.1987

RCC start: 10.10.1988

RCC completion: 31.10.1989

Site completion: 30.11.1990

Height (m): 70

Length (m): 268

Volume of RCC ($m^3 \times 10^3$): 180

Total volume ($m^3 \times 10^3$): 210

Reservoir capacity ($m^3 \times 10^6$): 24

Upstream slope: V

Forming of upstream face (code): (1)

Downstream slope: 0.50

Forming of downstream face (code): (1) *

Spillway slope: 0.50

Forming of spillway face (code): (1) *

Depth of layers (mm): 250

Depth of lifts (mm): 250

Cement content (kg/m^3): 58

Pozzolan content (kg/m^3): 136

Code for pozzolan: (F)

RCCDAM Unique Serial No.: RCCDAM0057

Under Construction



RCCDAM0057UC

Completed Dam



RCCDAM0057CD

Google Earth



RCCDAM0057GE

Guide to Abbreviations

Purpose

- E Environmental
- F Flood control
- G Groundwater recharge
- H Flood control
- I Irrigation
- N Navigation
- P Pollution control
- R Recreation
- W Water supply

Facing method

- (1) Traditional concrete against formwork
- (2) Traditional concrete against formwork with external geomembrane
- (3) RCC against formwork
- (4) RCC against formwork with external geomembrane
- (5) Traditional concrete against precast concrete panels
- (6) Traditional concrete against precast concrete panels with geomembrane
- (7) RCC against precast concrete panels
- (8) RCC against precast concrete panels with geomembrane
- (9) RCC against precast concrete panels with hot poured membrane
- (10) RCC against precast concrete blocks
- (11) Reinforced conventional concrete cast before RCC placement
- (12) Reinforced conventional concrete cast after RCC placement
- (13) Reinforced concrete cast against precast units or slip-formed facing elements
- (14) Slip-formed/extruded facing elements
- (15) RCC supported by fill shoulders
- (16) Mechanically compacted unformed face of RCC
- (17) Unformed face of RCC
 - ' GEVR/GE-RCC
 - * Stepped face

Pozzolans

- (-) No Pozzolan Used
- (C) High-lime flyash (ASTM Class C)
- (F) Low-lime flyash (ASTM Class F)
- (M) Milled sand
- (N) Natural pozzolan (ASTM Class N)
- (R) ROLAC (mixture of flyash and slag with or without limestone fines)
- (S) Ground-granulated blast-furnace slag
- (L) Mixture of GGBFS and limestone fines