

Dam: El Esparragal

Country Spain

River Viar

37°48'26.54"N 5°54'56.13"W

37.807373 -5.915592

Owner/Client Confederación Hidrográfica del Guadalquivir

Designer/Engineer Manuel Gonzalez Sereno (ATE)

Contractor Ferrovial - Agroman/Sando J.V.

Purpose (code) E

Site start 01.01.2002

RCC start 06.05.2003

RCC completion 19.08.2003

Site completion 31.03.2004

Height (m) 21

Length (m) 383

Volume of RCC ( $m^3 \times 10^3$ ) 62

Total volume ( $m^3 \times 10^3$ ) 89

Reservoir capacity ( $m^3 \times 10^6$ ) 5

Upstream slope 0.30

Forming of upstream face (code) (3') \*

Downstream slope 0.90

Forming of downstream face (code) (3') \*

Spillway slope 0.90

Forming of spillway face (code) (3') \*

Depth of layers (mm) 300

Depth of lifts (mm) 300

Cement content ( $kg/m^3$ ) 68

Pozzolan content ( $kg/m^3$ ) 157

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0297

## Under Construction



RCCDAM0297UC

## Completed Dam



RCCDAM0297CD

## Google Earth



RCCDAM0297GE

# 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