



WORK CORRECTION OF THE ENVIRONMENTAL IMPACTS IN THE LORIGUILLA RESERVOIR

CONTRACT INFORMATION

ADMINISTRATIVE INFORMATION

TYPE OF CONTRACT:

Technical Assistance to the Work Management

CONTRACT NAME:

Technical Assistance for the Control and Surveillance of the Environmental Impact Corrections Project in the reservoir of Loriguilla

LOCATION: Loriguilla

BUDGET: 203.838,88 €

WORK BUDGET: 2.757.664,45 €

CLIENT: Confederación Hidrográfica del Júcar

DATE (BEGINNING-END): February 2007- December 2009

TECHNICAL INFORMATION

Excavations and treatment of the land:

Clearing: 40.534,32 m³

Excavation: 63.885,13 m³

Ground waterproofing: 1.456,00 m

Body of weirs and breakwater protection:

Breakwaters: 11.211,77 m³

Concrete Filling: 9.175,50 m³

Polypropylene filter: 3.006,96 m

Steel: 1.449,89 kg

Wall floodgates: 2 units

Fish scales: 722,00 m

Auscultation elements: 6 units

Plantations:

Hydroseeding: 644,94 m²

Shrubs: 241,00 units

Woodland: 687,00 units

Security bar: 1.635,00 m

WORK OBJECTIVE

The work objective consists of executing two dams in series, within the Loriguilla reservoir, over the Tuéjar river, complementing the renovated recreational area. The aesthetic aspect of the weirs was integrated into the design along with keeping in mind the work and its surroundings.

DEVELOPED TASKS

- Geometric Control
- Economic Control
- Material Quality Control
- Initial and Final Report of the Work
- Execution of the Quality Self-Control Plan
- Monthly Reports
- Modified Project No. 1
- Complementary Project No. 1
- Work Liquidation Projects
- Price Revisions

PREVIOUS STATE



Aerial Photo: Before Work

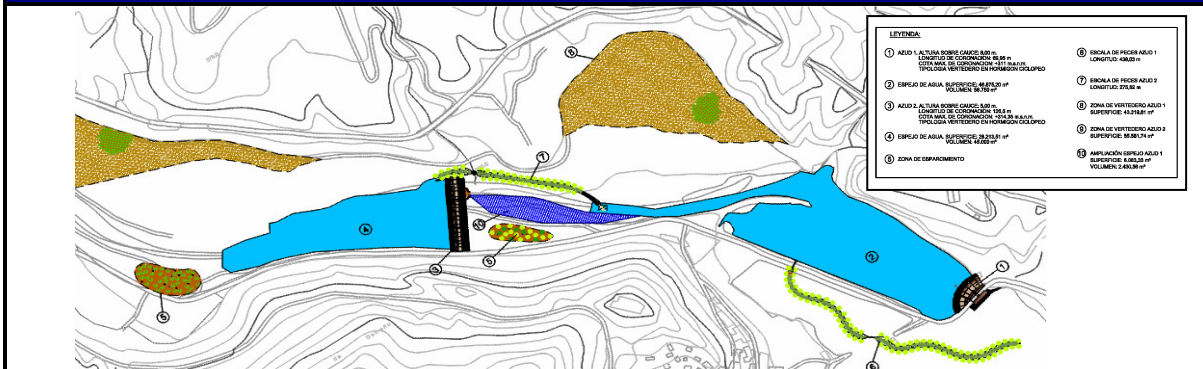
FINAL STATE



Aerial Photo: After Work



WORK DESCRIPTION



The **Environmental Corrections Impact in the Loriguilla Reservoir** consists of executing two dams in series over the Tuéjar river, complementing the renovated parking area. The dams have a manual control device for emptying the water and waterproof screens to reduce possible leaks.

The modifications affect the following work elements: 1. Fish scales, 2. Widening the water surface, 3. Deforestation within the project area, 4. Security bars on the old road C-234, 5. Banisters in recreational areas.

The typology scale chosen is that of the route of the successive ponds. The section adopted consists of a small channel excavated in the ground. The lower part of the section, intended for water circulation, is configured with a rectangular section with a concrete base 1 m wide inside and 0.6 m high in width: 3H:2V. This section is able to be an environmental area with vegetation, to keep the species *Tamarix Galicia* in the berms in mind and *Populus alba* at the top of the slopes. To guarantee stability of the old road C-234, a 4 m high infill is planned on both sides of the zone next to the right abutment of weir 1, where the road runs on top of a landfill confined by ashlar walls 7 meters high.



Breakwater basin Dam 2 buffering



Injection screens



Dam 2 general view



Dam 1 fill