

Detailed inspection of the barrier at Cumières


Client:

Voies Navigables de France

Project manager:

Voies Navigables de France
Direction Interrégionale du bassin de la Seine

Contractor:
Years:

1988

Principal features:

Dam with central pillar and working footbridge.
Total length: 50.9 m over two spans.
Height of air draught under the structure 2.5 m

Background

The barrier at Cumières sits on the Marne river (the non-navigated branch) in the *commune*, or municipality, of Cumières, department of the Marne (department number 51).

As part of the regulatory framework of the ITSEO (the Technical Guidance for the Supervision and Maintenance of Engineering Structures), the Inter-regional Management of the Seine basin ordered a periodical detailed inspection of the Cumières barrier.

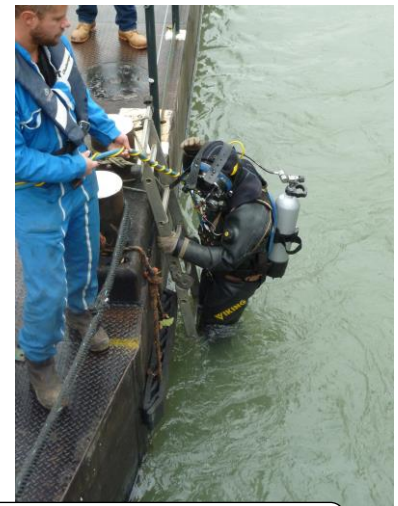
The engineering structure consists of two abutments and of a concrete pier forming two spans, which are crossed by means of a metal pedestrian footbridge. Metal valves (two per span) manage the river flow and are controlled from the platform on the central pier.


DIADES' task

DIADES carried out a comprehensive diagnosis of the engineering structure in order to assess its condition of deterioration.

A work barge provided by VNF enabled the detailed inspection of this engineering structure.

The periodical detailed inspection carried out by DIADES revealed various defects and enabled a program of routine and specialist maintenance to be drawn up as part of the policy of management of VNF's portfolio.


Specific features of the task

In order to see the task through to completion, the pooling of skills and the organisation of collective effort under the direction of DIADES was required, as follows:

- Detailed inspection of the engineering structure (DIADES),
- Inspection of the barrier's control equipment (SETEC TPI),
- Detailed inspection of the submerged parts upstream and execution of bathymetry along the structure (Bonnevalle, under the direction of DIADES).

Diadès

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