

Orléans - Construction of hydraulic structures on the quays along the Loire



Country

France

Client

Communauté
d'Agglomération Orléans
Val-de-Loire

Date

2005-2007

Cost of works

€5.04m exc. VAT

Sogreah's services

- ▶ Design services and project supervision



Context

In the context of the Loire - Loiret - Canal project, the Orléans urban area authority wished to reopen the filled-in section of the Orléans Canal running from Cabinet Vert to the lock on the River Loire for leisure uses.

The project included two distinct schemes:

- Development of the canal and its outlet into the Loire, over a total distance of 1000 m.
- Development of a fixed pontoon and mooring structures for boats on the Loire.

The particular feature of the hydraulic structures to be built is that they are part of an overall urban development

and landscaping project for the Loire quays and involve existing hydraulic structures belonging to the local heritage connected with the River Loire.

The three existing structures (the feeder canal, lock on the Loire and basin downstream of the lock) were built at the beginning of the 20th century and have undergone major modifications since then. The other structures (embankment wall, lock, floor and bank of the downstream basin) have not been maintained since they were built. Only the fixed pontoon and the boat mooring system are new structures to be built.

Description

The design services commissioned from Sogreah concerned the following structures:

- The feeder canal: excavation of an 860 m feeder canal in the filled-in section of the canal between the Cabinet Vert footbridge upstream and the harbour basin. The feeder canal is 9 m wide and offers a draft of 1.5 m for pleasure boats. This canal will be bordered by reclamation areas occupied by various activities (outdoor market, parking areas, play areas, etc.) and by the embankment wall running along the Loire.



- Harbour basin: construction of a basin 140 m long and 16 m wide situated upstream of the lock. It covers 3300 m² and includes a lower quay providing access to the boats, a slipway for launching boats and a turning area 23 m in diameter.
- Lock on the Loire: restoration of the existing lock, including repairing the masonry and changing the two gates and chamber emptying and filling valves.
- pontoons: construction of a 360 m² fixed pontoon (wooden decking with a metal structure 36 m long and 10 m wide placed on 20 steel piles) and a floating pontoon fixed to three guide piles for berthing small boats, plus an access ramp connecting the landing stage to the floating pontoon.
- Installation of berthing systems for mooring two boats (the "Inexplosible 22" steamship and the boat wash-house) at the quayside downstream of the landing stage.