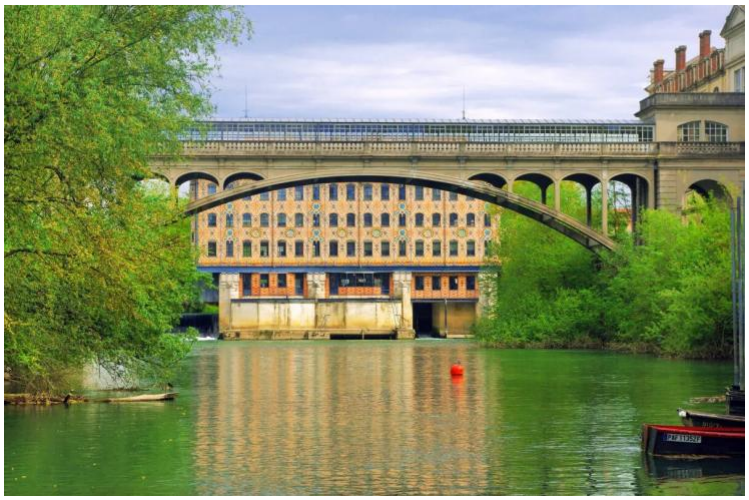






Footbridge over the Marne

Location : Noisel

Architect : Reichen et Robert & Associés

Client : Linkcity

Scope : Feasibility study for a crossing over the Marne and condition survey of three existing crossings

Date : 2021

As part of an urban project to convert the former chocolate factory and open up the Nestlé site to the town of Noisiel and the Vaires leisure park, Linkcity plans to create a new pedestrian crossing over the Marne. In addition, three existing crossings (Pont Hardy, Pont de la Confiserie and the fire brigade footbridge) have undergone a condition survey.

The assignment covers the feasibility of a footbridge for pedestrians, cyclists and people with reduced mobility, spanning around 80 m across the Marne. The crossing must take into account the following constraints: the VNF navigation clearance, exceptional flood levels, the requirements of the flood risk prevention plan (PPRI) and the French Water Act, accessibility for people with reduced mobility (including 4% access ramps) and the geotechnical conditions at the abutments. The study first identifies the possible scenarios for location, structural type, geometry, materials and equipment, based on the objectives set with Linkcity and the local authorities. These scenarios are assessed from several perspectives (landscape, architecture, structure, geotechnics, hydraulics, cost, environment, etc.) to weigh their advantages and drawbacks and arrive at a recommendation for the optimal solution.

As part of the same study, a condition survey was carried out on three existing crossings over the minor arm of the Marne. The aim is to assess their current condition, identify any defects and propose repairs and improvements where needed.

The three existing structures are: Pont Hardy, a 44 m concrete arch bridge dating from 1906; the Confiserie footbridge, a 40 m steel span dating from 1887; and the P4 bridge, a steel structure dating from 1995.