Harley Street pedestrian/cycle bridge

Cork City, Ireland / 2016

Client Scope Cork City Council

Here is the English translation of your text:

This project was submitted to a design competition in Ireland.

The concept is based on a simple beam with a large central void that reduces the physical and visual mass of the structure, without compromising its structural capacity. The proposal featured a very low cost, a straightforward construction method, and a slim profile that integrates seamlessly into the urban landscape of the port area in the city of Cork.

CONTEXT

The purpose of this footbridge is to improve pedestrian and cyclist connectivity between St. Patrick's Quay and Merchant's Quay, enhancing links between the city center, MacCurtain Street, Kent railway station, and the surrounding areas of Cork, Ireland. The project is located in the heart of the city, in an area characterized by traditional two-storey buildings.

OVERALL CONCEPT

The structure is designed as a slender beam that blends elegantly into the urban landscape of Cork's city center. The footbridge was conceived with a design that is both simple and innovative. It consists of a beam with a variable-depth top chord and a web that disappears at the center of the span, emphasizing the slenderness of the structure. The form derives from structural principles. The central chord also serves to separate pedestrian and cyclist traffic, thereby increasing user safety.

DESIGN

The lightweight beam at the core of the project concept is designed with durability in mind. The deck is proposed in stainless steel to ensure long-term performance. Additionally, due to the short span of the structure, support devices and expansion joints—typically maintenance-intensive elements—can be eliminated.

The bridge has a visually simple design, crossing the quay at a low level to create a harmonious relationship between the city, the structure, and the user, while also engaging in a dialogue with other structures in the area. The design responds directly to the project's constraints. The deck includes a slight elevation at mid-span to increase vertical clearance over the north channel of the River Lee.

The project integrates flood protection walls. To achieve this, the landing areas at both St. Patrick's Quay and Merchant's Quay have been slightly raised, which also elevates the underside of the deck above the river's maximum flood level.

The proposed structural concept reflects an intention to offer an economical, low-profile solution that is both slender and robust. The top chord, triangular in shape and made of stainless steel, changes form gradually to suit structural logic. At mid-span, the chord becomes wider to improve its resistance to buckling. This geometry reinforces the visual slenderness of the structure. The bridge's variable dimensions allow for a very lightweight structure over the water, minimizing its visual impact on the cityscape.

As the crossing is open 24/7, the lighting strategy includes typical parameters to ensure visibility and user safety, but it also serves to highlight the bridge's geometry. To achieve this, two lighting lines are discreetly integrated into the central stainless steel chord.

Other bridge elements—such as wind screens, handrails, barriers, and anti-slip paving—were included in the competition design as key components to ensure safe crossing conditions and to create a pleasant experience for users.

EPITOME

The proposed solution responds pragmatically to the existing constraints, while also aiming to make the most of the opportunities offered by the river, the landing areas, and the city's landscape. The goal was not only to create a crossing element, but to offer a new high-quality urban space in the heart of Cork





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