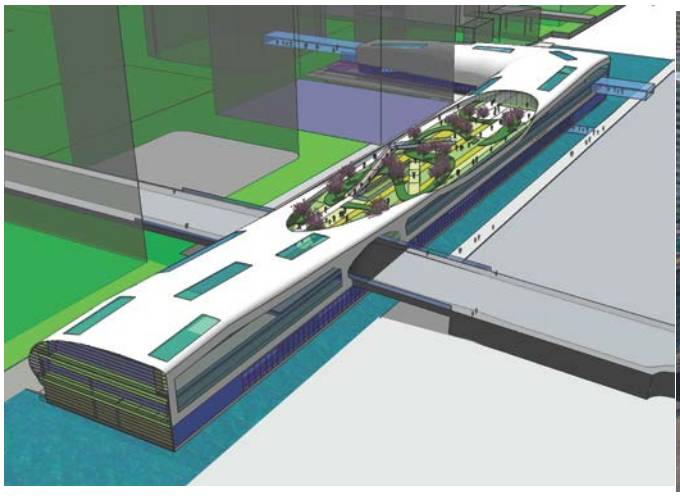
Isles of Dogs Crossrails Station, Canary Wharf, London, UK

Wind Engineering Study



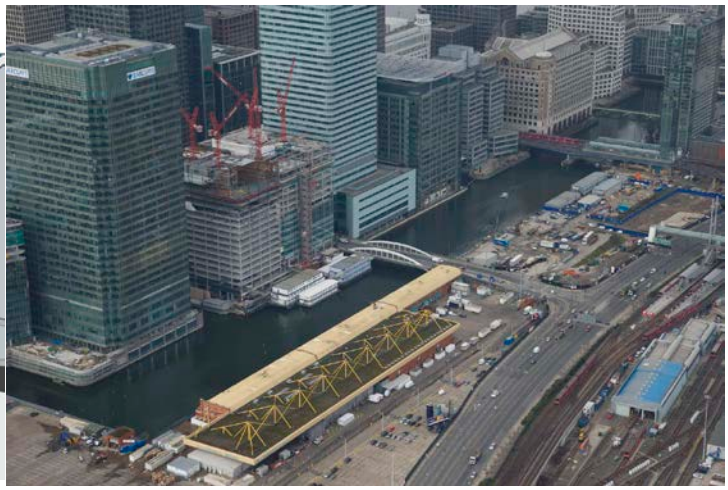


Image Credit: Adamson Associates Architects (2008)

Client	Executive Architects	
Canary Wharf Group PLC	Adamson Associates Architects, Toronto, Canada	
Dimensions	Year Tested	Model Scale
475m x 32m x 44m	2008	1:500

The Project

In 1846, Parliament banned the construction of railway lines above the surface in Central London. Many journeys across London are difficult and public transport is often tested by the sheer number of passengers travelling during peak hours.

The solution is a £16 billion series of mainline railway tunnels that will add £20 billion to the UK's economy and generate 30,000 jobs. Project completion will be in 2015.

Every hour during peak times, 24 crossrail trains will criss-cross through central London carrying an additional 72,000 people. The line will be about 117 km (73 miles) long, stopping at 38 stations including this one at Canary Wharf

The station at Canary Wharf is to be located in the Quay to the north of One Canada Place The Quay to the north will be drained, the site excavated about 20 m below the normal water level and a 475 m by 32 m concrete "box" will be built to house the rail tunnels, platforms and ticket halls.

The Project (continued)

Canary Wharf Group is proposing to add additional retail stores, a restaurant, day care centre and small park above the station where the waterline of the Quay would occur (see concept drawing above).

The Wind Tunnel Studies

The study will provide information on pedestrian wind speeds in and around the project site.

Testing for the proposed scheme will examine the effectiveness of various height perimeter walls that will be used to protect pedestrians using the park area located in the middle of the complex.

The Boundary Layer Wind Tunnel Laboratory

Western

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