

All aboard the **CAR PARK**

By Jasper Mulder, Dutch Docklands, and Vincent Ryan, Quadriga Limited

With space becoming a premium, especially in crowded city centres, developing new car parks is becoming increasingly hard. Other obstacles for potential locations include financial viability, planning procedures, environmental considerations and infrastructure implications. So new solutions have to be found.

Floating and 'mobile' parking constructions provide a possible answer.

Dutch Docklands in cooperation with Park4All and Quadriga Limited offers an innovative, durable and flexible parking answer.

Dutch Docklands is the global leader in tailor-made floating developments based on their intellectual property which is founded on hundreds of years of experience in the battle against water in The Netherlands.

Innovations in floating foundations mean that water has become a realistic option for building space for various different functions. This presents new opportunities for fast and effective parking solutions wherever needed, permanently or temporarily.

In addition, planning procedures for temporary developments tend to be less complicated than for permanent parking facilities.

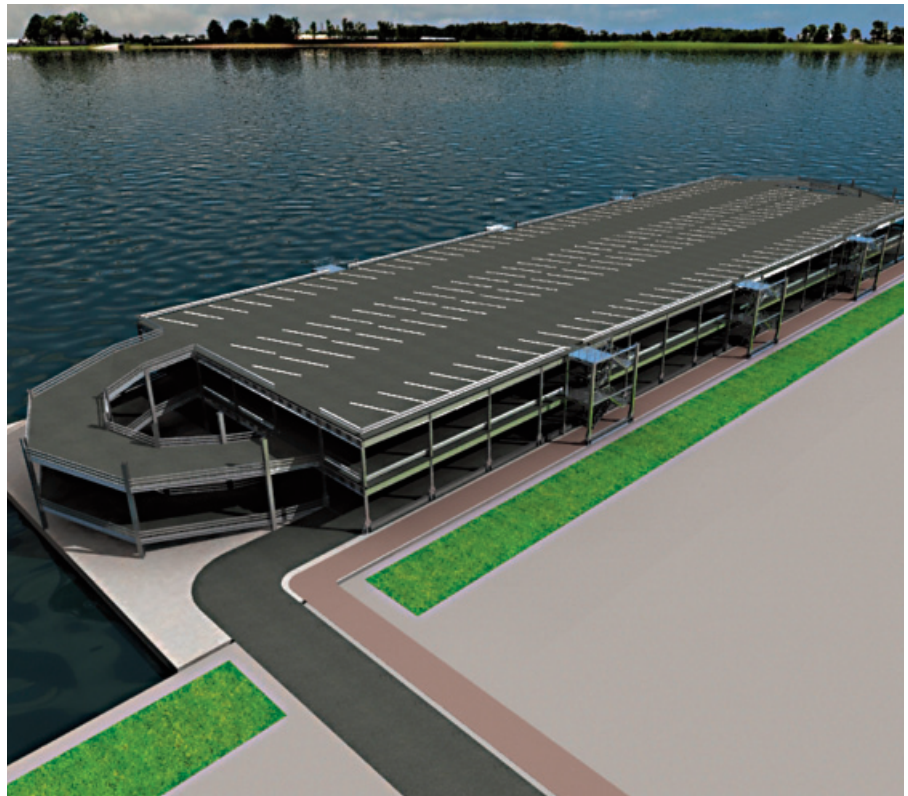
Floating car parks

The floating foundation of the car parks consists of a concrete and EPS-foam sandwich with a lightweight floor. The worldwide patented building system for floating bases allows for on-shore construction / assembly of prefab components without the usually required dry dock.

The construction of the car park is provided by Park4All. This company has developed an ultra-light, flexible and modular garage-system which can be realised in just a couple of weeks. A smart combination of a solid steel construction and a lightweight glass composite floor provides a 'meccano'-system. This system is completely modular and prefab and therefore easy to ship and can be assembled in just a couple of weeks.

The combination of these two systems makes the floating car park a durable and cost-effective solution that can be compared with similar cost prices as a multi-storey parking building with a piled foundation.

The system of ultra-light parking decks results in lower demands for the floating foundation. The maximum number of park-



ing storeys depends on the water current and the width of the floating car park necessary for a stable construction. An average floating car park of three storeys has a draught of 2.5 metres. The local fluctuations of the water level define the costs for the entrance and exit. There are extra procurements for sediment transport so that this will never affect the water quality.

Beside the common pressure on parking spaces there is another advantage of floating car parks. The floating car parks are dynamic in terms of location and are easy to move to different places. Therefore, a floating car park can also be a solution for events such as the Olympic Games, where the need for extra, temporary, parking places is very high.

The possibility of moving the floating car park from location to location makes it an even more profitable option, especially within a large waterfront area, as it offers additional business opportunities for temporary, water-bound, parking space.

Cheshire-based Quadriga Limited, one of the partners in this product, is a company

Above

Innovations in floating foundations mean that water has become a realistic option for building space for various different functions, including car parking

with a special car park division. They provide a wide range of parking solutions and are therefore involved as a partner in the UK market.

Worldwide interest

In The Netherlands building on floating structures is becoming more and more common.

In the UK, Quadriga Limited has also received an increasing number of enquiries to provide floating car parks as an alternative to traditional structures.

For more info visit, www.quadrigaltd.com or visit us at Parkex 2008 on stand P24.

www.dutchdocklands.com **PN**