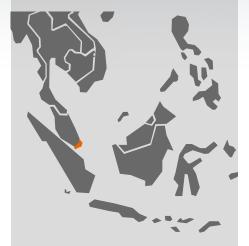
# **Project Sheet**

#### **Delta Marine Consultants**

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Delta Marine Consultants is a trade name of BAM Infraconsult by

# URA/MBS Waterfront Promenade



Singapore's Urban Redevelopment Authority developed a waterfront promenade and park connecting the Marina Bay Sands resort and the Central Business District. The promenade links with the MBS promenade and the park has already been used for several events including for the Youth Olympic Games held in Singapore in August 2010.

The promenade includes a water taxi berths with pontoon.

#### Client

McConnell Dowell S.E.A. Pty. Ltd.

#### Type of contract

Design

# Completion

2009

## Location

Singapore

## **Consultancy Fees**

Catagory ?? (see page 2)

## Services

?

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# **URA Waterfront Promenade**











#### **Projectdescription URA**

To safeguard Marina Bays functions as a fresh water reservoir and drainage buffer much of the promenade is constructed as a piled platform extending from the existing L-wall along the bay. The deck in places supports multiple levels of promenade including planted areas with trees and shrubs.

During construction part of the deck was also used as access or staging area for heavy cranes required in other parts of the development.

## **Role DMC**

The original design concept for the promenade was adapted by DMC in collaboration with the contractor to allow for ease of construction in the restricted space that the bay offered to construction barges etc. This has meant maximising the use of prefabricated units, including along the curved sections of the promenade.

#### **Projectdescription MBS**

The Marina Bay Sands integrated resort in Singapore is constructed along, and in part above, the waters of the Marina Bay. The Bay is a freshwater basin with limited level variation maintained by the PUB.

A cost-effective alternative design, developed by DMC and D&C contractor McConnell Dowell led to the latter being awarded the construction of the marine promenade deck on an EPC basis.

Constraints were placed by the existing retaining along the bay, third party foundations that needed to be utilised and the architectural curvatures required. Thick layers of soft marine clays added to the challenge.

By rationalising the pile layout and making extensive use of standardised prefabricated elements construction could progress very quickly while maintaining a high quality standard.

Consultancy Fees: 1: 50.000€ 2: 50 - 150.000€ 3: 150 - 300.000€ 4: 300 - 600.000€ 5: > 600.000€



