



**Location**  
Garden Island, WA

**Client**  
Department of Defence

**Duration**  
Dec 2003 - June 2004

**Contract Type**  
ASDEFCON Construct Only

# HMAS STIRLING OXLEY WHARF DOLPHINS

Increasing the Navy's berth space at Fleet Base West

Fleet Base West at Garden Island, located off the coast of Perth's southern suburbs, is Australia's largest naval fleet base and home of the Collins Class submarines. To enable the base to cope with increasing needs, Marine & Civil were awarded a contract to construct a dolphin berth extension to one of the two land backed wharves at the base, Oxley Wharf.

The works comprised:

- Construction of 2 dolphin structures capable of berthing vessels ranging from submarines through to replenishment ships.
- Driving of 12 piles up to 50m in length
- Fabrication and installation of space truss walkways up to 45m in length
- Supply and installation of lighting, bollards, kerbs and cathodic protection.



beam level. To ensure quality workmanship of concrete below water, the front panels were precast off site and incorporated into the dolphin structure through a modified construction detail in the dolphin deck pour. The project added an additional berth to the Navy's capacity at Fleet Base West.

The dolphins required lengthy frontal panels extending below water line to allow for fendering of submarines which by their nature have a very low





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