

Woodside Marine Structures Phase 2

PROJECT DETAILS:

Location:	North West Shelf, Western Australia
Contract Value:	A\$110 million (1985)
Contract Period:	29 months



CLIENT: Woodside Offshore Petroleum

Scope of Work:

Following the successful completion of the Marine Structures Phase 1 contract, the Harbourworks Clough Joint Venture undertook the construction of the LNG and Condensate Load Out Jetty, the first structure of its kind ever built in Australia.

The contract called for the installation of an 800m approach jetty, loading platform, surge drum, valve, SS/FAR and bend platforms. Also included was the extension of the pre-existing Phase 1 dolphin berth structure, roadways, instrument-cabling culverts, concrete decking, kerbs and plinths.

The primary construction equipment included an IB 901 jack-up platform barge and the "Garrath" jack-up barge provided by Harbourworks. A total of 8,500 tonnes of substructure piles, up to 40m in length each formed part of the structure, many of them concreted into the seabed rock. Some extend to 15m below existing seabed level.

The total structure utilised some 9,920m³ of concrete and 67,000 tonnes of structural steel. 100% traceability was maintained for all material and welding throughout the works and comprehensive final documentation packages were prepared and presented to the client. All welds were 100% non destructive tested and all plates were ultimate tensile scanned during manufacture.

Carried out in a tropical cyclone zone and presenting tremendous technical challenges, the Woodside Marine Structures Phase 2 project was a significant achievement for Harbourworks Clough.