

## **Project Profile**

## Osborne South Development Project – Early Works, Pavements, Detailed Excavations, Demolition, Common Service Trench and Stormwater



Client	Lendlease
Location	Adelaide, South Australia
Duration	October 2017 to November 2019
Contract	Managing Contractor
Cost	\$24.0 million

## **Project Overview**

The Osborne Naval Shipyard is Australia's premier naval industry hub. The precinct is home to Australia's two largest naval projects, the Collins class submarine sustainment and Hobart class Air Warfare Destroyer construction. It is also the confirmed build location for the Australia's \$50 billion Future Submarine program and \$35 billion Future Frigate fleet.

The South Australian Government developed the world-class Common User Facility and Maritime Skills Centre, and later transferred ownership to Australian Naval Infrastructure, a government business enterprise of the Australian Government, after a sale was negotiated in May 2017. The transfer ensures the State recoups its significant investment in the facility and enables a clear path for the Australian Government to expedite Offshore Patrol Vessel, Future Frigate and Future Submarine programs. The precinct is located at Osborne, 25km northwest of Adelaide's central business district.



Head Office









The redevelopment of Osborne South Naval Shipyard will support current and future naval ship development, operations and maintenance programs. Facilities will include a Block Outfitting and Ship Erection Hall, Block Assembly Hall, Steel Fabrication and Unit Workshop, New Blast and Paint Hall, Wharf Extension, modern workshops, a new carpark, to allow continuous shipbuilding activities for many decades into the future.

Development is scheduled to be complete in early 2020. Principal Contractor Lendlease first engaged McMahon Services in joint venture with Intract Australia to undertake early works, and then awarded later packages for pavements, detailed excavation, common service trench and stormwater works.

## **Scope of Work**

The McMahon Services-Intract team has delivered a variety of civil infrastructure works across the 185,000m² site including bulk earthworks, detailed earthworks, piling pads, demolition works, pile trimming, heavy-duty pavement construction, asbestos remediation, soil management, stormwater construction, stormwater management, common services trenching and temporary site facilities including haul roads, carparks, and hardstands for a temporary site precast yard.

Earthworks have totalled over 60,000m³ of cut to fill and cut to stockpile, 100,000m² of dynamic impact rolling for deep compaction and consolidation, 110,000m² of 300mm deep insitu-stabilisation with 4% cement for crane and piling pad and verification through plate bearing testing, 75,000t of imported pavement material with the top 220-320mm insitu-stabilised with 4% cement.

Other works included haul road construction, a 70,000m² temporary hardstand area, breakdown and trimming of 3,000 piles, construction of the site common service trenches (for electrical, communications, fire, water, sewer and gas services), 3.5km of stormwater pit and pipe for class G loading, 500m of heavy-duty ACO drains including reinforced concrete encasement, and rebuild of the existing Mersey Road. Five gross pollutant traps were installed to depths up to 5.0m below the existing ground level and up to 2.5m into the ground water table.

Workforce peaked at 40 personnel. Plant and equipment utilised on the project includes E32, E60, E85, PC130, PC220, PC300 and PC360 excavators, 25t Franna, 70t, 200t, 350t all-terrain cranes, 12M, 14M and 140M graders, hydro vac trucks, skid steers, impact rollers, padfoot rollers, 3t and 10t smooth rum rollers, land planes, 15,000L water trucks, quick fill water tanks, 15kVA and 20kVA generators, CAT 924, WA250 and WA380 front end loaders, tandem tippers, scissor lifts, shoring boxes, dewatering equipment and stabilisers. The majority of plant and equipment was sourced from McMahon Services own fleet.







