

Project Profile

Parnkalla Waters Stage One Development



Client	Lincoln Lakes Development Co. / Sarin Property Group
Location	Port Lincoln, SA
Duration	10 Months
Contract	Bulk Earthworks and Infrastructure
Cost	\$4.6 Million

Project Overview

McMahon Services were engaged by Lincoln Lakes Development / Sarin Property Group to undertake this extensive residential subdivision project as part of the Lincoln Cove Marina expansion in Port Lincoln, South Australia.

The project was split into two stages, a lakeside residential area named “Parnkalla Waters” and a larger residential area named “South Lakes” situated on deep-water canals with frontage for private pontoons. For the stage one Parnkalla Waters contract, McMahon Services carried out all of the bulk earthworks, essential infrastructure, road works, asphalt, concrete works and landscaping, including miscellaneous metal works for the 34 waterfront allotments.

The project scope included:

- › Bulk earthworks – cut to fill totalling 150,000m³;
- › Supply and placement of over 4,500 tonne of 300mm rock revetment;
- › Supply and placement of over 6,000 tonne of beach sand to a newly constructed beach;
- › Retaining wall construction – 900 lineal metres of retaining wall – 1 metre high;
- › Installation of storm water infrastructure including over 20 pits, two gross pollutant traps, 380 lineal metres of storm water pipe

McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E adelaide@mcmservices.com.au

W mcmservices.com.au



- ranging from 375mm to 1200mm and a triple cell culvert over 22 metres long;
- › Installation of sewer infrastructure – two pump stations, 700 lineal metres of sewer up to 5 metres deep including all block connections;
 - › Installation of water infrastructure – 680 lineal metres of water main including two live taps into the existing main and all block connections;
 - › Installation of common service trench – 800 lineal metres of common service trench including all electrical infrastructure, two transformers, light poles, NBN Co. pits and pipe;
 - › Road construction – including sub base, base and asphalt placement;
 - › Concrete works – over 1,250 lineal metres of kerbing and 650m² of footpath;
 - › Asphalt works – 5,600m² of asphalt laid in three stages;
 - › Installation of 196 lineal metres of guard rail and four trailing terminals.

The location of the project posed some significant challenges for our team. This included working in and around ground water and tidal flows from the neighbouring marina. This was particularly evident with the installation of deep services for the sewerage infrastructure. To overcome this, two six inch pumps operating 24 hours a day for over four months were utilised, and a series of wells were excavated to enable water to be pumped away from the work zones. This method was extremely effective, and meant we did not need to drive heavy earthmoving equipment into the marina to undertake the installation of the infrastructure.

Innovative techniques when pouring the triple cell culvert were utilised, which saw us specially designing the head walls in precast concrete so they could be lifted directly into place, instead of pouring the head walls insitu. Each head wall weighed over 10 tonne and was installed in two hours as opposed too in excess of one week each for form and pour conventionally. During the construction of the project a number of significant sewer changes were required, which included the addition of a pump station in St Andrews Drive. This also included the decommissioning and conversion of an existing pump station, along with a connection into the existing pumping main.

In order to assist our client with the total delivery of the project, McMahon Services offered to undertake all of the electrical service and NBN Co. works including all coordination and liaison with SA Power Networks for connections. Strong communication with residents and the collaborative approach between the client and McMahon Services was imperative to the successful delivery of the project. In addition, 90% of our work force were employed from the local community, and multiple small businesses in the region were engaged to deliver services for the project.



McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E adelaide@mcmservices.com.au

W mcmservices.com.au





McMahon Services

Head Office

T (08) 8203 3100 **F** (08) 8260 5210

E adelaide@mcmervices.com.au

W mcmervices.com.au

