

# S1 Doppler Radar Tower

Project Director: Chris Pines  
Project Manager: Alan Gordon  
Site Foreman: Rex Gauld  
Safety Officer: Peter Lucas



Client: **Bureau of Meteorology**

Location: **Terrey Hills, NSW**

Project Cost: **\$900,000**

Near the end of 2008, CC Pines was engaged to erect a 30m high radar tower for the Bureau of Meteorology. The tower was made up of five separate sections all requiring carefully coordinated crane lifts and specialist equipment to complete the connections.

The project also involved civil works to prepare the site, a large concrete pour (140m<sup>3</sup>) for the tower footing, drainage works and construction of an equipment building to support the tower, installation of an air-conditioning system and the installation of an extensive UPS with generator backup power supply.

All the works were coordinated and completed without interruption to the golf course which was adjacent to the site.



The tower footing measured 8m x 8m and was 1.5m deep. It required seven tonnes of reinforcing steel and a three tonne holding down bolt cage that protruded out of the footing to anchor the tower. A series of conduits had to be positioned in the footing to allow levelling of the tower in the future due to the site being located on an old landfill tip.



The two halves of the conical top of the tower were bolted together on the ground and lifted up as one piece on top of the 10m mid-section. The tower sections came up to Sydney overnight from Melbourne so close coordination was required between the crane crew, the transport company and erection crew to ensure smooth and successful transition, unload and erection of the tower.



A steel framed equipment building was built to house the radar support equipment and provide some office space. This required three air conditioning units to cool the equipment and a UPS with generator backup to ensure the equipment is able to run uninterrupted.