

Gunnedah Radar Doppler Tower

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



Client: **Bureau of Meteorology**

Location: **Gunnedah, NSW**

Project Cost: **\$750,000**

Near the end of 2009, CC Pines was engaged to erect a 22m high radar tower for the Bureau of Meteorology on the top of a mountain in country NSW. The tower was made up of three separate sections all requiring carefully coordinated crane lifts and specialist equipment to complete the connections.

The project also required extensive road works to be conducted on 7kms of dirt track to provide suitable access to the site for the necessary construction and delivery vehicles.

An additional building to house the radar equipment was also installed along with a backup generator to provide constant power to the facility.



A 40 tonne bulldozer was used to cut and shape the access road to the site. This was followed by a 25 tonne excavator working with a skid steer loader to profile the track and cut in gulleys to divert water during heavy rainfalls. Several hundred tonnes of locally won gravel was transported, placed and compacted to complete the wearing course of the road.



The rock under the site surface level was too hard to excavate conventionally with an excavator and rock hammer so the 40 tonne bulldozer was used to dig out a crater. The 5.5m x 5.5m tower footing then had to be formed from the bottom up. A Holding Down Bolt Cage was tied inside the footing reinforcing steel and the form then filled with concrete. The formwork was then stripped and the areas backfilled and compacted using predominately site won materials.



When the concrete had cured the tower sections were brought to site and crane lifted into place. At this stage the radar equipment shelter and the generator were also lifted into position. All the electrical and communications connections were then made and the fencing and site pavements were placed.