

3. Development Description

The proposed met mast is essentially a guyed radio mast structure containing meteorological measuring equipment. The mast is secured by concrete foundations and tethered to the ground by a series of guy anchors. In total, each mast arm contains 13 guy wires with a maximum span of 110m. The area required for the met mast is approximately 0.038km².

The met mast measures weather data independently and following construction subsequent activity on the site should be minimal. The composition of the met mast is made up two main elements; the main mast structure and mast ancillaries which support the measurement of wind data, and are described below:

3.1 Met Mast Structure

The met mast structure is summarised below:

- Approximately 151m in height above the natural ground level;
- Anchored by three (3) mast arms, oriented north or 0 degrees, south-west or 120 degrees and south-east or 240 degrees;
- Tethered by nine (9) anchor footings (concrete foundations) with a total of 39 guy wires;
- Each guy anchor is secured by fencing measuring 1.83m in height and 2.1m in width;
- Secured by a mast base (concrete foundations);
- The met mast base is secured by fencing measuring 1.83m in height and 2.1m in width, with anti-climbing equipment located directly above;
- The met mast includes one (1) lightning rod; and
- Constructed from various grades of steel.

3.2 Mast Ancillaries

In addition to the main structure, the met mast will include the following equipment:

- 11 anemometers;
- Four (4) wind vanes;
- Seven (7) junction boxes;
- Two (2) aviation lights;
- Two (2) temperature and humidity measuring equipment;
- Two (2) solar panels;
- One (1) Anti-climb equipment;
- One (1) AV1 distribution cabinet;
- Campbell Scientific Data Logger; and
- One (1) pressure sensor.