

Environmental Impact Assessment (EIA) considerations

Traffic and transport

Various studies have been undertaken to assess route options and help minimise potential impacts during the delivery of wind turbine components.

We are assessing traffic volumes in the local area to understand the impact of other construction traffic (HGVs, site plant, 4x4s) and identify ways to minimise disruption on road users. The site entrance has been carefully designed with appropriate visibility splays to meet strict safety requirements.

We are also in consultation with Midlothian Council's roads department as well as the emergency services and other relevant consultees.

Should the proposal be consented, a detailed Traffic Management Plan would be developed to mitigate potential impacts on road users and ensure road safety.

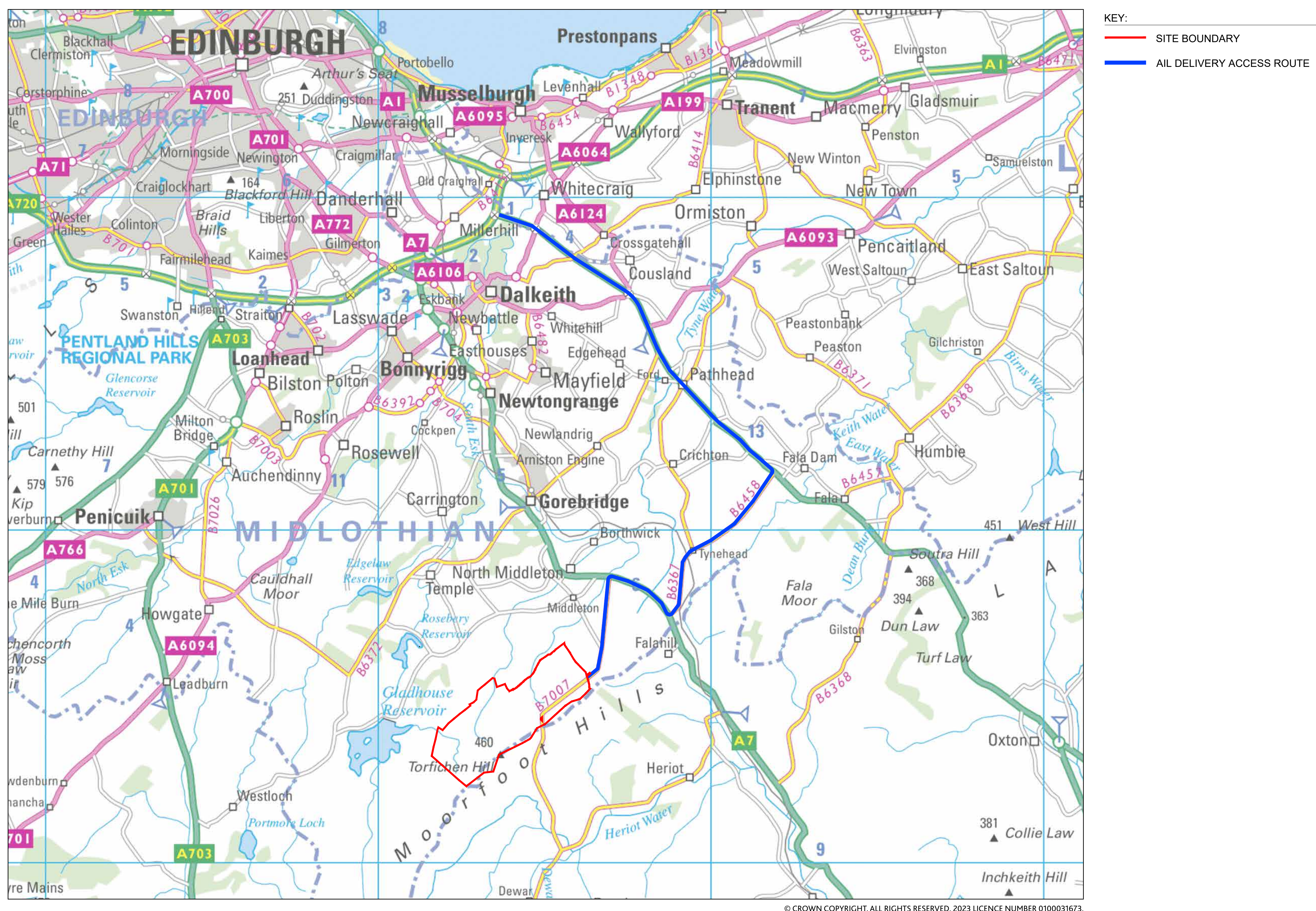
Aviation and radar

Radar systems can be susceptible to interference from wind turbines as the blade movement can cause intermittent detection by radars within their operating range. This is particularly relevant where there is a line of sight between the radar and the wind farm.

RES has undertaken an initial Aviation Assessment to identify any radar infrastructure which may be impacted by the proposed turbines. The closest infrastructure to the site is located at Edinburgh Airport and Lowther Hill, however there is no line of sight to the proposed turbines from either. Further assessment is being carried out to establish any potential impacts of the proposed turbines on the instrument flight procedures of Edinburgh Airport.

Full consultation will be undertaken with all relevant consultees including the MoD, Civil Aviation Authority and Edinburgh Airport.

Indicative turbine delivery route



Aviation lighting

In accordance with the Air Navigation Order 2016, en-route obstacles at or above 150m, such as the wind turbines proposed at Torfichen Wind Farm, require to be lit at night with medium intensity red aviation lights. The aviation lighting is designed to focus the light across and upwards for the attention of aircraft rather than downward to those at ground level and, in some circumstances, not all wind turbines require to be lit.

The light intensity varies in response to weather conditions and visibility (via atmospheric conditions and visibility sensor on the wind turbine) - with lighting dimmed to 10% of their intensity in good visibility (typically greater than 5km) but maximised in cloudy or foggy weather (where visibility is typically less than 5km). We are consulting with the Civil Aviation Authority (CAA) to agree a lighting strategy with them. The proposed lighting strategy will be presented in the planning application which will also include a night-time visual impact assessment and visualisations.