# **DESIGN AND ACCESS STATEMENT**

# FOR A 6KW WIND TURBINE

At

COTTONSHOPE FARM
ROCHESTER
NEWCASTLE UPON TYNE
NE19 1TF

Prepared by:

Miss G M Pattinson MRICS FAAV
Hexham and Northern Rural
Mart Offices, Tyne Green
Hexham, Northumberland
NE46 3SG



## 1.0 Introduction

- 1.1 This Design and Access Statement accompanies an application for planning permission submitted by Mrs Anne Robson, for the erection of a 6KW Kingspan domestic wind turbine on Cottonshope Farm. The farm cottage and associated agricultural buildings are off grid and rely on a diesel generator. Diesel and servicing costs are in excess of £5,000 per annum. These costs would be reduced by an annual average of 70% by the introduction of a wind turbine.
- 1.2 The provision of a turbine to site will help enhance the site and area within the Northumberland National Park as it will be providing environmentally friendly green energy and therefore no longer requiring a diesel generator, which creates both noise and air pollution.

# 2.0 Design

2.1 The turbine will be mounted on a concrete pad with dimensions of 2.50m x 2.50m and will have a 9 metre steel mast. There will be a three blade horizontal axis propeller design on the mast. The Kingspan design was chosen as it was considered a quality design which will be more appropriate for being sited within the National Park. To make the development more sympathetic to the National Park, the mast will be painted dark green in keeping with the existing turbine on Cottonshope in order to blend into the surroundings. Please see photo below of existing turbine which serves the farmhouse.





#### 3.0 Location

- 3.1 The location for the turbine was chosen after considering topographical constraints, highways, access and existing developments.
- 3.2 The turbine will be located within an enclosed farmyard currently used for the storage of round bale silage and agricultural machinery. The direction of the prevailing wind is of crucial importance and it is for this reason that the turbine could not be positioned closer to the farm buildings as they would cause turbulence therefore reducing the wind speed.
- 3.3 Consideration of topple distance was also look at when making the decision on location. In the unlikely event that the mast should fall it would not land on either the farm road or the farm drive. There are no footpaths in the vicinity.
- 3.4 The position of the anchor pad to safely raise and lower the turbine was also taken into account when deciding on the positioning.
- 3.5 The location was discussed with Michael Miller during his site visit and had agreed with reasoning behind the chosen location.

## 4.0 Access

4.1 Access to the site will be via the farm road which runs from the A68 making efficient use of the existing infrastructure. There will be no requirement for further engineering works to allow for the site access.

