

11. ARCHAEOLOGY

The sites being used for the erection of the wind turbines are farmland areas, but these chalk areas have been used as settlement areas.

The recent excavations for the construction of the A505 road near to the site were the subject of excavation and there were several important finds.

This suggests that there may be archaeological artefacts in the area.

Discussions are in hand with the Hertfordshire County Archaeological Department to consider appropriate measures.

A Scheduled Ancient Monument is present 500 metres north-west of Bush Wood as shown in Figure 59.

The foundations and ground damage caused by wind turbine construction is small. All access roadways and construction areas will be made without excavation, on top of the existing soil. This will avoid damage to any artifacts that may be beneath them.

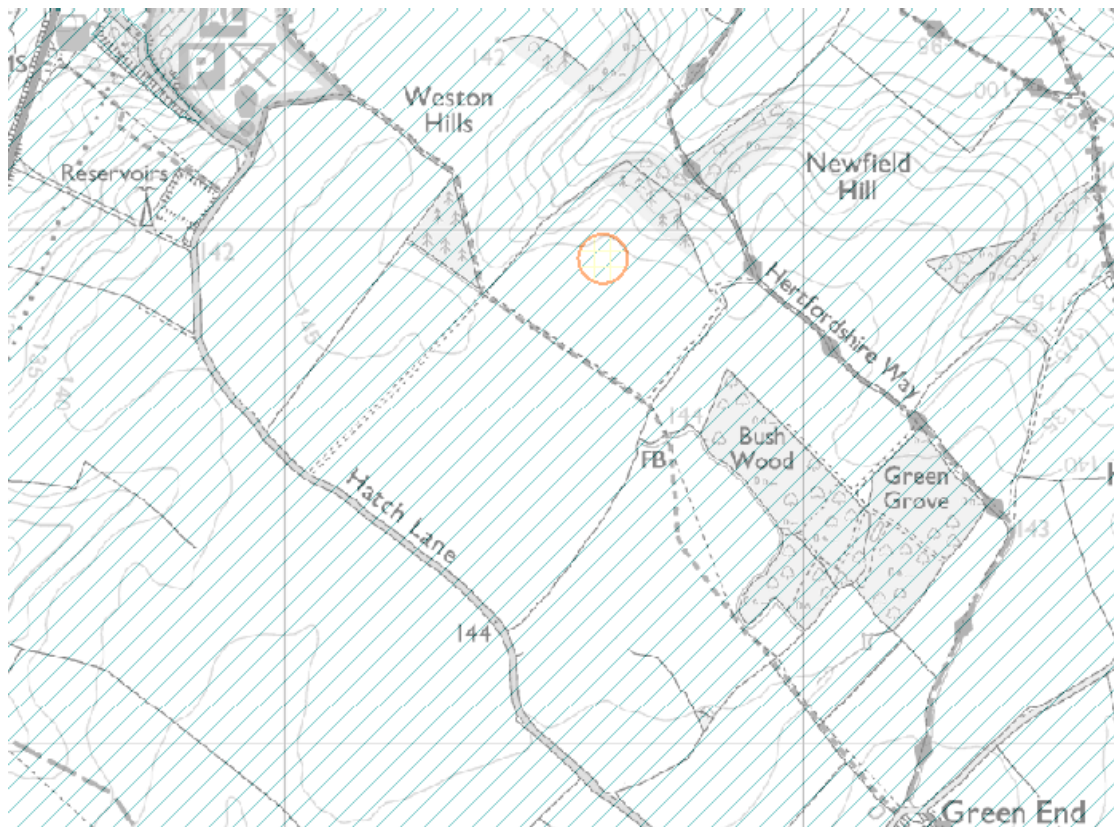


Figure 1 Scheduled Ancient Monument

11.1 Extract From English Heritage's Record Of Scheduled Monuments

MONUMENT: Henge 500m north west of Bush Wood

PARISH: WESTON DISTRICT: NORTH HERTFORDSHIRE

COUNTY: HERTFORDSHIRE NATIONAL MONUMENT NO: 20764

NATIONAL GRID REFERENCE(S): TL25613194

DESCRIPTION OF THE MONUMENT

The monument includes a henge monument which is situated on the top of a north east facing ridge, 2.25km north west of Weston parish church. The monument is visible as a raised platform about 1m in height, circular in shape with a diameter of about 65m. A surrounding ditch is also visible as an earthwork and measures between 7m and 10m in width and a maximum of 0.5m in depth. Although no longer visible at ground level, two opposing entrances across the surrounding ditch can be seen clearly as cropmarks on aerial photographs and will survive as buried features. The eastern entrance measures 15m across, the western entrance measures 20m across. The monument is classed as a type 2 henge because it has two opposing entrances. The site is associated with a local legendary giant called Jack O' Legs who was supposed to have lived in a cave nearby.

ASSESSMENT OF IMPORTANCE

Henges are ritual or ceremonial centres which date to the Late Neolithic period (2800-2000 BC). They were constructed as roughly circular or ovalshaped enclosures comprising a flat area over 20m in diameter enclosed by a ditch and external bank. One, two or four entrances provided access to the interior of the monument, which may have contained a variety of features including timber or stone circles, post or stone alignments, pits, burials or central mounds. Finds from the ditches and interiors of henges provide important evidence for the chronological development of the sites, the types of activity that occurred within them and the nature of the environment in which they were constructed. Henges occur throughout England with the exception of south-eastern counties and the Welsh Marches. They are generally situated on low ground, often close to springs and water-courses. Henges are rare nationally with about 80 known examples. As one of the few types of identified Neolithic structures and in view of their comparative rarity, all henges are considered to be of national importance.

Despite some reduction by cultivation the henge 500m north west of Bush Wood is still visible as an earthwork and such a high quality of survival is rare for sites of this date in southern England. Both as an earthwork and as a group of buried features below the ploughsoil, the site will provide

archaeological information relating to the construction and use of the monument and environmental evidence relating to the landscape in which it was built. It is considered particularly unusual because of its large size.

MONUMENT INCLUDED IN THE SCHEDULE ON 17th January 1995

12. EMISSIONS TO AIR AND WATER

12.1 Emissions to Air

The operation of wind turbines has no innate emission to air.

12.2 Emissions to Water

There are some fluids required for maintenance ie gearbox oil, paint etc.

These fluids are also part of normal farm practices and the wind turbine requirements may be stored in safe locations on the farm. Maintenance contracts will specify safe working practices with regards to avoidance of spillages.

If necessary, bonded storage areas will be constructed.

13. SHADOW FLICKER

The Guidance Notes for PPG 22 indicate the relative locations to a wind turbine at which shadow flicker may impact on residential properties.

This is at an angle of up to 130° from north and within 10 rotor diameters.

The only residence within this area is shown below and it has been assessed for shadow flicker.

Location	Position relative to turbines	Time of exposure to shadow flicker
Reservoir Cottage	North West	Morning

In practice it is currently shielded by trees so this calculation indicates the worst case situation.

Figure 60 below summarizes the shadow flicker calculations for the property from each wind turbine.

Should shadow flicker be a clearly identifiable problem for residents in this location, Weston Barns will alter the operating period of the offending turbines to prevent shadow flicker on the properties concerned.

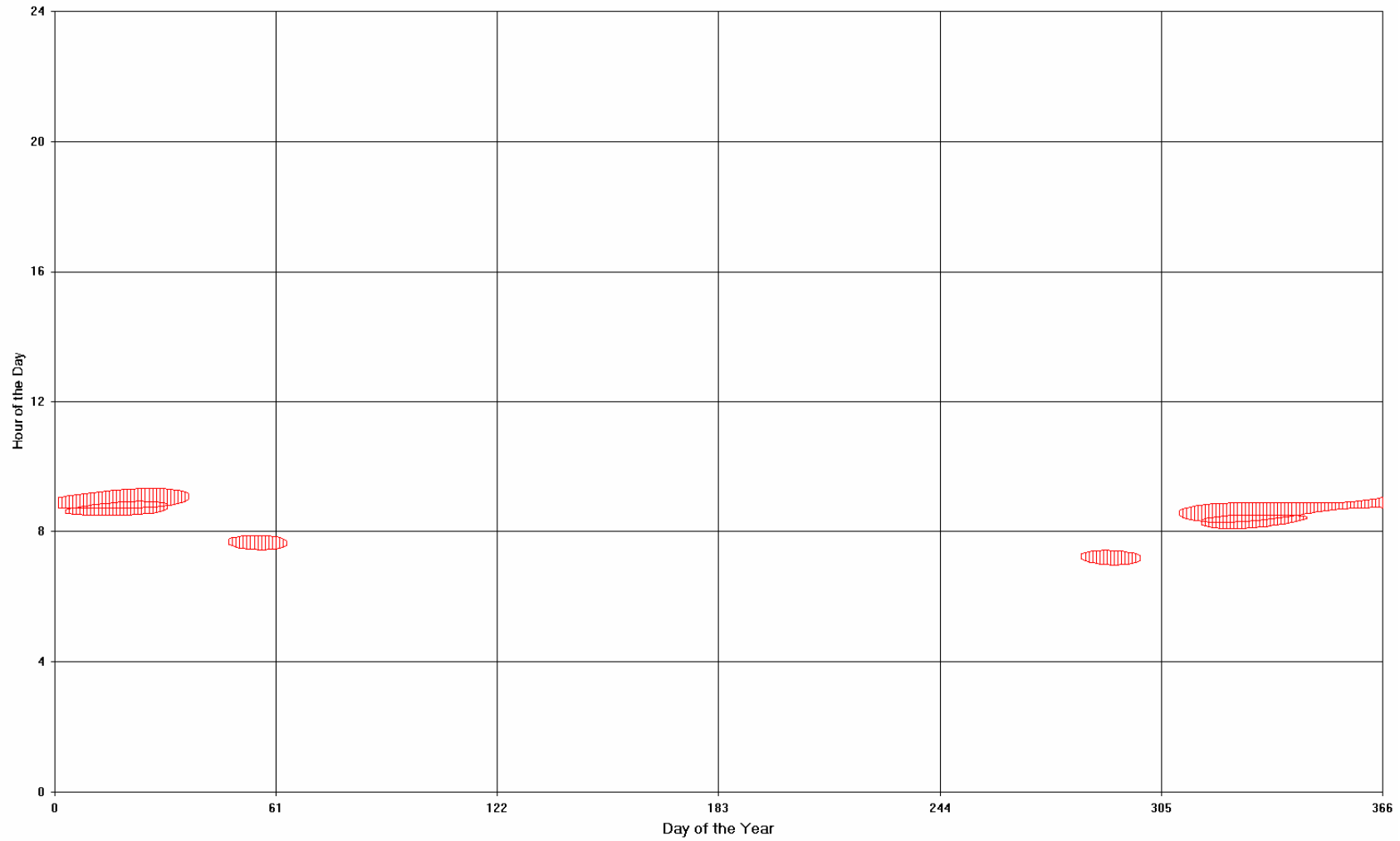


Figure 2 Shadow Flicker Events over Whole Year

14. ELECTRO-MAGNETIC SIGNALS

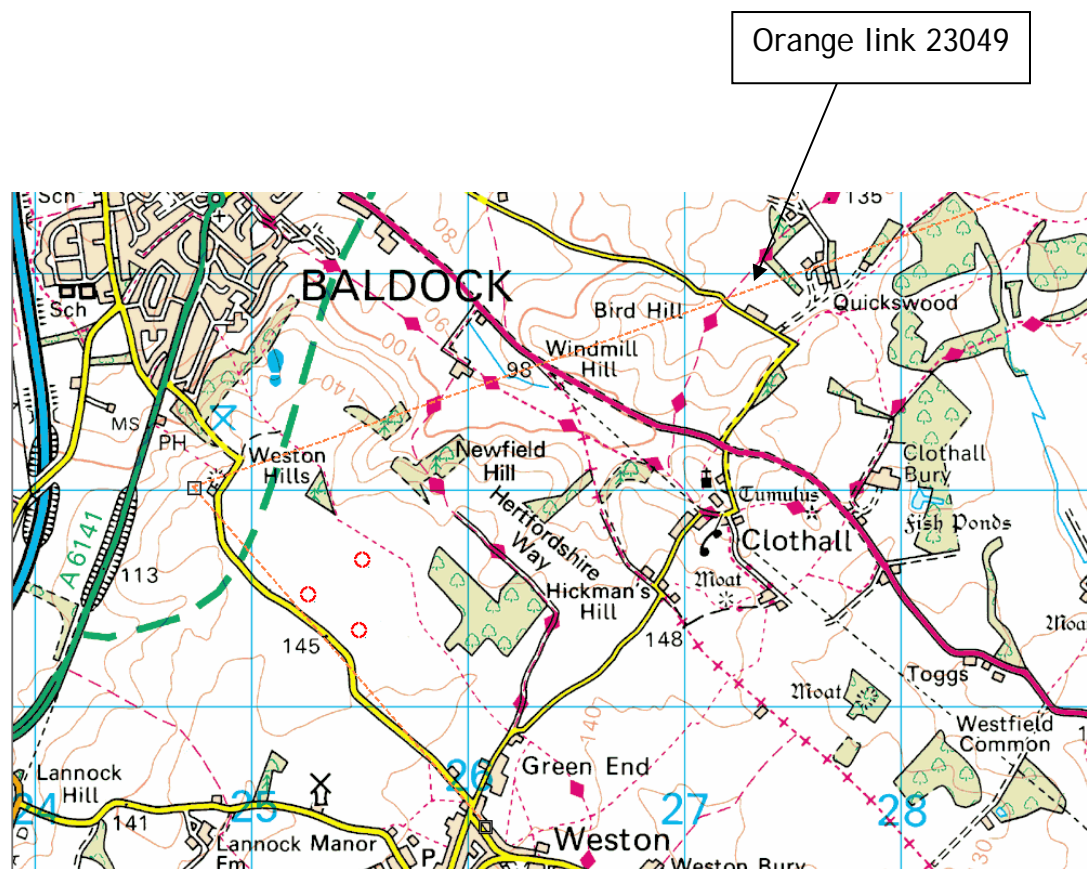
Enquiries with OFFCOM have revealed three microwave link operators that have links passing within 2 km of the new wind turbines.

The links are listed below with responses where received.

14.1 Orange

The Orange link number 23049 passes to the north of the site and has 550m clearance to the nearest wind turbine. Orange have not identified this as a problem.

A potential link 115200, which would pass from the water tower in Weston to the communications tower at the reservoir on Weston Hills would receive interference from the wind turbines. However, Orange agreed that their action would restrict the landowner's development, and agreed to move or divert the link when it was commissioned. No dates were given or alternative routes discussed about the new link.



©Crown copyright 2002. All rights reserved. Licence number 100045164

Figure 3 Communications Interference Response, Orange

14.2 BT

BT have no objection to the proposals

Their confirmation is shown below.

BT wholesale

Tony Benson

9 January 2006

Your reference

Our ref: WID1390 to 1393

Dear Sir/Madam,

RE: PROPOSED WIND FARM AT BALDOCK

Thank you for your letter dated 9 January 2005.

We have studied this proposal with respect to EMC and related problems to BT point-to-point microwave radio links and satellite. The conclusion is that, the Wind farm Project indicated should not cause interference to BT's current and presently planned radio networks.

Yours sincerely

MIKE REDWIN

BT Network Radio Protection

PP BLDG, Shepton Mallet TEL EXCH, Paul Street, Shepton Mallet, SOMERSET BA4 5LD

14.3 Bedfordshire & Hertfordshire Trust

Have not responded

14.4 JRC

JRC have no objections.

On behalf of the UK Fuel & Power Industry, JRC analyses proposals for wind farms in order to assess their potential to cause interference to 460MHz point to multi-point telemetry and telecontrol radio systems

operated by utility companies in support of their regulatory operational requirements.

In the case of your proposed wind farms at:

TL 25 31, Baldock (East)

The JRC does not foresee any potential problems based on known interference scenarios and an assumed site development radius of 1Km. If any details of the wind farm change, in particular the disposition or scale of any of the turbines, it will be necessary to re-validate the proposal.

In making this judgement, JRC has used its best endeavours with the available data, although we recognise that there may be effects which are as yet unknown or inadequately predicted. JRC cannot therefore be held liable if subsequently problems arise that we have not predicted.

It should be noted that this clearance pertains only to the date of its issue. As the use of the spectrum is dynamic, the use of the band is changing on an ongoing basis and consequently, you are advised to seek re-coordination prior to submitting a planning application, as this will negate the possibility of an objection being raised at that time as a consequence of any links assigned between your enquiry and the finalisation of your project.

JRC offers a range of radio planning and analysis services. If you require any assistance, please get in touch by phone or email.

P.A.Swan JRC Ltd Unit 108 The Blackfriars Foundry 156 Blackfriars Road London SE1 8EN t:020 7953 7099

14.5 TV Signals

With a development such as a wind turbine project, there is the potential for it to cause disruption to terrestrial television domestic reception. In the event of reception problems there are often straightforward solutions, eg. improving the receiving aerials or providing the affected house holds with an alternative source of suitable television signals - off air from a different transmitter, cable system or satellite.

We have made enquiries with the BBC and Ofcom and have received the rough estimate of populations that may suffer interference from wind turbines, built at the locations specified. At Weston there are no houses that may be affected for which there is no alternative off-air service.

Each turbine position affects additional houses for which there may be an alternative off -air service should the scheme cause interference.

Transmitters at Croydon (CH5), Crystal Palace and Sandy Heath are involved. Each turbine may affect 2949 homes, 3487 homes and 4165 homes, although many homes are repeated for each turbine.

All television reception difficulties caused by the erection of wind turbines must be rectified at the cost of the developer.

If a resident reports that their reception has been affected, the operator of the turbines will arrange for an engineer to inspect the installation, and make agreed alterations if necessary. This may be to realign the reception aerial, to install a signal amplifier, installation of a satellite system or other technical solution.

Such interference is manageable and Weston Park Farms are totally committed to the avoidance of television signal difficulties caused by the wind turbine installation.