

APPLICATION NO	PA/2013/1402
APPLICANT	Mr T Bletcher, C/o Mr J Rich (Land Agent)
DEVELOPMENT	Planning permission for the installation of a 2.04 mW ground mounted solar PV system
LOCATION	Land north of Green Lane, Westgate, Belton
PARISH	BELTON
WARD	Axholme Central
CASE OFFICER	David Wordsworth
SUMMARY RECOMMENDATION	Refuse permission
REASONS FOR REFERENCE TO COMMITTEE	Member 'call in' (Councillor Redfern – significant public interest) Objection by Belton Parish Council

POLICIES

National Energy Policy: The Kyoto Protocol (1997); European Directive 2009/28/EC

National Planning Policy Framework: Paragraphs 14, 93, 98, 100, 118, 186, 187, 196 and 197.

National Planning Practice Guidance: Paragraphs 13 and 14.

North Lincolnshire Local Plan: Policies RD2, LC14 and DS1.

North Lincolnshire Core Strategy: Policies CS5, CS18 and CS19.

CONSULTATIONS

Highways: No objections subject to conditions.

Environment Agency: Originally objected to the proposal because no flood risk assessment had been submitted. However, this issue has now been resolved and the Environment Agency has removed its objection subject to conditions.

Yorkshire Water: No objections.

Severn Trent Water: No objections.

Isle of Axholme & North Nottinghamshire Water Level Management Board: No objections in principle, however the Board maintains Folly Drain adjacent to the western boundary and also the Green Lane Drain adjacent to the southern boundary which are governed by the Board's bylaws. This will be referred to in an informative attached to any grant of planning permission.

Humber Fire & Rescue Service: No objections.

NHS: Raises concerns regarding the impact of noise during the construction phase on local residents and the potential for vehicle accidents on Green Lane and at the junction of Westgate Road.

Environmental Protection: Request a noise impact assessment be submitted prior to the determination of this application due to the potential for the development to cause noise disturbance to nearby residential properties.

Environment Team (Public Rights of Way): Object because the impact upon public rights of way that flank the site, namely Green Lane to the south and Shaw Nook Lane to the east, have not been considered by the applicant and neither have the potential impacts of the development upon these public rights of way.

Environment Team (Ecology): No objections subject to conditions.

Environment Team (Landscape): Object because the proposal is within an area of Special Historic Landscape Interest under policy LC14 of the North Lincolnshire Local Plan whereby the applicant would need to demonstrate that the development would not detract from the open landscape element that is considered to be important in this area. Given the proximity to the historic landscape, it advises that such a scheme be available and submitted as part of this application and agreed prior to determination.

PARISH COUNCIL

Object to the proposal on the following grounds:

- Green Lane is unsuitable for use by HGVs and any construction/maintenance vehicles relating to the solar array.
- Bird Lane is also considered to be totally unsuitable for anything other than cars and 4x4s.
- The site is surrounded by many public footpaths used by walkers, ramblers and horse-riders. (The design and access statement does not reflect this accurately.)
- This proposal will be extremely destructive and disruptive to local wildlife, including birds, plants and reptiles.
- The proposed site is located within the historic open landscape.
- There are many brownfield sites in the county that are more suitable, including parts of Sandtoft industrial estate.
- The applicant states the site has low agricultural potential yet a maize crop was grown for biofuel in October 2013.
- The applicant states there are no trees adjoining the land. (This is not an accurate statement.)

- The junction of Green Lane and Westgate Road is potentially hazardous with blind bends and speeding cars. Adding HGVs into the equation will worsen the situation. These issues have been raised with North Lincolnshire Council previously.

PUBLICITY

Consultation

- Very few households received neighbour notification letters.
- Prior to submitting the planning application neither the applicant nor landowners attempted to consult current residents on Green Lane or Westgate Road.
- Information provided by Solar Trade Association confirms that community engagement is paramount and therefore some notification of local residents would have been expected prior to the application being submitted.

Access

- Building materials and types of construction vehicles will be substantial which are not suitable for Green Lane (a single track and not a standard built road or surfaced with tarmac).
- Previous requests have been made to North Lincolnshire Council to repair potholes.
- Concerns have been raised about the safety of children due to additional traffic and construction traffic.
- Westgate Road has a current weight restriction of 7.5 tonnes in either direction and is not wide enough to allow HGV access into Green Lane.
- The site is nowhere near Sandtoft industrial estate.
- Would the solar panels affect Sandtoft Flying School or amateur radio?
- The revenue that the (FIT) tariff will generate far exceeds that of a crop for biofuel.
- This is commercialisation of the countryside.
- The UK has no capacity to store electricity as it does gas therefore electricity generated on site will be used there and then fed directly into the grid. It will not, nor can it be, stored on site for the benefit of Belton residents as is suggested.
- There is no detail of the required building in the proposal yet one will be required to house the inverters which convert the solar PV to electricity.
- The siting of this array will industrialise the residential nature of Green Lane.
- Possible impact on stables and livestock on both sides of the site.
- Close proximity to residential properties – this site is on the flight path for Robin Hood Airport (RHA). Has any consultation taken place with the Civil Aviation Authority to ensure there is no adverse impact on aircraft safety?

- Similar concern for Sandtoft Airfield which handles general aviation of light aircraft.
- Local wildlife, including swans, deer and bats, have all been spotted in the close area which will all be affected.
- Health hazards associated with solar development of this size, for example heat risks and fire, particularly due to hay and straw stored in the vicinity.
- Impact upon the medieval landscape of the Isle of Axholme which is designated as policy LC14 where development that could destroy or damage the historic character should not be supported.
- On behalf of Campaign to Protect Rural England, who objected on the grounds of unsuitable access, loss of agricultural land, impact on landscape character, visual impact, lack of consultation and potential impact upon aviation safety.
- How is this development going to benefit the villagers? Are they going to receive cheaper electricity?
- This part of the Isle has just become a dumping ground for alternative sources of energy and scrap cars. The proposal will be a major eyesore.

Landscape

- The site can clearly be seen from first-floor rooms in existing properties.
- Wildlife currently use the field and hedgerows and these will be adversely affected.
- The proposed site is green agricultural land that has been used to grow potatoes.
- Potential glare from the mounted unit.
- The field has always had a crop in the whole time over 12 years.
- This is a beautiful rural area with unspoilt countryside.
- We should be protecting the countryside for future generations and using brownfield sites before taking up arable land.
- Renewable energy does not override the need for environmental protection.
- There are no details in the application of how energy will be connected to the grid and whether a building will need to be erected on the land.

ASSESSMENT

Full planning permission is sought to install a ground-mounted solar photovoltaic (PV) system on a site of 8,160 square metres that will constitute 8,160 individual solar modules on land north of Westgate Road, Belton. The proposed 2.04 megawatt PV system will produce a minimum of 1,869,252 kilowatts of renewable electricity each year for 25 to 35 years. The solar array modules will be mounted on a galvanised steel ground mounting system that is secured by posts driven into the ground and does not consist of the laying of concrete. The modules are to be angled at an optimal 30 degree pitch and will sit

500 millimetres above the ground at the panel's lower end and 2.4 metres above the ground at the panel's higher end. The power generated by the PV will export directly to the national grid. The landowner has several parcels of land around the village of Belton. This particular field was chosen rather than other fields close to larger farming operations because the applicant states that the field is particularly low yield/low value, however it was noted upon visiting the site that the entire field is in crop and is therefore in agricultural production.

The key issues in determining this proposal are whether the development would adversely affect the character, appearance or setting of the historic landscape (allocated under policy LC14 of the North Lincolnshire Local Plan); would have an adverse impact upon aviation safety, particularly concerning the risk of glare from the solar PV panels and potential impact upon flights operating at Robin Hood Airport; and whether the proposed development would adversely affect pedestrian and highway safety as a result of construction traffic accessing the site from Westgate Road via Green Lane.

National energy policy

The Kyoto Protocol (1997) set targets for reductions in greenhouse gas emissions for most developed nations. The emission reductions under Kyoto were intended to be achieved in the period 2008 to 2012 and relate to a base year of 1990.

The Kyoto Protocol includes an emissions reduction target for the European union of 8%. This has been disaggregated on a country by country basis. The UK Government has been committed to reducing greenhouse emissions by 12.5% below 1990 levels by 2012.

The Kyoto Protocol remains the main international agreement on the reduction in greenhouse gas emissions. In this context greenhouse gas emissions in the period 2008 to 2010 have been below the required Kyoto target levels.

The European Commission in January 2008 set out the agreement by the European Council on two targets:

- a reduction of at least 20% in greenhouse gas emissions by 2020
- a 20% share of renewable energies in EU energy consumption by 2020.

This agreement was encapsulated in European Directive 2009/28/EC of 23 April 2009 which relates to the promotion and use of energy from renewable sources. It requires EU countries to meet the mandatory renewable energy targets. The targets on energy from renewable sources relate to all energy use, not just energy use in the electricity market (ie electricity, heat and transport).

In January 2014 the European Union removed the rules that bound Member States to renewable energy targets. Whilst Britain will still have to provide 15% of its renewable power from renewable energy power by 2020, however after that date there will be no target. Instead, the European Union as a whole will have to produce 27% of its energy from renewables by 2030.

The government has set targets to generate 10% of the UK's electricity from renewable energy sources by 2010 followed by 15% in 2015 and 20% by 2020. This is in addition to cutting carbon dioxide emissions by 60% by 2050 set within the Climate Change Act 2008.

Paragraphs 93 and 98 of the National Planning Policy Framework (NPPF) are relevant:

93. Planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development.
98. When determining planning applications, local planning authorities should:
- not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and
 - approve the application, unless material considerations indicate otherwise, if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should also expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas.

Landscape and heritage

The proposed site is located north-west of the village of Belton, a significant distance away from the settlement boundary as shown in the North Lincolnshire Local Plan. The site is clearly set within a rural countryside landscape setting and is located within the designated area of Special Historic Landscape Interest (policy LC14 of the North Lincolnshire Local Plan). Within this area development is not permitted which would destroy, damage or adversely affect the character, appearance or setting of the historic landscape, and for clarity policy LC14 is shown below:

The Isle of Axholme is designated as an area of Special Historic Landscape Interest.

Within this area development will not be permitted which would destroy, damage or adversely affect the character, appearance or setting of the historic landscape or any of its features.

Development required to meet the social and economic needs of rural communities and small-scale tourist and outdoor sport and recreational development will be permitted provided such development is related to the historic landscape and its features.

A high standard of design and siting in new development will be required reflecting the traditional character of buildings in the area and the character of the historic landscape and using materials sympathetic to the locality.

Schemes to improve, restore or manage the historic landscape will be sought in connection and commensurate with the scale of any new development affecting the area of Special Historic Landscape Interest.

The site is accessed by vehicles from Green Lane which is relatively narrow with no road markings and is connected to Westgate Road. Pedestrian access is also gained from Shaw Nook Lane to the east of the field and both are public rights of way. The site is visible from the first-floor windows of some properties on Green Lane and whilst it is possible to walk around the edge of the site it does not appear to be a highly visible location other than from a small number of dwellings. The potential impact of the proposal upon the historic landscape has been assessed by an officer of the Historic Environment Record who refers to both policy LC14 of the North Lincolnshire Local Plan and policy CS6 of the North Lincolnshire Core Strategy. They emphasise the importance of the Isle of Axholme historic landscape and refer to the duty of the council to conserve its significance through safeguarding the nationally significant medieval landscape, notably the open strip fields and turbaries.

The planning application states that solar PV arrays will change the general landscape character of the field as will be the case for the historic landscape character of the Recent Enclosed Land. The Historic Environment Record (HER) considers that a change of this nature and scale within the recent enclosed character area does not amount to significant harm. The HER has also assessed the impact on the setting of the core historic landscape of Belton open field and the area of early enclosed land next to the site. It is noted that the site cannot be viewed from the open field and is adequately screened from the early enclosed field to the east and south-east by hedgerows. The HER is satisfied that the proposal will not adversely affect the setting of the core historic landscape and that the change to the historic landscape character within the application site is acceptable. Additionally, it is agreed that the proposal will not adversely affect the designated heritage assets in the vicinity of the site that include the windmill on Green Lane (a grade II listed building).

With regard to archaeology, the HER does not consider that the impact would amount to a significant adverse effect on the below-ground heritage asset as a whole and therefore does not object to the application providing that a programme of archaeological work is carried out so that any remains that might be uncovered by the development can be properly identified and recorded. Therefore, subject to conditions, there are no objections to the proposal on landscape or archaeological grounds.

The site is bounded along the majority of its borders by existing hedgerows several metres deep in some places and significantly higher than the height of the proposed photovoltaic modules. Existing hedgerows vary in height between 2 to 4 metres. However, it is considered that supplementary planting and enhancement of the existing hedgerows would further restrict views over the countryside of the proposed development. It is noted that views of a development does not necessarily mean that they are harmful and on this issue alone it is not considered that a refusal of planning permission could be justified on impact upon the character and appearance of the landscape.

Aviation safety

With regard to national planning policy and guidance, the National Planning Policy Framework (NPPF) states the principles involved when considering applications for renewable energy schemes. More detailed guidance is given within the National Planning Practice Guidance (NPPG) within paragraphs 13 and 14. Paragraph 13 lists the planning considerations relating to large-scale ground-mounted solar photovoltaic farms which includes visual impact, the effect on landscape of glint and glare and on neighbouring uses and aircraft safety.

Whilst no specific guidance is given within the NPPF or NPPG regarding aviation safety and issues arising from solar PV installations, the guidance for other renewable energy technologies such as wind turbine developments contains links to the Civil Aviation Authority (CAA), National Air Control Transport Services (NATS) and Ministry of Defence (MOD) web sites.

The CAA recommends that:

‘...as part of a planning application the SPV developer provides safety assurance documentation (including risk assessment) regarding the full potential impact of the SPV installation on aviation interests.’

The CAA aims to replace the informal guidance with formal policy in due course and reserves the right to cancel, amend or alter the guidance provided.

The CAA recommends pre-planning consultation to establish both civil and military aviation-related issues at the earliest possible stage.

North Lincolnshire Council’s own Supplementary Planning Document (SPD) contains advice for developers of wind energy proposals to consult the relevant safeguarding bodies of the MOD, NATS and operators of other aerodromes and radar systems early on in the process without specifically referring to developers of SPV farms. If the local planning authority takes a precautionary approach it is felt that policy 11 of the SPD can be considered to be relevant to this proposal and therefore reference can be made to this policy in the determination of the application.

A report was submitted as part of the planning application entitled ‘Solar photovoltaic energy facilities – assessment of potential for impact on aviation’ (January 2011) produced by Spaven Consulting. The document assesses the potential impacts of solar photovoltaic energy facilities located in off-airfield situations. The following conclusions are drawn in the report.

The potential for glare or dazzle to pilots caused by sunlight reflected off solar photovoltaic panels is the only significant aviation issue likely to be raised by this technology. This is because PV panels are unlikely to have sufficient stand alone heights to constitute a physical collision hazard to aircraft and they do not generate sufficient electromagnetic energy to act as a source of electromagnetic interference other than at very short range in the immediate vicinity to the panels. Transformer units at a PV panel site may generate electromagnetic fields in their immediate vicinity but these are subject to normal established standards for minimising electromagnetic interference around any electrical facility. Solar photovoltaic panels are designed to absorb rather than reflect light. Typical panels are designed to reflect only some 2% of incoming sunlight. Reflected light from solar panels will have a significantly lower intensity than glare from direct sunlight. Solar energy facilities located away from the vicinity of airfields are unlikely to present problems of glare to pilots. No evidence can be found from existing solar energy projects around the world of any reported problems of glare affecting pilots and this includes many projects in the USA where the Federal Aviation Administration (FAA) routinely assess such projects for potential glare impacts. UK and USA aircraft accident databases contain no cases of accidents in which glare caused by a solar energy facility was cited as a factor.

Upon validation of the planning application Robin Hood Airport and Sandtoft Airfield Flying School were consulted directly. No response has been received from Sandtoft Airfield

Flying School however an objection was received from Robin Hood Airport objecting to the proposal and stating that:

'there was a possible cumulative effect of a solar PV system causing critical stage flight distraction or eye-damaging glare to air crews. The possible glare and reflectants from PV systems is a risk to aircraft operating in the vicinity. The airport will need certified and documented testimonials, a safety case and risk assessment that the glare will be at safe levels and that the type of SPV (solar photovoltaic) panel to be used will have a reduced glare to minimise the risk to aircraft unlike other standard residential and commercial reflective surfaces.'

The applicant has attempted to resolve the outstanding objection from Robin Hood Airport, however the airport has stated that the Spaven's report is not site specific and the objection will remain until such time as the applicant provides their own documented evidence based on SPV farm, orientation of panels, risk assessments, safety case and documented evidence relating to the panel type to be used, its reflective properties for the location and sunlight exposure assessment.

This issue has not been resolved and therefore the proposal cannot be granted planning permission.

Other matters

Belton Parish Council and local residents have raised concerns regarding access to the site from vehicles during the construction phase and ongoing maintenance. Such matters are the responsibility of the highway authority to advise on and their response has been one of no objections subject to the imposition of conditions which include the submission of a construction management plan to ensure there are no adverse impacts upon highway safety.

With regard to the issue of flood risk, the Environment Agency originally objected to the scheme because no flood risk assessment had been submitted. Subsequently, following submission of a flood risk assessment from the applicant, the Environment Agency has since removed its objection subject to conditions relating to setting of junction boxes and the transformer at appropriate land levels and also regarding access and tracks to be constructed of permeable materials constructed at ground level.

Concerns regarding impacts of the development upon ecology have been considered and the council's ecologist has recommended the submission of a biodiversity management plan to ensure that any potential harm to existing wildlife is mitigated to an acceptable degree.

In making a full and proper planning balance, the benefits of the proposed development, in terms of the level of power which would be produced, must be taken into account with the resultant CO₂ savings which are a national imperative to meet the UK's role in tackling climate change.

A balance must be made between the positive benefits of renewable energy, which is a national priority, and the harmful impacts of the scheme. The planning balance in this case falls in favour of the potential risks to aviation safety and public rights of way and the proposal should therefore be refused.

RECOMMENDATION Refuse permission for the following reasons:

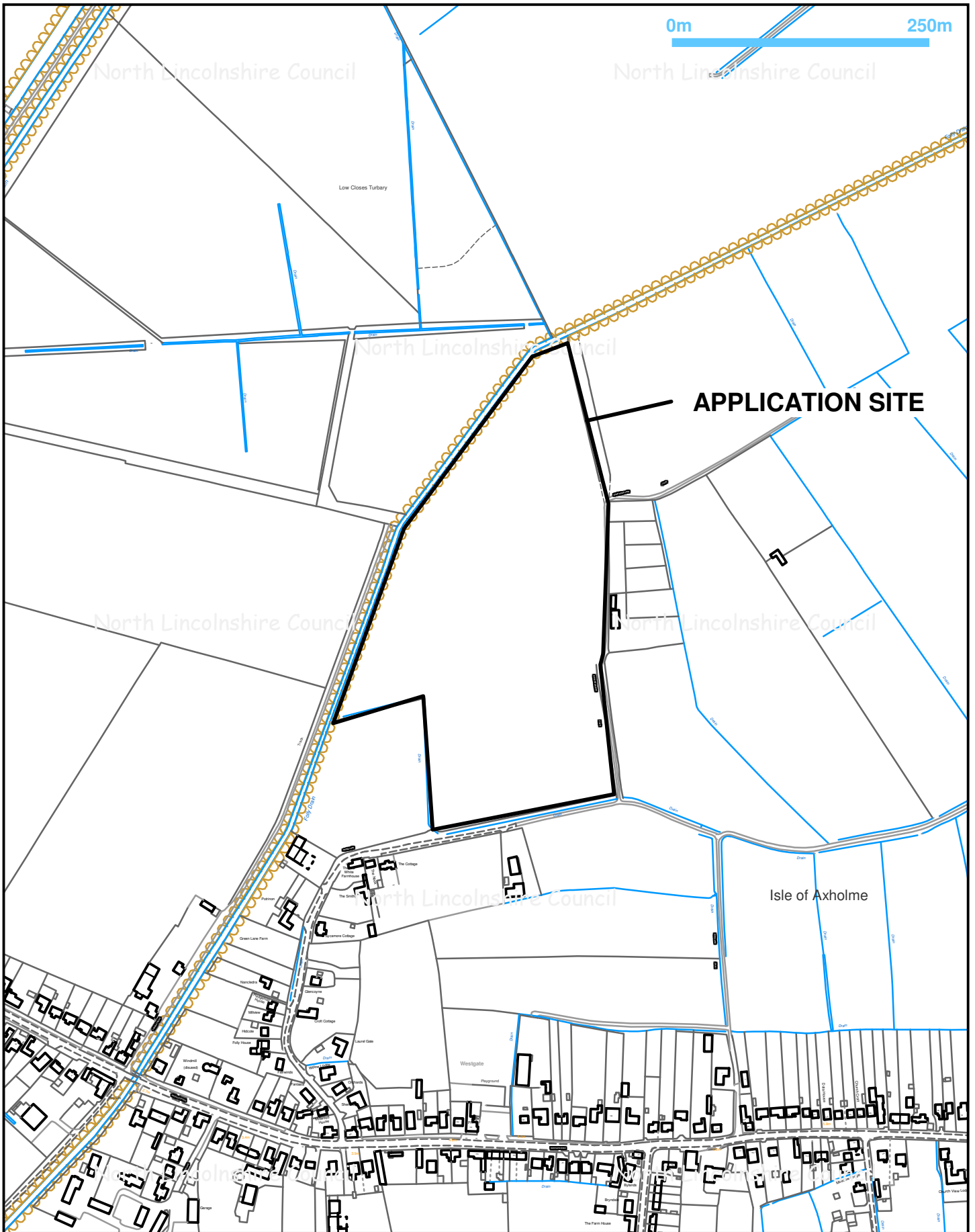
1.

The proposal has received an objection from Doncaster Sheffield Robin Hood Airport based on the possibility of the proposed solar photovoltaic panels having an adverse impact upon aviation safety through critical stage flight distraction or eye-damaging glare to air crews within aircraft operating within the vicinity. The information submitted in support of the planning application is not site specific and does not provide evidence based on the type of photovoltaic panel proposed for this installation. The proposal therefore fails to comply with paragraph 8 of the Interim CAA Guidance - Solar Photovoltaic Systems and policy 11 (Aircraft and Radar) of Supplementary Planning Document - Planning for Renewable Energy Development (adopted 2011).

2.

The proposal fails to comply with policy R5 of the North Lincolnshire Local Plan and policy 13 (Highways and Rights of Way) of the Supplementary Planning Document Planning for Renewable Energy Development (November 2011) for the following reasons:

- (i) The proposal does not include an assessment of the proposal's potential impact upon the public rights of way close to the site.
- (ii) Low Closes Turbary to the north-west of the site is an area of statutory open access under the Countryside and Rights of Way Act 2000, over which the public can roam freely on foot. The proposal fails to protect and enhance public rights of way or add additional links between Low Closes Turbary and the existing recreational network with Belton.



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