From:	Kate Dewey
To:	Steve Massey
Cc:	Planning Comments (SMDC); Curley, Jane; Bayliss, Gillian
Subject:	Re: SMD/2019/0368 - Bird Grove Farm, Hilderstone - request for Screening Opinion
Date:	09 July 2019 18:26:55
Attachments:	TCPA_EIA_Screening_Matrix_2017_EIA_Regs Bird Grove Farm solar SWT 9Jul19.docx

Dear all,

I have done my best to go through the Schedule 3 criteria in terms of potential ecological issues, with the limited information available. I have concluded that some further information is needed before I can confidently conclude that an EIA is not required from an ecology pespective, so hopefully I can discuss this further.

I have attached a screening matrix form that I have filled in where I felt able, but there are many unknown aspects that may need further attention by others.

Below are my notes and reasoning on ecology/ hydrology elements.

SCREENING CRITERIA

Column 1 Description of development: (a) Industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1);
Column 2 Applicable thresholds and criteria: The area of the development exceeds 0.5 hectares
Under 50 MW
Not in or adjacent a 'sensitive area'.

GENERAL HYDROLOGY AND ECOLOGY INFORMATION

Within a Drinking Water Safeguard Zones (Surface Water) (England)
Within a Nitrate Vulnerable Zones 2017 Designations (England)
Small areas on the site near watercourses are at risk of surface water flooding according to https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?easting=389659.97&northing=334532.289
Not a type of development that requires consultation with Natural England in terms of SSSI/SAC/SPA/ Ramsar risk zones.
Not in an environmental stewardship scheme.
No ecological survey information provided. Are any previous surveys available e.g. from the wind turbine development on the site?
No information on potential cumulative impacts to ecology.

PROPOSALS RELEVANT TO ECOLOGY

Panel foundation types uncertain, dependant on ground conditions. Possibly ramming steel profiles to max depth of 1.8m.
No information on site preparation/ clearance methods, or whether topography would be altered.
Equipment to be in place for 40 years.
Grazing of land under panels is proposed.
Each enclosure to be fenced with max 2.5m high security fencing along existing hedgerows. Not clear whether this means each field parcel, or the perimeter of the two land parcels shown in the Site Location Plan.
Hedgerows can be enhanced as part of proposals.

ECOLOGY ISSUES RELEVANT TO SCHEDULE 3 CRITERIA

Local Wildlife Sites (LWS), Ancient Woodland, potential LWS

Contrary to the proposal description, the site is adjacent to one locally designated wildlife site, which is also an ancient woodland. Given the lack of habitat survey data for the area, there may also be habitats within the site that are worthy of Local Wildlife Site designation.

Part of the south-eastern site boundary is adjacent Bromley Wood Local Wildlife Site, with Hose Wood Local Wildlife Site located 310m to the north-east. Both of these woods are registered Ancient & Semi-Natural Woodland. There are a number of other ancient woodlands scattered throughout the surrounding area. Ancient woodlands under 2 hectares in size have generally not been recorded on the register, therefore unidentified ancient woodland fragments may be present. Smaller ancient woodland are often found near to larger registered sites, especially in landscapes where there are collections of such woodlands present. There are two other areas of woodland adjacent the boundary of the proposal site, which should be investigated as to their potential ancient status. An appropriate stand-off will be needed from any ancient woodland.

Staffordshire Ecological Record holds very little habitat data for the proposal site or the surrounding area, meaning this area has not been comprehensively surveyed. Therefore there may well be further habitats of high ecological value within or adjacent the site that have not yet been assessed for LWS status.

An area of woodland, parkland and ponds adjacent the southern boundary has potential value, and may need an appropriate stand-off/ buffer.

An area of grassland within the proposal site, comprising the three small fields to the north of Bromley Wood, is recorded on https://magic.defra.gov.uk as 'Good quality semi-improved grassland' within the English Nature Lowland Grassland Inventory. This area is also recorded by Staffordshire Ecological Record (SER) as an 'historic' Local Wildlife Site (LWS) of county importance. Such areas were previously designated in the late 70's early 80's but have not been assessed against the current LWS criteria, therefore have no current status, but the survey data can indicate potential value. The site previously supported scrub, semi-improved and marshy grassland with running water. It was described in the previous survey as ' A moderately grazed pasture located immediately to the north of Bromley Wood. Small patches of scattered scrub have replaced the old hedge lines and the field is quite wet in places, particularly near the small stream. A reasonable species diversity remains, including ragged robin, *Filipendula ulmaria* [meadowsweet] and self-heal *Prunella vulgaris*.' This area appears from aerial photos to be less agriculturally improved and could have potential to meet the current LWS criteria and requires assessment. Installation of solar panels would impact diverse grassland through disturbance and long-term shading, as well as potentially impacting hydrology if soil strata are disrupted by panel installation. Therefore if the grassland is of value, it would need to be excluded from the panelled areas.

Grassland in the west of the site around Bird Grove Farm looks to be less improved, with possible ridge and furrow patterns in fields; this may need detailed assessment if found to be diverse. If of high value, it would need to be avoided.

Some of the hedgerows within the site could potentially meet the LWS criteria. Parts of the hedgerow along the Public Footpath No. 24 (Draycott Parish), just outside of the site, are recorded as historic wildlife sites of district value and so may have some diversity. It appears from the project description that hedgerows will be retained and could also be enhanced, therefore impacts to these receptors would be minimal and potentially positive.

Watercourses

There are three drains/ watercourses within the site, all of which eventually drain to the River Blythe. Any clearance of land or impact to ground water could affect these watercourses through silt run-off or altering hydrology where ground water is near to the surface. The current condition of these watercourses in terms of water and habitat quality would need to be considered, but could be enhanced as part of the proposals.

Great crested newts

The nearest GCN record is 630m to the north-east. The OS map shows 2 ponds within the site, although other ponds are present on historic maps and water may collect temporarily in areas not shown. A further 13-14 waterbodies are present within 250m of site, with many more within 500m, providing a suitable landscape of habitats for amphibians. If GCN were to be present on or adjacent the site, a licence may be needed for construction, and areas of habitat around ponds may need to be retained and enhanced within the site, potentially reducing the area of panels. With correct mitigation and enhancement however, the proposals could result in a net gain for amphibians.

Bats

Bat roosts have been recorded in a number of properties around the site, mostly to the south. These would not be impacted, but indicate that bats will be using the wider landscape to feed and possibly roost if suitable trees are present. There are likely to be bat populations in the nearby woodlands, and these will use the hedgerows on site for commuting and foraging. Given that hedgerows will be retained and ideally enhanced, there should be minimal impact to bats as long as no trees are felled and any lighting of hedges is avoided.

Reptiles

Grass snake was recorded within the site in 1983 the fields to the north of Bromley Wood where a moated site is present. Habitat may well still be suitable for grass snakes here and in other patches of habitat on the site. With precautions the proposals could avoid harm to reptiles and increase habitat quality.

Priority Birds

Priority ground nesting farmland birds such as skylark, lapwing, snipe and curlew require large open fields/ habitat areas and would be precluded from nesting on any site with solar panels. SER hold no records of birds within the site, and therefore bird populations on the site are currently unknown. However skylark, lapwing, snipe and curlew have all been recorded in adjacent 1km grid squares, so have potential to use the site. The intensive arable and grassland over much of the site and lack of inclusion in an environmental stewardship scheme reduces the likelihood of bird assemblages greater than local value, however the surrounding semi-natural habitats may increase bird usage of the area. Most of the field parcels are also greater than 3 ha meaning that ground nesting birds would be able to use them for breeding, and winter feeding, although the presence of a wind turbine in one field would likely prevent ground nesting in that parcel.

Priority birds using hedges and trees would not be impacted, and may benefit from any enhancements.

Breeding and wintering bird surveys will be required. If any priority bird species would be displaced from the site, compensatory enhancement areas off-site will be needed to maintain the populations locally. This could involve enhancement of other arable or grassland fields, using measures similar to options within stewardship schemes to increase capacity for supporting birds.

Brown Hare

This species has been recorded within the site. There should be no long term negative impacts to hares from the proposals, as long as mammal access to the site is maintained via access points in fences, and habitat quality for hares could be enhanced.

CONCLUSIONS

Given the lack of baseline data, information on potential cumulative impacts, lack of details of the layout and construction of the scheme and any capacity for avoidance and compensation, it is difficult to reach a definitive conclusion. If a 'worst case scenario' were taken that habitats and species assemblages of county importance were found to be present on the site, there could be up to county level significant impacts. However if sensitive receptors (namely ancient woodland, diverse grassland, GCN, ground nesting birds) were able to be avoided, mitigated for and adequately compensated within the design, and cumulative impacts were not applicable, this would mean significant negative effects to ecology would be unlikely. Therefore **further information** on the ecology baseline and surveys proposed, cumulative impacts, layout and construction methods, and capacity for ecological avoidance/ mitigation is requested.

Should an EIA not be required, it is recommended that the following surveys and mitigation measures be carried out:

Surveys required

- Preliminary Ecological Appraisal with phase 1 habitat survey, search for evidence, HSI of relevant ponds and GCN risk assessment to determine whether further surveys are needed.
- LWS assessment of any habitats that appear to be of high value.
- Ancient woodland assessment of undesignated woodlands adjacent site if initial surveys indicate potential.
- Breeding and wintering bird surveys
- If necessary – GCN surveys
- If any trees are to be felled- bat surveys

Avoidance, Mitigation, Compensation and Enhancements

- Adequate stand-off from ancient woodland, trees and hedgerows.
- Avoid panels on high value grassland.
- Provide species-specific mitigation and compensation where present or likely.
- Ideally minimise the length of security fencing installed- could this be kept to the perimeter of the two site parcels?
- Minimise ground disturbance.
- Sustainably drain any hard surfaces.

- Enhance watercourses with appropriate management.
- Enhance hedgerows with additional species planting, and appropriate management (laying, trimming on rotation every 3 years)
- Create diverse grassland under panels wherever possible; if not entire fields, enhance field margins.
- Submit Landscape and Ecological Management Plan for the site for the life of the development, including periodic monitoring of key habitats/ species.

Regards,

Kate Dewey BSc (Hons) MCIEEM

Senior Planning Officer

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On Mon, 8 Jul 2019 at 18:30, Steve Massey <Steve.Massey@staffsmoorlands.gov.uk> wrote:

> The proposed development would be an industrial installation for the production of electricity, and the area of the development would exceed 0.5 hectares. The site is not within or adjacent to any of the “sensitive areas” (a) to (g) inclusive as defined in Section 2(1) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, and therefore this 0.5ha threshold correctly applies in this case. In consequence, the proposed scheme would be a “Schedule 2 Development” in accordance with Item 3(a) of Schedule 2 of the Regs, for which an EIA may be necessary.

Government Guidance on Environmental Impact Assessment includes an Annex giving indicative screening thresholds for Schedule 2 developments; in relation to industrial installations for the production of electricity, the indicative threshold for requiring EIA is suggested as thermal output of more than 50MW, and further advises that small *(i.e. below this threshold?)* stations using novel forms of generation should be carefully considered. The applicant's screening request information advises that the proposed solar farm would have a planned capacity of approximately 49.9MW, just below the threshold. A solar panel farm would not now be regarded as a novel form of generation. Strict reference to these indicative threshold and criteria would therefore suggest that this particular Schedule 2 development would not require an EIA; however, the Guidance makes clear that these thresholds and criteria should not be applied rigidly, and that the LPA should still have regard to general guidance on determining whether EIA is required.

The Annex suggests the key issues to consider for electricity generation development are likely to be: level of emissions to the air; arrangements for the transport of fuel; and any visual impact. In practice, air emissions and fuel transport do not appear relevant to a scheme generating electricity by solar panels. However, visual impact clearly would be a key issue to consider for this proposal. Whilst it is evident from the site location plan provided that this would be a large scale development, the true extent of the site is even more fully appreciated from a site visit.

Due to:

- the location and aspect of the site on a plateau, and in a contained shallow valley, within a gently rolling wider topography;

- the existing landscape structure of fields, hedges, hedgerow trees and woodlands;

- the relative sparsity of public rights of way and public highways in the immediate vicinity affording views of the site;

- and the relative lack of elevated viewpoints in the surrounding area offering mid-range or close-range views of the site,

at this stage it appears more likely that any visual impact of the proposed development would be mainly experienced from adjacent to or within the overall extent of the site. The Cresswell-Hilderstone Road runs close to and in some places immediately adjacent to the site boundary, and Public Footpath No. 24 (Draycott Parish) – also carrying the promoted route of the "Stone Circles Challenge" – runs along the tarmac farm track bisecting the site, being immediately adjacent to the site boundaries for some 585m and also affording close range views of the site for a further 430m – 600m or so of its length.

The applicant's screening request advises that a Landscape and Visual Impact Assessment (LVIA) would anyway accompany any planning application; a full and comprehensive LVIA certainly should be required even if full EIA is not, and at this stage the screening request's contention that visual impact of the proposed scheme would be "minimal" is considered premature.

In a similar vein, the screening request somewhat jumps to the conclusion that the ecological value of the various fields "is limited to the hedgerows" as the "majority" of the fields have been the subject of progressive and modern agricultural practices. Whilst it is appreciated that improved grassland or intensive arable farming may well be less favourable for wildlife, it would not be safe to assume no/limited ecological impact without proper assessment. Further to this, the screening request states that the site neither includes nor is in close proximity to any national or local nature conservation designation, but in fact it is noted that the site has over 400m common boundary with the immediately adjacent Bromley Wood which is included as an Ancient Semi-Natural Woodland in the Staffordshire register of Ancient Woodlands and therefore of notable and irreplaceable habitat value.

In addition to assessing any potential ecological impact on Bromley Wood, any planning application should also be supported by a suitable tree survey/arboricultural impact assessment report in accordance with British Standard 5837:2012 *Trees in Relation to Design, Demolition and Construction - Recommendations* which should consider how the trees in Bromley Wood, and also the hedges and hedgerow trees forming the boundaries of the various fields making up the site, may be physically affected by the proposed solar farm – unless it is demonstrably clear from the layout and structure details to be submitted with a planning application that there would be no such impact. Such consideration should take account not only of the construction/installation of the frames and panels themselves, but also any impact arising from temporary construction access and on-going operational/servicing access, together with any associated infrastructure provision for drainage, transformers and links to the electricity network etc.

Whilst there are no "sensitive areas" within /adjacent to the site, which would include Scheduled Ancient Monuments, it is noted that in the south-easterly field of the subject site adjacent to the north-western boundary of Bromley Wood there is a non-designated heritage asset being identified on Statmap as the earthwork remains of a medieval moated site. Presumably therefore some appropriate heritage assessment of the nature, condition and value of this moated site, and of how it may be affected by the proposed solar farm development, should also be submitted with any planning application.

Having regard to the location and description of the proposed development provided in the screening request, the absence of "sensitive areas", and the indicative criteria and thresholds set out in Government Guidance on EIA, it is considered on balance that a full EIA would NOT be required in relation to the issues addressed in this e-mail, but subject to the submission with any subsequent planning application of the following supporting assessments (which would anyway be required in connection with an application for a large scale development

proposal in the rural area irrespective of EIA screening requests):

- **A full, comprehensive LVIA**

- **An ecological assessment report (subject to/in accordance with guidance from SMDC's ecological planning advisers)**

- **A tree survey/arboricultural impact assessment report (unless the submitted details of the application evidently demonstrate that any such impact would not occur or would be so unlikely as to not reasonably require such a report)**

- **A heritage assessment/statement in relation to the medieval moated site (subject to/in accordance with guidance from SMDC's senior conservation officer)**

Steve Massey

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