

Appendix A – EIA Screening Request for 2023 Scheme

Our Ref: 3044-01/PR

7th September 2021

Development and Conservation
North Hertfordshire District Council
PO Box 10613
Nottingham
NG6 6DW

Sent via email to:

planning.control@north-herts.gov.uk

Dear Sir/Madam

PROPOSED 25MW SOLAR FARM AND 12.5MW BATTERY STORAGE FACILITY ON LAND TO THE SOUTH OF SPERBERRY HILL, WYMONDLEY, NORTH HERTFORDSHIRE, INCLUDING GRID CONNECTION CABLING TO THE NATIONAL GRID WYMONDLEY SUBSTATION.

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 - REGULATION 6 – REQUEST FOR A SCREENING OPINION

We are writing on behalf of our client, RNA-Energy Ltd (The Applicant), to request a formal Screening Opinion under Regulation 6 (1) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (hereafter referred to as ‘the EIA Regulations’) in relation to proposals for a 25MW Solar Farm and 12.5MW Battery Storage Facility (‘the Proposed Development’) on land South of Sperberry Hill, Wymondley, North Hertfordshire (‘the Site’). The location of the Site is illustrated on Figure 1 and the extent of the likely development area is shown on Figure 2.

To assist in your adoption of a Screening Opinion we have provided a summary of the Proposed Development location and a brief description of the nature and purpose of the Proposed Development.

We then set out our view on whether the Proposed Development falls within Schedule 1 or Schedule 2 of the EIA Regulations.

Finally, consideration is given to the information required to complete the EIA Regulations Screening Matrix¹. This is presented under the following headings:

1. Natural Resources
2. Waste
3. Pollution and Nuisances
4. Population and Human Health

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/643241/TCPA_EIA_Screening_Matrix_2017_Regs.pdf

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5. Water Resources
6. Biodiversity (Species and Habitats)
7. Landscape and Visual
8. Cultural Heritage/Archaeology
9. Transport and Access
10. Land Use
11. Land Stability and Climate
12. Cumulative Effects
13. Transboundary Effects

Each section seeks to address the selection criteria for screening Schedule 2 development provided in Schedule 3 of the EIA Regulations.

Site Location

The Site location is illustrated on Figure 1 and the extent of the Site is shown on Figure 2. In total the area of the Site is circa 33.9 hectares.

The Site comprises arable farmland with some hedges and isolated hedgerow trees defining the boundaries of the fields included within the Site. In addition, overhead pylons and transmission lines cross the western part of the Site.

The northern boundary of the Site is formed by Sperberry Hill and views into the Site are generally restricted by roadside hedges and development at Redcoats Farmhouse Hotel and Restaurant. The Site slopes to the south away from Sperberry Hill and is visible from more elevated land to the south and west.

Little Almshoe Lane separates the eastern and western parts of the Site and views into the Site are available from field gates and over lower sections of boundary hedgerows. Little Almshoe Lane also forms the southern boundary of the western part of the Site. Views of the Site from this section of the road are generally limited by roadside hedgerows to the north and the main focus of views is across the more open landscape to the south.

The eastern part of the Site is generally on lower lying land and is crossed by a number of public rights of way (PROW), including a section of the Hertfordshire Way.

Cables would be required to run from the Site to Wymondley Sub-Station. The likely connection route is illustrated on Figure 1 and would follow Stevenage Road and Blakemore End Road from the Site to the connection point at the substation.

The site is not subject to any landscape designations. The closest landscape designation is the Chilterns AONB some 3.7km to the west.

There are no listed buildings or scheduled monuments within the site, the closest being the group of listed buildings at Redcoats Farmhouse Hotel (Grade II and II*) to the north and The Wyck (Grade II) to the south. Both these clusters of listed buildings would have views of the Site largely filtered by intervening vegetation and as such effects on their setting would be limited.

There are no ecological designations on the Site. The closest is Wain Wood SSSI approximately 2km to the west. The Site is within the Impact Risk Zones for Wain Wood SSSI, but a solar farm is not of a development type that would require consultation with Natural England.

The Site is entirely located within Flood Zone 1 ('low risk' of river or sea flooding).

Based on available baseline mapping the Site comprises Grade 2 and 3a best and most versatile agricultural land.

The closest residential properties are located on Sperberry Hill and Tittendell Lane to the west and The Wyck and Almshoeberry Cottages to the south.

Brief Description of the Proposed Development

The Proposed Development is for a 25MW solar farm with 12.5MW of battery storage. The detailed layout has yet to be finalised, but the plan provided at Figure 2 shows the extent of the development site. The equipment and infrastructure would be within this overall area with the final details to be determined following completion of assessments. However, it is likely to consist of the following key elements:

- Photovoltaic (PV) solar panels and associated support frames and cabling
- String Inverters
- Battery Storage Containers
- Transformer Stations
- Control Building
- Switchgear Building
- Access tracks
- Security fencing
- CCTV security cameras & supports
- Grid connection cable to Wymondley Substation

A typical configuration for the solar panels and supports is illustrated below. This illustrates standard post support construction. The construction period for the solar farm is anticipated to last approximately 10 weeks.

During operation, the land under the solar panels would be managed for biodiversity gains and sheep grazing.

The Proposed Development would be for a time limited period of 40 years after which time the Site would be decommissioned and restored back to full agricultural use.

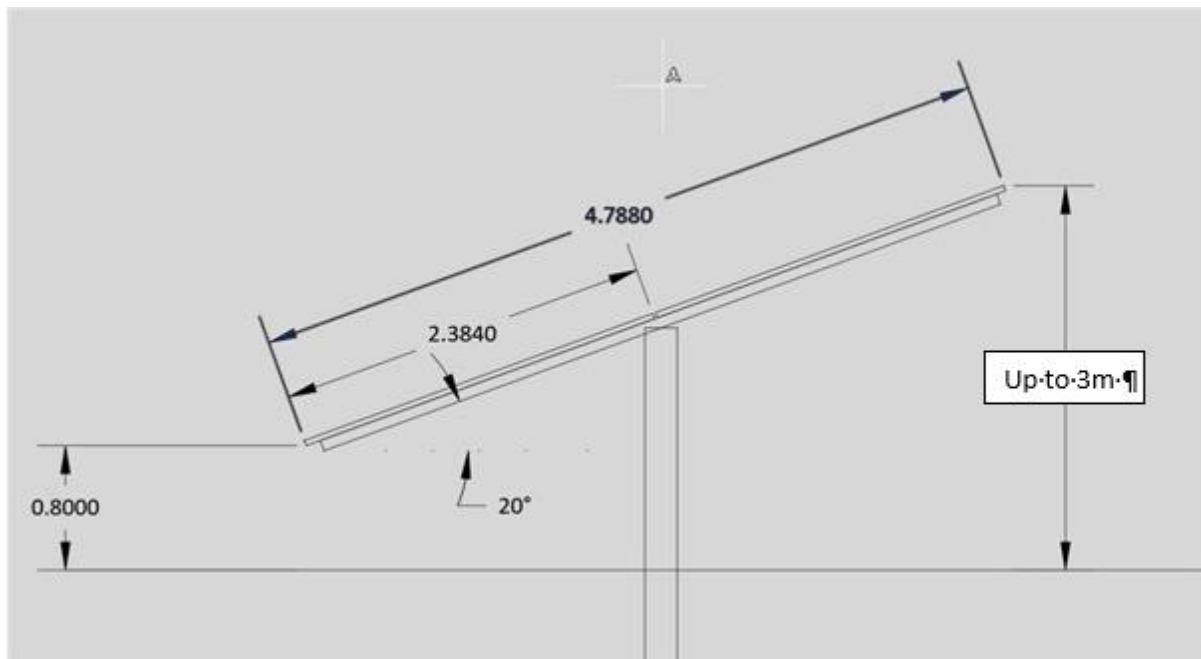


Diagram 1: Typical configuration for the solar panels and supports

Planning History

The western portion of the site has been the subject of a previous planning application for a 5MW solar farm (application ref: 15/01532/ 1, dated 8 June 2015). The application was refused on the 24th of February 2016 and was subject to a planning appeal in 2017 (Appeal Ref: APP/X1925/W/16/3156843). The appeal was dismissed because the inspector considered that: *'The harm caused by reason of inappropriateness, together with the effect on the openness of the Green Belt and the detrimental impact on landscape character and visual amenity are not outweighed in this case by the benefits of the renewable energy produced. The benefits do not amount to the very special circumstances necessary to allow the scheme to proceed'*.

Since this decision there have been a number of changes to the planning context in respect of renewable energy development, including the Government's commitment to net zero by 2050, North Hertfordshire's commitment to achieve net zero by 2030 and advances in photovoltaic solar technology that enable an increased generation benefit to offset any harm to the openness of the Green Belt and any detrimental impact on landscape character and visual amenity.

EIA Screening

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 define EIA development as that falling under either Schedule 1 Development, or Schedule 2 Development likely to have significant effects on the environment by virtue of factors such as its nature, size or location.

Schedule 1 Development

The Proposed Development does not fall under any of the Schedule 1 categories. Therefore, the Proposed Development is not Schedule 1 development and mandatory EIA is not required.

Schedule 2 Development

Schedule 2 of the EIA Regulations includes a table that sets out various categories of development that may require EIA, subject to their likely effects on the environment. Schedule 2 includes applicable thresholds and criteria, which if exceeded, mean that the development is considered to be Schedule 2 development.

Schedule 2 development is required to be screened against the criteria set out in Schedule 3 to determine if the development is likely to give rise to significant effects on the environment. If the Proposed Development is deemed likely to give rise to significant effects by virtue of their location, characteristics or potential impacts then EIA is required.

In the context of Schedule 2 the Proposed Development is considered to fall within an 'industrial installations for the production of electricity, steam and hot water (Schedule 2, 3a).

The Schedule 2 indicative threshold for industrial installations for the production of electricity, steam and hot water is that the area of the development exceeds 0.5 hectares. The Site is c.33.9 hectares and exceeds this threshold. Accordingly, the Proposed Development is considered to fall within category 3a of Schedule 2 of the EIA regulations.

In order to establish whether the Proposed Development is likely to give rise to significant environmental effects, and therefore if the application must be subject to EIA, planning authorities are required to consider (or 'screen') the proposals against the criteria set out in Schedule 3 of the EIA Regulations.

Schedule 3

Schedule 3 sets out three main criteria against which the development should be considered, as follows:

- 1) Characteristics of development;
- 2) Location of development; and
- 3) Types and characteristics of the potential impact.

A number of sub-criteria are also provided, and these are considered below in the context of the EIA Screening Matrix, referenced above. In addition, reference is made to government EIA guidance in respect of indicative thresholds and criteria for Schedule 2 developments.

The indicative thresholds for industrial installations for the production of electricity, steam and hot water indicate that EIA is more likely to be required for installations where the development has a thermal output of more than 50MW and that small stations using novel forms of generation should be considered carefully. Neither of these indicative criteria and thresholds are applicable to solar farms or battery storage developments. Furthermore, the key issues to consider for this type of development are the level of emissions to air, arrangements for

transportation of fuel and visual impact. Of these three key considerations only potential for visual impact is of relevance to the Proposed Development.

Based on the key issues to consider, set out in the EIA Planning Practice Guidance Note indicative threshold table, significant environmental effects as a result of the Proposed Development are not considered likely and EIA should not be required for this Schedule 2 development. This is discussed further below in the context of the EIA screening matrix.

1. Natural Resources

The Proposed Development will not lead to any significant change to the topography of the area and earthworks would be limited to soil stripping for track construction and formation of foundations for the transformers, control building, switchgear building and service connections etc. Stripped soils would be retained on site and be cultivated into the areas below solar panels prior to seeding. The solar panel supports would be mechanically driven into the soil and would not require excavations or foundations. These types of activities are common to most types of industrial development and are unlikely to result in any significant environmental effects.

The Proposed Development would facilitate the generation of renewable energy, and this would conserve natural resources that would otherwise be used to generate power. Whilst the solar panels, frames and ancillary equipment would use natural resources during construction this would not be in significant quantities that could have wider significant environmental impacts.

The site is indicated as Grade 3 agricultural land on Figure 4. The Proposed Development would not result in the permanent loss of this natural resource. During operation the site would be used for sheep grazing and the partial reduction in land management options (i.e. removal of arable options) would not result in significant long-term impacts on agricultural land in the context of this wider resource available in North Hertfordshire.

2. Waste

The Proposed Development would not generate significant waste during construction or operation. Following decommissioning at the end of the scheme's operational life or when panels need to be replaced due to failures/damage solid waste will be created. PV panel disposal is covered by the Waste Electrical and Electronic Equipment (WEEE) Directive. As such, any disposal of panels will need to comply with this directive. PV panels comprise a high proportion of glass along with smaller amounts of plastic, aluminium and other metals. All of these components are readily recyclable, with c.80% of the panel materials able to be recycled, at specialist processors. Solid waste generated by decommissioning works can be effectively managed by moving waste up the waste hierarchy through recycling for beneficial use. As such significant effects associated with disposal of waste as a result of the Proposed Development would not occur.

3. Pollution and Nuisances

The Proposed Development would not result in any emissions to air, with the exception of vehicle emissions associated with the delivery/removal of material during

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construction/decommissioning and dust during construction/decommissioning. These potentially polluting activities would occur for a limited time period and potential for dust can be mitigated by standard construction management techniques. As such significant effects are not considered likely.

There would be limited noise and light pollution associated with the construction / decommissioning periods and this would be localised and mitigated by standard construction management techniques. During operation the main noise emissions would be from the battery storage containers, transformers and inverters. These noise sources would be attenuated to levels that would not result in any significant impacts at sensitive noise receptors.

The Site comprises previously undeveloped agricultural land and as such there is limited risk of any contamination of land and water as a result of existing ground conditions. The Proposed Development would not result in increased risk of contamination to ground water due to the nature of the development.

In conclusion, the Proposed Development is unlikely to result in significant pollution and nuisances.

4. Population and Human Health

As set out above, effects as a result of emissions that could affect human health would be limited to vehicle movements during the limited construction and decommissioning phases. During these phases traffic controls would be put in place along with appropriate signage and management to ensure that there would be no conflict between construction traffic and pedestrians/cyclist. Construction activities could be controlled by a Construction Environmental Management Plan (CEMP) to ensure that risks to the public and environment are managed effectively.

As such there is limited risk to the surrounding population as a result of the Proposed Development.

5. Water Resources

The site is remote from nearby rivers but is in proximity to a ground water source protection zone. However, due to the nature of the Proposed Development and appropriately managed construction techniques there would be no risk to the ground water source protection zone.

Whilst the solar panels would introduce large areas of impermeable material, each panel would drain to the land immediately below the support structure and rainwater would permeate into the ground, as per the existing undeveloped situation. Surface water would be managed by a suitable sustainable drainage system (SuDS) scheme that would ensure overall runoff rates from the site would not increase. This would ensure that there would be no increased risk of flooding as a result of any increased impermeable areas at the site.

The site is within Flood Zone 1 and at low risk of flooding.

Effects on water resources can be effectively managed through design to avoid any potential for significant environmental effects that would trigger the need for EIA.

6. Biodiversity (Species and Habitats)

As illustrated on Figure 3 the site is remote from SSSIs and Ancient Woodland. Whilst the Proposed Development would be located within the impact zones for a number of SSSIs there would be no discharges to air or water, as a result of the solar farm, that could have a negative effect on these designations.

The arable fields that would be used for the development are of low ecological value due to their intensive agricultural cultivation. However, the area could be used by different species at different times of the year depending on the nature of crops/cultivation.

The hedgerows and tree lines around the site are likely to represent the best habitat resource. The Proposed Development would ensure a minimum of a 5-6m buffer to these features and the buffer zone would be seeded with species rich grassland and wildflowers. These areas would be managed for biodiversity benefits and to improve the habitat within the Site. In addition, hedgerow planting is proposed to provide additional habitat connectivity and visual screening/landscape integration.

The areas underneath the solar panels would be sown with agricultural grassland and would be managed by low intensity sheep grazing and manual cutting as required. Where land is taken out of arable production significant net gains in biodiversity can be achieved as a result of solar farm developments.

Overall, it is considered that the Proposed Development would not have any significant adverse effects on biodiversity and that there is potential for net biodiversity gains as a result of taking the land out of intensive arable production and managing the areas under and around the solar panels for habitat benefits.

7. Landscape and Visual

There are no areas or features on or around the site which are protected for their landscape and scenic value. The Chiltern AONB is located c. 3.7km to the west but is located outside the ZTV for the Proposed Development. As such there would be no effects on this designated landscape.

As illustrated by the Zone of Theoretical Visibility (ZTV) on Figure 5 the Proposed Development would be well screened from the north. However, there would be visibility of the Site from rising ground to the south and east of the Site, within 1km. There would also be visibility from the area to the southwest, east of Poynders End. This includes a section of the Chiltern Way and Hertfordshire Way.

In this context the Proposed Development would give rise to localised landscape and visual effects.

8. Cultural Heritage/Archaeology

There are no SAMs, listed buildings, conservation areas, registered parks and gardens or historic battlefields within the Site. As referenced above there are a number of listed buildings in the surrounding landscape. In addition, there are three Scheduled Monument and a registered park and garden within 3km.

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The DSM ZTV presented on Figure 5 illustrates that the Proposed Development would not be widely visible from most of these heritage assets and as such effects on their setting would not be significant. There would be visibility of the Proposed Development from the northern part of Temple Dinsley registered park and garden. However, at distances in excess of 1.6km visual effects on the setting of the parkland are unlikely to be significant.

There remains potential for unknown buried archaeology to be present on the Site. However, with appropriate mitigation in place, such as preservation by record and /or preservation in-situ significant effects are unlikely to occur.

9. Transport and Access

There would be no direct impacts on public rights of way (PROW) as these would be maintained within landscaped corridors through the site. There would be visual impacts on users of the PROWs that pass through the Site until mitigation hedgerow planting establishes.

Construction and maintenance traffic would access the site directly from the Sperberry Hill and/or Little Almshole Lane Road and would use existing farm access points, where practical.

Traffic generated during construction traffic would be modest and would be short term and temporary. As such, the Proposed Development is unlikely to result in significant environmental effects associated with increased traffic on the public highway.

10. Land Use

The site is not allocated in the local development plan for any land use other than agriculture. Whilst likely to result in restrictions on the use of best and most versatile agricultural land, some farming activities (sheep grazing) would be able to continue. The agricultural land holding that would be affected is involved with the project and their overall farm businesses would not be adversely affected by the Proposed Development.

The use of lower grade agricultural land is considered appropriate for this type of development and significant effects in terms of other land use policy are considered unlikely.

11. Land Stability and Climate

The site is in an area where land stability is not a consideration.

The development of renewable energy projects is essential for addressing climate change and delivering the Government's target of Net Zero by 2050. National Grid's Future Energy Scenarios Report 2021 (FES21) provides the detailed annual breakdown of solar capacity needed each year up to 2050 for a number of possible scenarios. The information is summarised below for this year and projecting forward to 2030, 2040 and 2050.

	2021	2030	2040	2050	2021 - 2030 Increase
Consumer Transformation	13.4	30.8	55.8	77.8	17.4
System Transformation	13.3	25.4	43.0	57.2	12.1
Leading the Way	13.6	38.7	67.86	88.6	25.1

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Steady Progression	13.2	17.4	27.8	34.3	4.2
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It can be seen that under all scenarios a significant increase in solar capacity is required between now and 2030, with further increases after that. Even under the *Steady Progression* scenario (which doesn't achieve Net Zero) an increase of 4.2GW of capacity is required between now and 2030.

The Proposed Development would contribute to achieving these ambitious targets and as such there would be beneficial climate change impacts associated with the Proposed Development.

12. Cumulative Effects

A review of North Hertfordshire's planning website has identified only one planning approval for a solar farm close to Luton Airport some 11km to the south of the Site. In addition, there is a screening request (21/01446/SO) for a solar farm near Bygrave some 8.3km to the northeast of the site and a screening request (21/02228/SO) east of Great Wymondley 1.7km to the north. The Bygrave solar farm was screened negatively, and EIA was not required. The Great Wymondley site is awaiting a screening opinion. In-combination visibility with the Great Wymondley site would occur from the elevated landscape to the south. However, at these distances it is unlikely that significant cumulative landscape and visual effects would occur with other solar farm development in the district.

Traffic associated with this, and other solar farm construction would be temporary in nature and would be unlikely to all occur at the same time or affect the same highway networks. As such significant cumulative traffic effects are not considered likely.

13. Transboundary Effects

Due to the geographic location, scale and nature of the Proposed Development there would be no potential for transboundary effects.

Screening Request

This letter provides a brief description of the Proposed Development and the likely significant effects on the environment in line with the requirements of Regulation 6(2) and Schedule 3 of the EIA Regulations. Whilst the Proposed Development is Schedule 2 development, screening against Schedule 3 of the EIA Regulations, and the related guidance in the PPG, clearly demonstrates that with appropriate standard mitigation in place the Proposed Development is not likely to result in significant environmental effects. As such, it is considered that the Proposed Development does not constitute 'EIA development'.

Planning Submission

Notwithstanding the above, the planning submission will be accompanied by a series of assessments setting out the details of the Proposed Development and the results of various technical assessment. These will include the following:

- Planning and Design & Access Statement;

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- Planning Drawings;
- Glint and Glare Assessment;
- Ecological Assessment;
- Flood Risk Assessment and Surface Drainage Strategy;
- Landscape and Visual Impact Assessment
- Cultural Heritage Assessment;
- Noise Assessment
- Agricultural Land Assessment, and
- Transport Statement.

Based on the previously undeveloped nature of the site it is not proposed to submit Phase 1 Ground Condition reports.

The final list of documents to be submitted in support of the detailed planning applications will be confirmed with North Hertfordshire Council. We trust that the contents of this letter along with the attached plans are sufficient to aid you in adopting a screening opinion. We look forward to receiving your response within the statutory three-week period; in the meantime, please do not hesitate to contact us should you have any queries. We look forward to your views on the intended scope of the planning application.

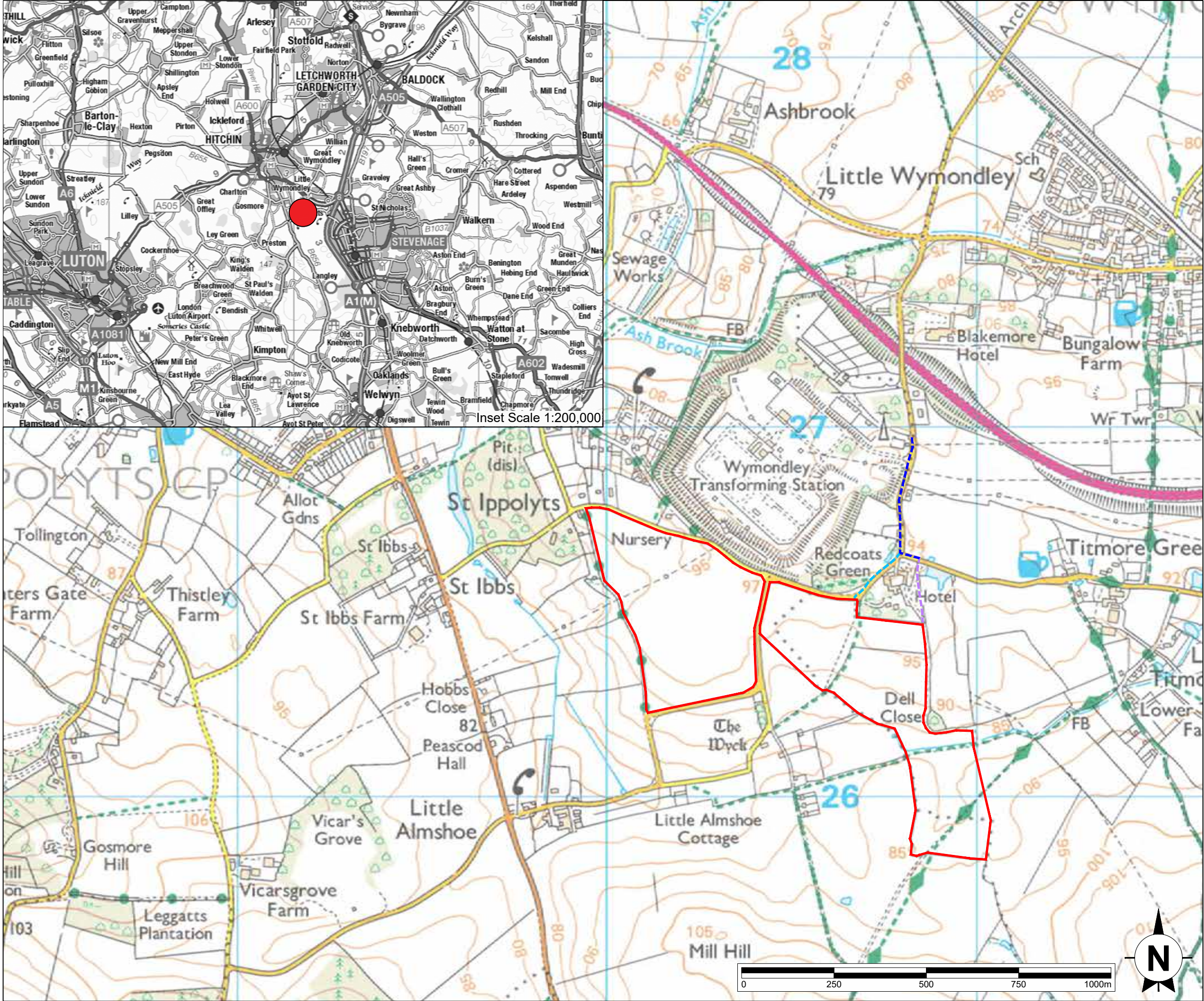
Yours sincerely



Phil Roden
Director

Enclosed:

- Figure 1: site Location Plan
- Figure 2: Draft site Layout
- Figure 3: Environmental Constraints
- Figure 4: Agricultural Land Classification
- Figure 5: DSM ZTV



axis



Site Location



Application Boundary



Grid Connection Route



Grid Connection Route
Option A



Grid Connection Route
Option B

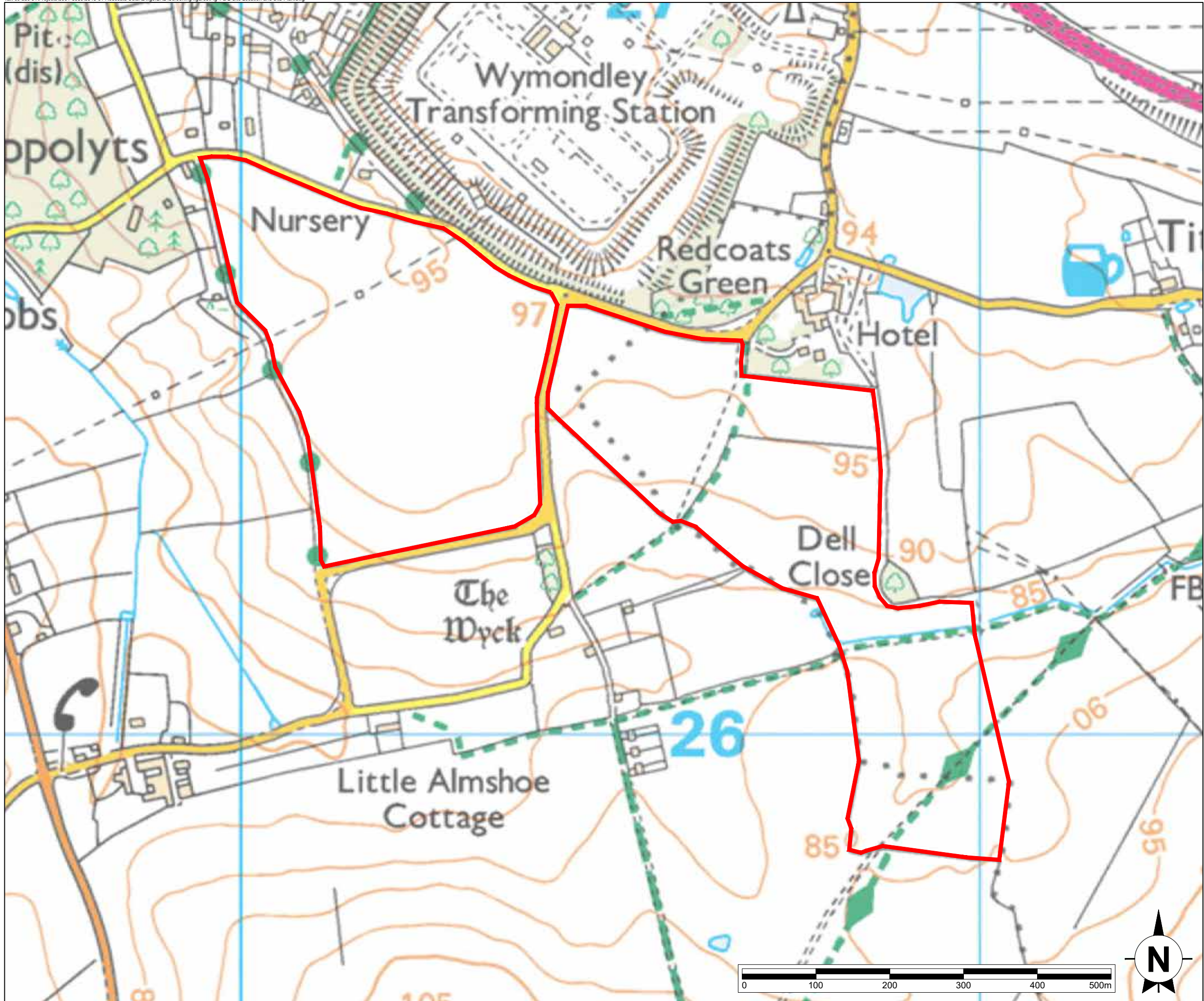
REDCOATS SOLAR

Figure 1

Site Location Plan

Scale
1:10,000 @A3

Date
July 2021



axis

Application Boundary
(339,175m²)

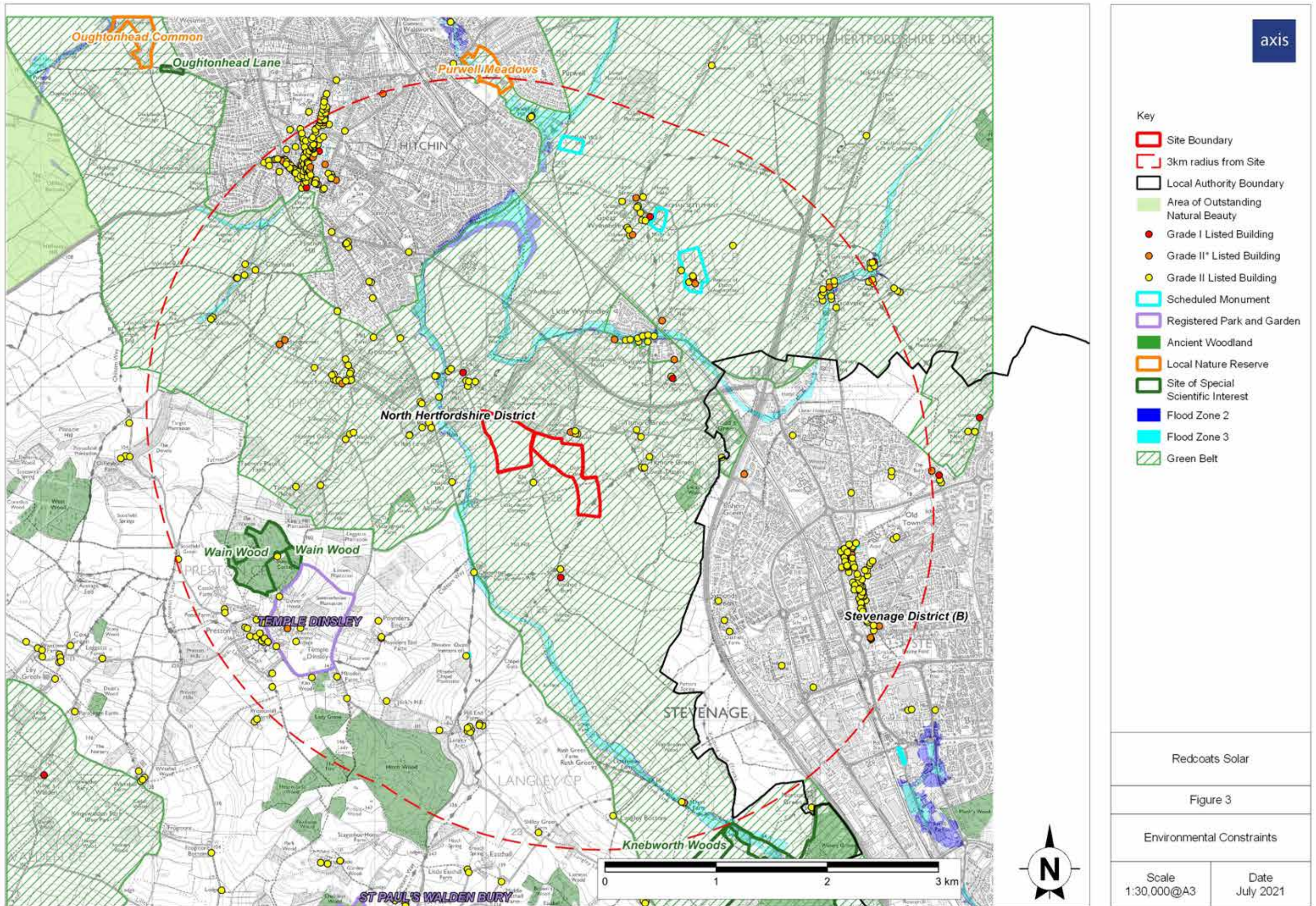
REDCOATS SOLAR

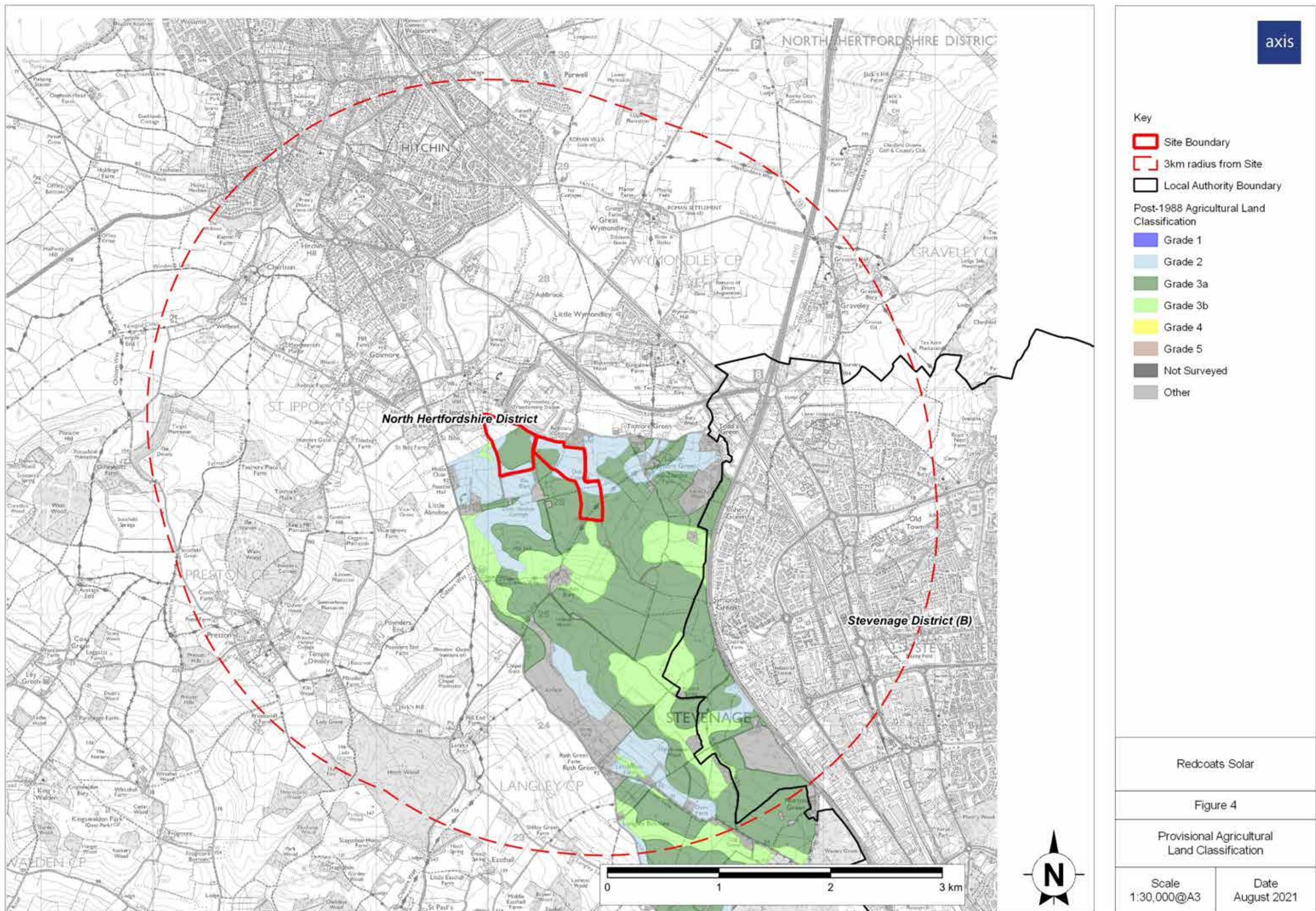
Figure 2

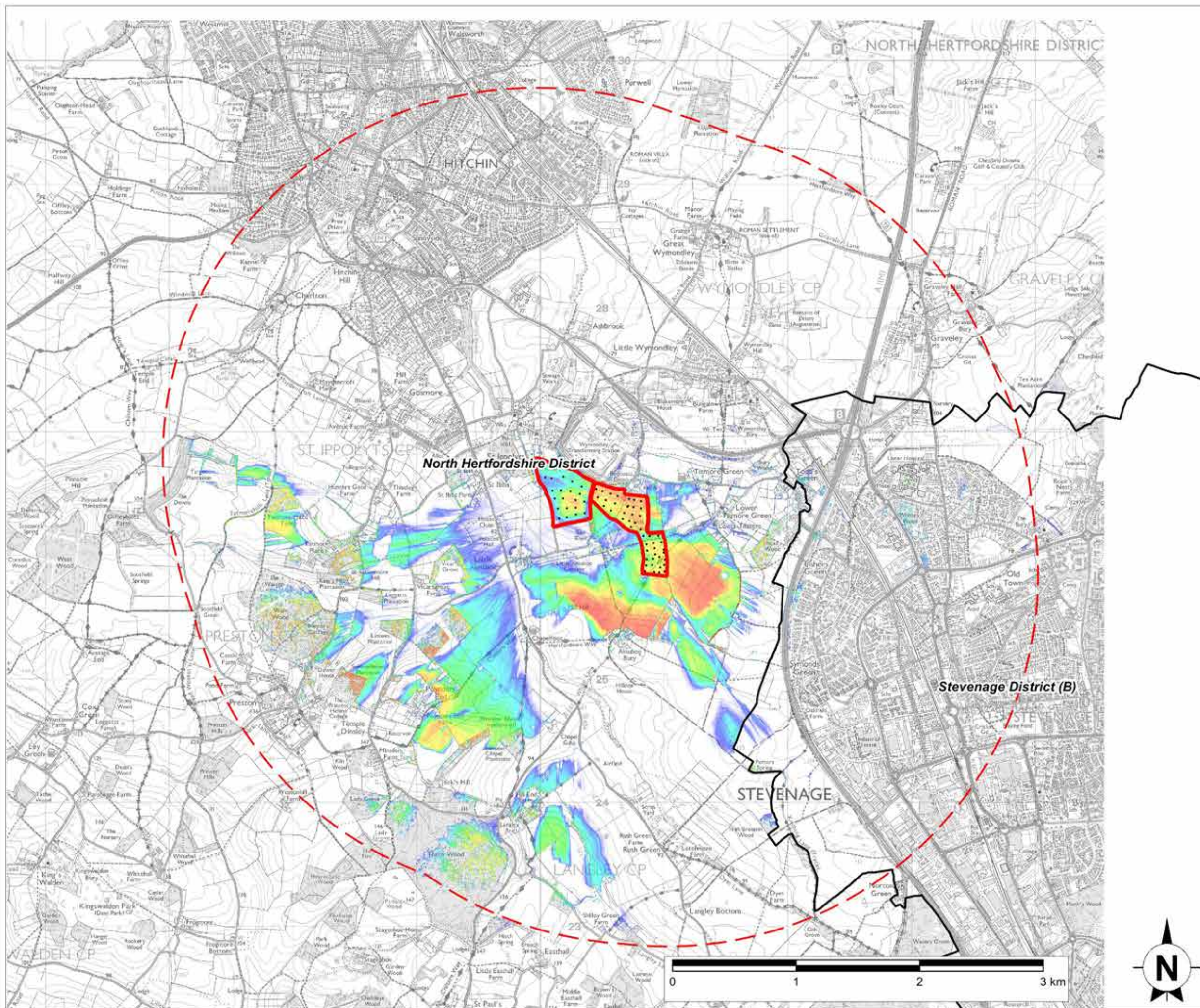
Site Plan

Scale
1:5,000 @A3

Date
July 2021







Key

- Site Boundary
 - 3km radius from Site
 - Location of solar panels used to calculate ZTV
 - Local Authority Boundary
- ZTV of 3m solar panels
- Approx. 1%-17% of development visible
 - Approx. 18%-34% of development visible
 - Approx. 35%-51% of development visible
 - Approx. 52%-68% of development visible
 - Approx. 69%-85% of development visible
 - Approx. 86%-100% of development visible

NOTES

1. Zone of Theoretical Visibility (ZTV) has been generated using BlueSky Mapping 2m photogrammetric Digital Surface Model (DSM) data, which reflects the presence of vegetation, buildings and other structures.
2. ZTV generation has allowed for the curvature of the earth, and for light refraction
3. ZTV has been generated based upon an observer eye height of 1.7m above

Redcoats Solar

Figure 5

Zone of Theoretical Visibility

Scale
1:30,000@A3

Date
July 2021