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Request for Environmental Impact Assessment Screening Opinion

Proposed Ground Mounted Solar Farm and Associated Infrastructure

Land at Water Hall Farm, Waterhall Road, Wixoe, CO10 8UA

Bluefield Renewable Developments Ltd

Report No. SHF.3019.001.PL.R.01.001 – EIA Screening Opinion

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Environmental Impact Assessment Screening Request for a Ground Mounted Solar Farm and Associated Infrastructure.

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Contents

1.0 Introduction

1.1 EIA Regulations

1.1.1 Enzygo Ltd, on behalf of Bluefield Renewable Developments Ltd, request a Screening Opinion under the Town & Country Planning Act (Environmental Impact Assessment) Regulations 2017. This is in order to determine whether an Environmental Impact Assessment (EIA) is required to be submitted for a proposed ground mounted solar farm and associated infrastructure (the "Proposed Development") at land at Water Hall Farm, Waterhall Road, Wixoe, Suffolk, CO10 8UA (the "Application Site"). Please refer to Appendix A for the site location plan.

1.1.2 The proposed development is expected to generate in the region of 35MW of renewable energy and will generate sufficient electricity annually to provide for the needs of approximately **8,100 households per** annum and will save in the region of **5,500 tonnes of CO_2 per annum**; which is the equivalent to taking **3,500 cars off the road**. The importance of renewable energy schemes is reflected within national planning policy (NPPF 2021 paragraph 158(a)) stating local authorities should '*not require applicants to demonstrate the overall need for renewable or low energy carbon energy and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions.'*

1.1.3 The size of the site falls below the threshold of a 'Nationally Significant Infrastructure Project'. As such, it is proposed that permission will be sought under the Town & Country Planning Act through a planning application. Ahead of this Screening Opinion being submitted a Pre-Application Enquiry was made with West Suffolk Council (Ref: PREAPP/21/188) in respect of the planning considerations of the proposed development, and a formal response was received on the 25th June 2021. The response concluded the principle of this development could be supported subject to compliance with the relevant planning policies.

1.1.4 The EIA Regulations set out thresholds for Schedule 1 developments for which Environmental Impact Assessment (EIA) is mandatory. The proposed development does not fall within any of the developments listed in Schedule 1

1.1.5 Where development falls under Schedule 2 development there may be the requirement for an EIA to be undertaken. Included in Schedule 2; Section 3(a), i.e. an *'industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1)'*, where the site exceeds 0.5ha in area. Where development falls under Schedule 2, the need for an EIA is determined based on criteria, which are:

- Development falls within one of the classes of development stated in Schedule 2, **AND**
- **EITHER** exceeds the size threshold for that class of development; **OR** is in a sensitive area as defined by the EIA Regulations; **AND**
- Is likely to have a significant environmental effects due to factors such as nature, size or location.

1.1.6 The exceedance of a Schedule 2 category threshold triggers the need to consider whether the proposed development is EIA Development with reference to the following criteria set out in Schedule 3 of the EIA Regulations. These are;

- Characteristics of the proposed development (e.g. size, cumulative effects with existing/approved developments, use of natural resources, production of waste, pollution nuisance, risk of accidents and risk to human health);
- Location of the proposed development (e.g. environmental sensitivity of the area); and
- Types and characteristics of the potential impacts (e.g. its magnitude, nature, probability and duration).

1.2 Requirement for Environmental Impact Assessment

1.2.1 Environmental Impact Assessment (EIA) is a process for identifying the likely significant consequences of a proposed development on the biological, physical and human environment.

1.2.2 In line with the requirements of Regulation 6(2) of the EIA Regulations, this requests contains the following information to allow West Suffolk Council, as the Local Planning Authority to provide a screening response:

a) A plan sufficient to identify the land;

b) A description of the development, including physical characteristics and description of the location (environmental sensitivity of geographical areas likely to be affected);

c) A description of the aspects of the environment likely to be significantly affected by the development;

d) A description of the aspects of the environment likely to affected by the proposed development and the likely significant effects, taking into account;

- Schedules 2 and 3 of the EIA Regulations;
- The characteristics of the proposed development; and
- The location of the proposed development and its surrounds.

e) To the extent the information is available, a description of any likely significant effects of the proposed development on the environment resulting from; the expected residues and emissions and production of waste, where relevant; and, the use of natural resources, in particular soil, water and biodiversity;

1.2.3 Based on the preliminary work undertaken, and consideration of the relevant selection criteria for screening Schedule 2 development presented in Schedule 3 of the EIA Regulations, it is considered that the proposed development at land at Water Hall Farm is unlikely to have any significant environmental impacts and does not require an Environment Statement to be submitted with a subsequent planning application.

2.0 Site Context and Proposed Development

2.1 The Applicant

2.1.1 Bluefield Renewable Developments Limited ('Bluefield Developments') is part of the Bluefield Group, one of the pioneers of the UK solar sector. The Group has invested over £1bn in the UK solar sector to date on behalf of the funds it advises. The Bluefield Group currently owns and operates over 100 Solar PV assets. These are situated across agricultural land and industrial sites, including Thames Water and Toyota. The portfolio under management has an aggregate capacity of over 750 MWp.

2.1.2 Building on the Group's track record of funding and managing UK solar assets since 2011, Bluefield Development is building a significant pipeline of new, subsidy-free solar projects. Bluefield Development seek to build long-term relationships with landowners to deliver high quality solar projects that provide diversified rural income sources and enhance biodiversity and the local environment.

2.2 Site Context

2.2.1 The site forms part of a larger holding at Water Hall Farm and is made up of three field parcels extending to c. 42ha/103 acres centred on Easting/Northing X: 571101, Y: 243799. The site is set in a rural landscape and rises to the east. The wider landscape rises to the north, east and west.

2.2.2 The site benefits from robust hedgerow boundaries, which can be improved by reinforcement in specific locations. There are a number of blocks of woodland in the immediate landscape surrounding the site. This existing vegetation structure provides effective screening and enclosure to the site from its surroundings that will assist in containing and breaking up the Solar Farm arrays and associated infrastructure within the landscape. There are two dwellings within the site that are in the ownership of the landowner.

2.2.3 The River Stour bounds the southern and western boundaries of the site and flows to the Dedham Vale AONB via the Stour Valley, however this is not considered significant being approximately 35km to the south west located between Colchester and Ipswich.

2.2.4 To the immediate south of the site, beyond the River Stour is the Wixoe Pumping Station, a disused railway line and an occupied industrial estate. The settlement of Kedington is approximately 2km to the north. The small village of Wixoe is circa 0.7km south east beyond which is Stoke by Clare (circa 3km). Baythorne End is 1.3km to the south. Sturmer and Haverhill are approximately 1.1km and 4km respectively to the west of the site. Haverhill benefits from two conservation areas and Stoke by Clare also has a Conservation Area.

2.2.5 There are no heritage assets within the site boundary. There are a number of heritage assets in the wider vicinity (1km buffer) of the site. A Scheduled Ancient Monument (Roman Settlement) lies to the north of site beyond Cotton Hall (circa 1.5km) and to the south east a further Scheduled Ancient Monument (Ring ditches and ritual structure (circa 1.6km).

2.2.6 The site does not lie within any statutory ecological designations such as SSSI/SAC/SPA, nor are there any in the vicinity of the site. The site has no formal designation, nor landscape designation, in the West Suffolk Local Plan.

2.2.7 To the west of the site is grassland and a pond which is designated in the Local Plan as a county wildlife site.

2.2.8 The woodland to the northwest of the site (Stour Mere) is in the National Forest Inventory . A strip of woodland in the southwest is in the Priority Habitat Inventory - Deciduous Woodland (England).

2.2.9 To the west of the site is an area of good quality semi-improved grassland (Non Priority) Priority Habitat Inventory - Coastal and Floodplain Grazing Marsh (England).

2.2.10 An Agricultural Land Classification survey was undertaken on the site in March 2021.The ALC survey identified 30% of the site falling within Grade 3a, and 70% falling within Grade 3b. In conclusion, the ''best and most versatile'' soils only accounts for approximately 30% of the development area. In National and Regional terms this development would not have an impact on the loss of the ''best and most versatile'' soils and the proposed development is fully reversible.

2.2.11 The Environment Agency flood risk maps demonstrate the site is largely located in Flood Zone 1 and at low risk of flooding, however, the site abuts an area of Flood Zone 3 on the western boundary profiling the River Stour's floodplain. The southern boundary also abuts an area of Flood Zone 2. The area to the west of the site has a potential risk of surface water flooding.

2.2.12 The developable area will seek to exclude the Flood Zone 2 and 3 areas to the site boundary, demonstrating the proposed development has been located to the areas at lowest risk of flooding. However it should be noted that the NPPF Annex 3 defines solar farms as essential infrastructure, and so can be located in areas at risk of flooding.

2.3 Proposed Development

2.3.1 The proposed solar photovoltaic farm will have the capacity of circa 35MW.

2.3.2 The proposed development will develop a renewable energy scheme connected to the National Electricity Grid via the Local Distribution Network. Energising the proposals will further enhance the UK's renewable energy supply and reduce the national dependency on fossil fuels. The proposed ground mounted solar farm will generate sufficient electricity for the needs of circa 8,100 households.

2.3.3 The site area is circa 42ha/103 acres. The point of connection to the Grid is located onsite. When identifying potential locations for solar farms, the critical factor is availability of a suitable grid connection in relative proximity to an available and suitable land parcel.

2.3.4 The detail of any PV panel layout may alter ahead of the final planning submission, but would be within the area identified in the Site Location Plan (see Appendix 1) and is likely to contain the following elements;

- Installation of solar arrays mounted on a southern facing axis. The height of the solar arrays will be around 3.0m.
- Substation providing the point of connection from the proposals to the National Electricity Grid.
- The associated infrastructure such as transformers and inverters will be hosted in containers which are not expected to exceed 3.5m in height.
- CCTV will be mounted on 3-4m poles. The development site will be enclosed by a 2m deer fence, with the compound enclosed by a steel mesh security fence up to 2.8m.
- The solar panels will have a non-reflective surface, which will increase the proportion of radiation absorbed, removing the risk of unwanted reflection and glare.

- Inverter/transformer units which will convert the Direct Current (DC) into an Alternating Current (AC) which is compatible with the National Grid.
- Distribution Network Operator (DNO) and client substation, including internal connective cable routes.
- Internal access tracks, to allow ongoing maintenance of the solar farm infrastructure.
- Additional landscaping including new hedgerow with an ecological management plan to increase the biodiversity of the site and demonstrate a biodiversity net gain; and
- Very limited waste will be produced and almost all elements are recyclable, and the proposed development is fully reversible.

2.3.5 The final PV panel to be used on this site has not yet been determined as detailed technical site investigations are currently being undertaken. The findings of these investigations will determine the final layout and panel choice, but as stated above all the panels will be located within the area identified in Appendix 1. The panels will be laid out in arrays oriented so as to maximise renewable energy generation.

2.3.6 To eliminate potential damage and destruction to existing hedgerows and trees on site a buffer zone will be left between the existing hedgerows and the solar panels.

2.3.7 The proposed site access, including construction traffic is to be taken off the existing farm access at Water Hall Farm. This access will then be used for maintenance vehicles for the lifetime of the Solar Farm.

2.4 Pre-Application Advice

2.4.1 Pre-application advice was made with West Suffolk Council (Ref: PREAPP/21/188) in respect of the planning considerations of the proposed development, and a formal response was received on the 25th June 2021. A further meeting was completed with the West Suffolk Council Planning Department (October 2022) to discuss the project. Additional pre-application advice has been undertaken with Place Services in respect of landscape considerations and agreeing viewpoints (6th January 2023).

2.4.2 The response also set out the technical reports that would be required to support any forthcoming application – this list is set out in the conclusion chapter of this document.

3.0 Principle of Development

3.1 National Context

3.1.1 In order to determine whether or not the proposed development constitutes EIA, the assessment must consider all criteria and thresholds outlined in the EIA Regulations.

3.1.2 The Proposed Development does not fall within Schedule I of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, where such development always qualify as an EIA application. The need for an EIA for development listed in Schedule 2 of the EIA Regulations is dependent on whether the development is "*likely to have significant effects on the environment by virtue of factors such as its nature, size or location*" (Schedule 2 Development)

3.1.3 Considering the proposed size of development and due to the anticipated lack of significant environmental impacts, it is considered an EIA will not be required.

3.1.4 In May 2019, a national climate change emergency was declared by the UK Parliament. MPs called on government to make changes that included setting a new target of reaching net zero emissions before 2050. On June 27th, 2019, Parliament approved the net zero target in law, thereby changing the original target of 80% reduction of greenhouse gas emissions in the UK to 100%. The aim of this target is that it is addressed by the UK and not to rely on international carbon credits.

3.2 National Policy and Guidance

3.2.1 Below we summarise the relevant national policy and guidance.

National Planning Policy Framework (2021)

3.2.2 The NPPF recognises the importance of renewable energy, highlighting the abundance of resources, and the benefits renewable energy developments can bring. It provides a set of national planning objectives which facilitate growth, protect the environment and ensure decisions are made at a local level. There are no direct references to ground mounted solar development.

3.2.3 Whilst the NPPF does not directly reference solar farms, it does encourage transition to a low carbon future by utilising renewable energy. To support this transition to renewable sources, the NPPF (2021, paragraph 155) states development plans should:

> *a) Provide a positive strategy for energy from these sources, that maximises the potential for suitable development while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);*
>
> *b) Consider identifying suitable areas for renewable and low carbon energy sources and supporting infrastructures, where this would help secure their development; and*
>
> *c) Identify opportunities for development to draw its energy from decentralise, renewable or low carbon energy supply systems and for co-location potential heat customers and suppliers.*

3.2.4 The NPPF (2021, paragraph 158) also states that applicants should not have to demonstrate the overall need for renewable or low carbon energy and that the application should be approved "*if its impacts are (or can be made) acceptable".*

EN-1: Overarching National Policy Statement for Energy (2011)

3.2.5 EN-1 was published in July 2011 and sets out national policy for energy infrastructure in the UK. The primary purpose of the policy is to be applied to decisions for Nationally Significant Infrastructure Projects. It is confirmed, however that this document can be a material consideration in the determination of planning applications.

3.2.6 Paragraph 3.4.1 sets out the UK commitments to sourcing 15% of energy from renewable sources by 2020. To hit this target, and to largely decarbonise the power sector by 2030, EN-1 states that: "*It is necessary to bring forward new renewable electricity generating projects as soon as possible. The need for new renewable energy electricity generation projects is therefore urgent*."

3.2.7 The National Policy Statement depicts how the energy sector can help deliver the Government's climate change objectives by clearly emphasising the need for new low carbon energy infrastructure to contribute to climate change mitigation.

EN-3: National Policy Statement for Renewable Energy Infrastructure (2011)

3.2.8 **EN-3**, also published in July 2011, sets out government policy used to guide decision-makers when determining nationally significant energy infrastructure. EN-3 should be read in conjunction with EN-1.

3.2.9 Similar to EN-1, EN-3 lays out the importance of renewable energy in achieving the Government's targets for renewable energy generation, stating that a *"significant increase in generation from large-scale renewable energy infrastructure is necessary to meet the 15% renewable energy target".*

3.2.10 A draft update of EN-3 was published in September 2021 for consultation. The draft policy includes general principles to be applied in the assessment of development consent application, and policy on the assessment of impacts and other matters specific to biomass and EfW, offshore wind energy, pumped hydro storage, solar PV and tidal stream energy. Of particular relevance is paragraph 2.47.1 which states:

> *The government has committed to sustained growth in solar capacity to ensure that we are on a pathway that allows us to meet net zero emissions. As such solar is a key part of the government's strategy for low-cost decarbonisation of the energy sector.*

Department for Communities and Local Government: Planning practice guidance for renewable and low carbon energy (2013)

3.2.11 The Department for Communities and Local Government outlined relevant planning considerations when assessing solar applications. The main considerations are listed below:

- *encouraging the effective use of previously developed land, and if a proposal does involve greenfield land, that it allows for continued agricultural use and/or encourages biodiversity improvements around arrays;*
- *that Solar PV Farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use;*
- *the effect on landscape of glint and glare and on neighbouring uses and aircraft safety;*

- *the extent to which there may be additional impacts if solar arrays follow the daily movement of the sun;*

- *the need for, and impact of, security measures such as lighting and fencing;*

- *great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large-scale Solar PV Farms on such assets. Depending on their scale, design and prominence, a large-scale Solar PV Farm within the setting of a heritage asset may cause substantial harm to the significance of the asset;*

- *the potential to mitigate landscape and visual impacts through, for example, screening with native hedges; and*

- *the energy generating potential, which can vary for several reasons including, latitude and aspect. The approach to assessing cumulative landscape and visual impact of large-scale Solar PV Farms is likely to be the same as assessing the impact of wind turbines. However, in the case of ground-mounted solar panels it should be noted that with effective screening and appropriate land topography the area of a zone of visual influence could be zero.*

House of Commons Briefing Paper 07434: Solar Farms: Funding, and Planning (2015)

3.2.12 The House of Commons released a briefing paper in December 2015 titled Solar Farms: Funding, Planning and Impacts which outlines the planning process and agricultural issues relating to solar farm developments. The report outlines the UKs plans for meeting the EU renewables targets and how solar can play an integral part in reaching these goals. It relays the NPPFs policy thrust that:

> *LPAs 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 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.*

The 6th Carbon Budget (December 2020)

3.2.13 The Sixth Carbon Budget, required under the Climate Change Act, provides ministers with advice on the volume of greenhouse gases the UK can emit during the period 2033-2037. The Sixth Carbon Budget can be met through four key steps:

- Take up of low-carbon solutions. People and businesses will choose to adopt low-carbon solutions, as high carbon options are progressively phased out. By the early 2030s all new cars and vans and all boiler replacements in homes and other buildings are low-carbon – largely electric. By 2040 all new trucks are low carbon. UK industry shifts to using renewable

electricity or hydrogen instead of fossil fuels, or captures its carbon emissions, storing them safely under the sea.

- Expansion of low-carbon energy supplies. UK electricity production is zero carbon by 2035. Offshore wind becomes the backbone of the whole UK energy system, growing from the Prime Minister's promised 40GW in 2030 to 100GW or more by 2050. New uses for this clean electricity are found in transport, heating, and industry, pushing up electricity demand by a half over the next 15 years, and doubling or even trebling demand by 2050. Low-carbon hydrogen scales-up to be almost as large, in 2050, as electricity production is today. Hydrogen is used as a shipping and transport fuel and in industry, and potentially in some buildings, as a replacement for natural gas for heating.

- Reducing demand for carbon-intensive activities. The UK wastes fewer resources and reduces its reliance on high-carbon goods. Buildings lose less energy through a national programme to improve insulation across the UK. Diets change, reducing our consumption of high-carbon meat and dairy products by 20% by 2030, with further reductions in later years. There are fewer car miles travelled and demand for flights grows more slowly. These changes bring striking positive benefits for health and well-being; and

- Land and greenhouse gas removals. There is a transformation in agriculture and the use of farmland while maintaining the same levels of food per head produced today. By 2035, 460,000 hectares of new mixed woodland are planted to remove CO_2 and deliver wider environmental benefits. 260,000 hectares of farmland shifts to producing energy crops. Woodland rises from 13% of UK land today to 15% by 2035 and 18% by 2050. Peatlands are widely restored and managed sustainably.

British Energy Security Strategy (Updated 7th April 2022)

3.2.14 The April 2022 Energy Security Strategy was published in response to steeply rising energy costs and is clear that the government seeks energy sovereignty – "*a power supply that's made in Britain, for Britain*" – as a means of managing energy affordability.

3.2.15 The strategy reaffirms the government's commitment towards 'net zero' energy production to 95% of energy being low carbon by 2030, and 100% by 2035.

3.2.16 For solar specifically the government strategy states a continued support for ground-mounted solar on 'lower value land' where possible and co-located with other functions such as agricultural or other uses in order to maximise the efficiency of land use.

3.2.17 Land at Water Hall Farm is precisely the kind of site and proposal that the government seeks to support – the site is comprised of predominantly lower value agricultural land, and during the life of the solar farm will continue to be in agricultural use. These proposals will help towards decarbonisation and help in addressing rapidly increasing energy costs in that it will "*reduce… our reliance on imported oil and gas and deliver… a radical long-term shift in our energy with cleaner, cheaper power, lower energy bills and thousands of high wage, high skilled new jobs.*"[1]

[1] https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy

3.3 Development Plan

West Suffolk Local Plan (consisting of the former Forest Heath & St Edmundsbury areas)

3.3.1 The extant West Suffolk Local Plan (consisting of the former Forest Heath District (FHDC) and former St Edmundsbury Borough (SEBC) Local Plan documents) sets out the long term planning and land use policies within West Suffolk. The local plan includes documents previously referred to as the Local Development Framework (LDF). The Local Plan contains:

- Joint Development Management Policies 2015
- Core Strategy 2010
- Rural Vision 2031

3.3.2 The application site falls within the former St Edmundsbury Borough.

3.3.3 Emerging policy documents include the West Suffolk Local Plan which between May and June 2022 undertook Preferred Options Regulation 18 consultation, and is currently scheduled for adoption in July 2024, so still at an early stage of preparation.

3.3.4 The Local Plan policies map extract below (see Figure 1) shows that the application site is within the open countryside, and does not fall into any other designations. The brown dotted area to the west of the site is a county wildlife site.

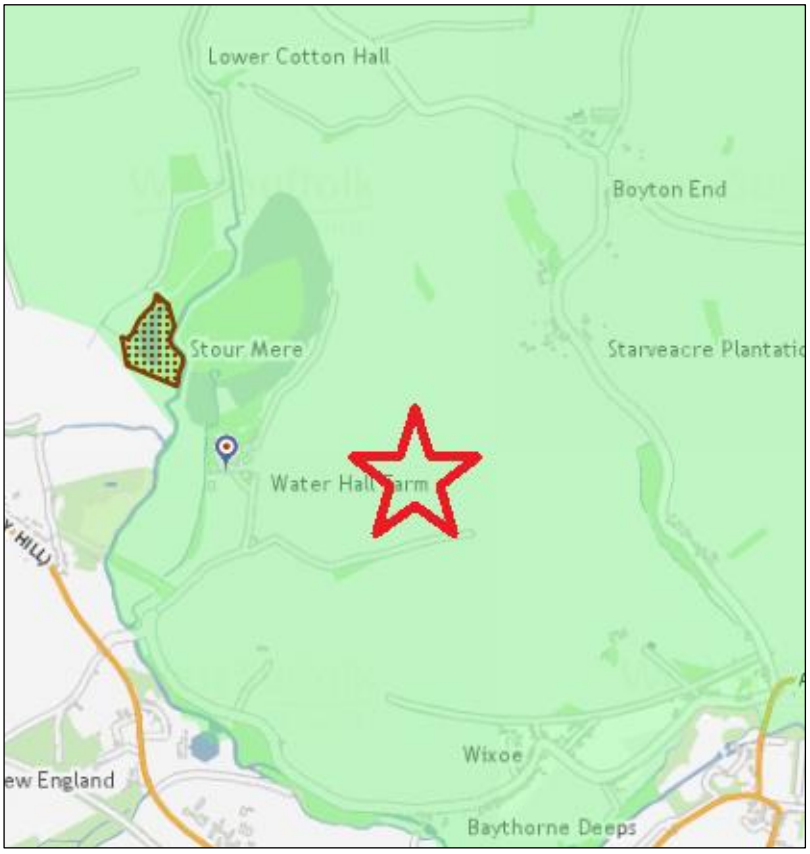

Figure 1: Extract of St Edmunsbury Borough Council Local Plan Policies Interactive Map, general site area denoted by red star.

3.3.5 The key Joint Development Management Policies in respect of the development proposal are Policy DM8: Low and Zero Carbon Energy Generation, Policy DM5: Development in the Countryside, and Policy DM6: Flooding and Sustainable Drainage – these are set out in more detail below.

3.3.6 Policy DM8: Low and Zero Carbon Energy Generation - All proposals for generation or recovery of low carbon or renewable energy, such as wind turbines, biomass, and combined heat and power, will be encouraged subject to the following criteria:

a. proposals will be required to demonstrate the new carbon saving benefit that they will create, taking into account both carbon dioxide savings from renewable energy generation and any additional carbon dioxide generation that results from the proposal;

b. proposals will be required to include a landscape and visual assessment which should, where appropriate:

i. show the impact of the proposal in the landscape or townscape. All development should be designed and sited to minimise intrusion and visual impact;

ii. include mitigation measures to address the visual impact of the scheme;

iii. include an appraisal of the impact on the environment of the proposal either in isolation or cumulatively with any other similar developments;

c. where appropriate the proposal includes provision for mitigation and compensation measures, such as habitat enhancement or relocation.

All proposals will need to demonstrate to the satisfaction of the Local Planning Authority that due regard has been given to the following:

d. the impact of off-site and on-site power generation infrastructure including achieving underground connections to the electricity grid system; and

f. soil quality is not affected adversely by either construction or the operation or decommissioning of the development.

3.3.7 The policy justification sets out proposals for the development of renewable energy technologies will be assessed in respect of their impact on the natural and historic environments with impacts on identified assets being assessed against Policies DM5, DM8, DM12, DM13, DM15, DM20, DM31 and DM44. The assessment of visual impacts will also take into consideration cumulative landscape impacts.

3.3.8 Policy DM5: Development in the Countryside - Areas designated as countryside will be protected from unsustainable development. No reference is made to renewable energy schemes.

3.3.9 Proposals for economic growth and expansion of all types of business and enterprise that recognises the intrinsic character and beauty of the countryside will be permitted where:

- it will not result in the irreversible loss of best and most versatile agricultural land (grades 1, 2 and 3a);
- there will be no significant detrimental impact on the historic environment, character and visual amenity of the landscape or nature conservation and biodiversity interests; and

- there will be no significant adverse impact on the local highway network.

3.3.10 **Policy DM6: Flooding and Sustainable Drainage** - Proposals for all new development will be required to submit schemes appropriate to the scale of the proposal detailing how on-site drainage will be managed so as not to cause or exacerbate flooding elsewhere.

3.3.11 Other relevant polices include:

Joint Development Management Plan Policies 2015

- Policy DM1 – Presumption in favour of Sustainable Development
- Policy DM2 – Creating Places – Development Principles and Local Distinctiveness
- Policy DM10 – Impact of Development on Sites of Biodiversity and Geodiversity Importance
- Policy DM11 – Protected Species
- Policy DM12: Mitigation, Enhancement, Management and Monitoring of Biodiversity
- Policy DM13: Landscape Features
- Policy DM14 – Protecting and Enhancing Natural Resources, Minimising Pollution and Safeguarding from Hazards
- Policy DM15: Listed Buildings
- Policy DM17 – Conservation Areas
- Policy DM20: Archaeology
- Policy DM31: Farm Diversification
- Policy DM44: Rights of Way
- Policy DM45: Transport Assessments and Travel Plans

Core Strategy 2010

- Policy CS2 – Sustainable Development
- Policy CS3 – Design and Local Distinctiveness
- Policy CS13 – Rural Areas

The Rural Vision 2031

3.3.12 The Rural Vision 2031 provides a framework for managing the pressures and opportunities for growth in rural St Edmundsbury over the next two decades. **Aspiration 12** of the Rural Vision '*Optimal use of the natural resources within the district is made, with sensitivity to local concerns (such as those over visual amenity, health and wellbeing), to generate low and zero carbon energy*'.

3.3.13 Relevant policies include:

- Policy RV1 – Presumption in Favour of Sustainable Development

- Policy RV9 – Green Infrastructure in the rural areas

Pre-application Response

3.3.14 The pre-application response was clear that the West Suffolk LPA are supportive of renewable projects "*where they accord with the development plan and do not have significant adverse effects on ecology, landscape or biodiversity. As with any proposal, the only way to fully test the merits of the proposed development would be through the submission of a formal planning application*."

4.0 Screening Consideration

4.1 Landscape and Visual Impact

Site Characteristics

4.1.1 The application site is not within a designated landscape area. The majority of the developable area lies within the 'Undulating Estate Farmlands' landscape character type which is described as an "undulating arable landscape with parklands plantations and ancient woodland" the key characteristics of which are:

- *"Undulating arable landscape.*
- *Organic field pattern rationalised by estate ownership.*
- *Oak, ash and field maple as hedgerow trees.*
- *Complex arrangements of plantations especially in the north.*
- *Ancient woodlands.*
- *Landscape parks and ornamental tree species.*
- *Substantial open areas created for airfields and by post WWII agricultural improvement.*
- *Dispersed settlement pattern of loosely clustered villages, hamlets and isolated farmsteads especially in the north.*
- *Settlements more clustered and less dispersed in the south.*
- *Rich stock of mediaeval and Tudor timber-framed and brick buildings and moated sites.*
- *A landscape of well wooded farmland in many places often with a well-kept appearance."*

4.1.2 As part of the pre-application process with West Suffolk Council additional consultation was undertaken with Place Services regarding landscape matters and how future proposals should relate and respond to the landscape setting and context. The design considerations and recommendations from that consultation will be included in the design process of the proposed solar farm.

Potential Sensitive Receptors

4.1.3 *The principal sensitive receptors include:*

- Public Rights of Way
  - Users of the Stour Valley Path of the northern part of the site, and particularly from the west;
  - Users of the footpaths to the west of the site and east of Sturmer;
  - Users of the local road along the southern boundary of the developable area that accesses Wixoe;

- Users of the track to the west of the site that runs from Watsoe Bridge towards Waltons Farm; and
- Users of the A1017 Rowley Hill road.

- Residential Properties and Farmsteads.
  - Properties on Fordwater Cottage south of the site;
  - Properties on Wixoe Lane south of the site; and
  - Properties west of the A1017 beyond the water treatment works on rising land.

4.1.4 There may also be oblique and glimpsed views of the southern part of the site from upper storey properties within Wixoe, although the majority of views will be screened by the former railway embankment and its associated vegetation.

4.1.5 Views from the majority of other private residences, farm houses and built up areas will be screened by the intervening rolling topography and vegetation.

Landscape Visual Effects

4.1.6 There are a number of sensitive receptors who may experience adverse landscape and visual effects as a result of the scheme. However, there are opportunities to introduce mitigation which will assist in reducing those effects to a sustainable level as well as providing endearing environmental benefits in terms of landscape, ecology and water environment.

4.1.7 In summary, it is considered that the proposed development can be accommodated within the local landscape and the **impact on the local landscape will be minimal**. The proposal represents a modest development on the landscape, and where landscape and visual impacts are identified they will be suitably mitigated through a robust landscaping plan, in line with national policy. With appropriate design and landscape measures **no significant landscape and visual effect are anticipated.**

4.2 Cumulative Effects

4.2.1 West Suffolk Council have granted planning permission for seven solar farms, indeed the 12.4MW solar farm at Toggam Farm in Lakenheath, is one of the largest Council owned Solar Farms in the country. The nearest Solar farm is approximately 7.5km north of the site. Due to the separation distance the potential cumulative landscape impacts are considered unlikely to be a constraint.

4.2.2 The application will be supported by an LVIA which will assess the cumulative impact from the existing, and proposed, solar farms in the locality.

4.2.3 We are aware of Longfield Solar Farm, which due to its generation capacity of 500MW is a Nationally Significant Infrastructure Project (NSIP). Longfield Solar Farm is a considerable distance from the application site being c. 30km south.

4.3 Ecology

4.3.1 The proposed development site does not lie within any statutory environmental designated sites. The site lies within a rural landscape and comprises large arable field units with boundaries supporting native hedgerow, scrub and small woodland blocks. Land to the north and east comprises further open arable farmland, with a water treatment plant and further farmland to the

south. Land immediately to the north-west is identified as a floodplain. Beyond this floodplain and in close proximity along the length of the western and southern boundaries is the River Stour.

4.3.2 The application will be supported by an Ecological Impact Assessment with a biodiversity management plan, including a biodiversity matrix setting out the ecological improvements that can be introduced onto the site.

Ecological Effects

4.3.3 A preliminary ecology walkover was undertaken on the 3rd March 2021. It identified the scope of surveys required to support an application for a solar farm on site. The following Phase 2 surveys were identified as potentially being required:

- Badger Survey
- Dormouse Survey (depending on required hedgerow removal)
- Potential need for wintering birds survey (these surveys are currently being undertaken).

4.3.4 It is well known that solar farms provide an excellent opportunity to deliver biodiversity benefits. The application will be supported by an Ecological Appraisal with a biodiversity management plan setting out biodiversity improvements that could be introduced to the site.

4.3.5 As recommended by the pre-application response from the local authority, the proposal will be supported by a comprehensive landscaping plan, utilising the Defra biodiversity net-gain metric to demonstrate that the proposal will provide at least a 10% net-gain in biodiversity.

4.3.6 It is anticipated that with the implementation of a biodiversity management plan and sympathetic site design potential impacts can be successfully implemented to **ensure there are no significant effects** on the ecological assets of the site and indeed a significant net gain in biodiversity will be delivered through the proposal.

4.4 Heritage and Archaeology

4.4.1 There are no heritage assets within the site boundary. There are 30 heritage assets within a 1km buffer of the development sites (see Figure 2 below). These heritage assets are predominantly Grade II or unlisted, but also include the following Grade II* and Grade I buildings:

- CHURCH OF ST LEONARD - **Grade: II*** List Entry Number: 1236079
- EAGLE FARM COTTAGES - **Grade: II*** - List Entry Number: 1122345
- THE LINNETTS - **Grade: II*** - List Entry Number: 1338393
- BAYTHORNE HALL - **Grade: I** - List Entry Number: 1338344

4.4.2 Within 5km of the site, there are 3 Conservation Areas: 1 in Stoke by Clare (3km) and 2 in Haverhill (4km). A Scheduled Ancient Monument (Roman Settlement) lies to the north of site beyond Cotton Hall (circa 1.5km) and to the south east a further Scheduled Ancient Monument (Ring ditches and ritual structure (circa 1.6km). There are no World Heritage Sites or Registered Historic Battlefields within 5km of the site.

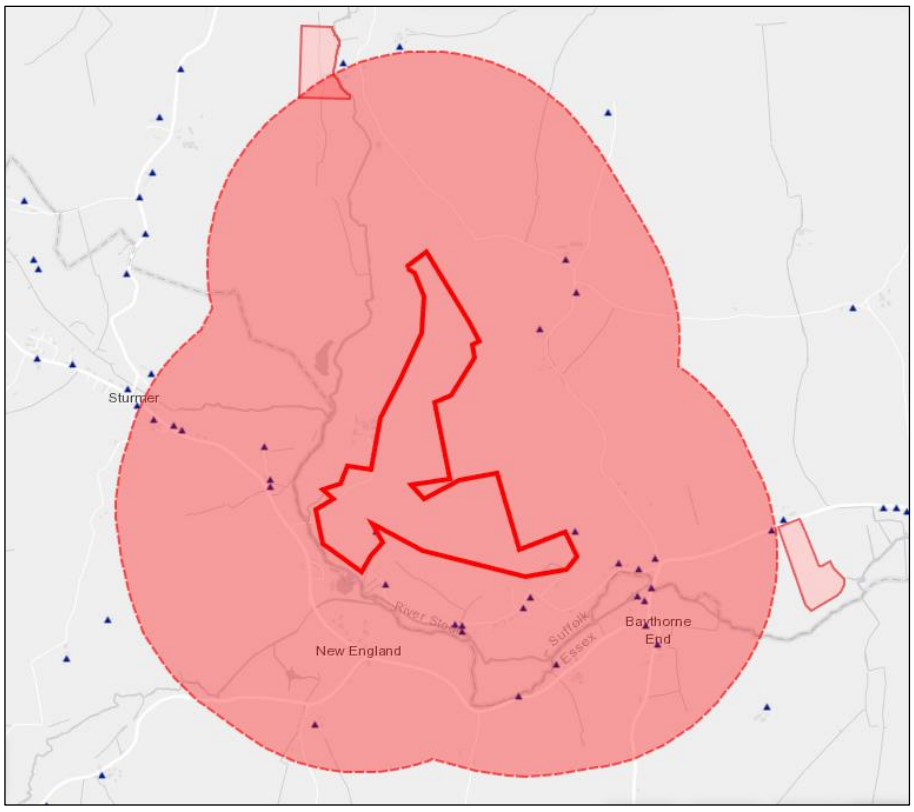

Figure 2 – Extract from Historic England Map Search (1km buffer)

4.4.3 Adjacent to the southern site boundary is Water Hall (Grade II) which is set within mature trees, and so is well screened from the site. To the south east of the site (circa 1km) is the Grade I Listed Baythorne Hall heritage asset. The robust vegetation and intervening topography screens the site from the Listed Building. To the east of the site (circa 0.5km) there are three Grade II listed farm buildings, and there are clusters of listed buildings within Baythorne End, however they are set within the built form of the village.

4.4.4 Beyond the southern boundary of the site there are several listed buildings that either follow the line of the river or the disused railway, however, these are considered well screened by the vegetation provided by the riverbanks.

4.4.5 A Geophysical Survey will also be undertaken in order to support the forthcoming planning application, to understand the potential archaeology significance of the site.

4.4.6 It is considered the impacts on any identified heritage assets would be minimal, particularly when compared to the significant benefits of delivering a significant output of renewable energy. The impact on the setting of these assets can be assessed in line with the NPPF, through a heritage impact assessment to demonstrate the impact would lead to **less than substantial harm**, balanced against the substantial benefits. Regarding listed buildings over a 1km from the site, it is considered that the intervening hedgerow, tree belts and existing built form mean that the overall visual impact on these heritage assets are **not likely to be significant.**

4.4.7 Consideration will be given to potential archaeological significance of the site and will be fully considered within a Heritage & Archaeology Desk Based Assessment. Due to the low level impact

of solar development below ground it is considered any impacts on currently unknown archaeological remains **are not likely to be significant**.

4.5 Flood Risk

4.5.1 The majority of the site is located within Flood Zone 1 and is at low risk of flood risk and surface water flooding and entirely suitable for the proposed development. A very small section of the site is within Flood Zones 2 and 3.

4.5.2 Solar Farms are considered to be "*water compatible*" (i.e., developments requiring water or developments which will not be affected by water) therefore the consequences of surface water flooding would be low. Solar Farms are therefore flood resilient.

4.5.3 The positioning of the solar arrays and associated infrastructure will seek to utilise those areas within Flood Zone 1. Similarly, the position of the associated infrastructure would also be located in Flood Zone 1.

4.5.4 The application would be supported by a Flood Risk Assessment (FRA). There are not expected to be any residual significant effects from the proposed development. Following the implementation of any mitigation measures identified in the FRA it is considered that the any potential hydrological affects are **not likely to be significant**.

4.6 Traffic and Access

4.6.1 The existing access to the farm will be used for the construction phase of the proposals, as well as by maintenance vehicles for the lifetime of the Solar Farm. A Transport Statement will be submitted in support of the application and early engagement has taken place with Essex County Council in respect of site access to the wider road network.

4.6.2 The site access is approximately 500m from the A1017, offering excellent access to the wider strategic highway network.

4.6.3 A Construction Traffic Management Plan (CTMP) will be submitted in support of the planning application. This will provide a framework for the management of the construction and delivery phase of the application site, as well as considering the size and number of vehicle trips generated. The traffic assessment will also consider the operational and decommissioning phases of the project

Potential Effects

4.6.4 During the construction phase of the proposed development traffic volumes will increase. However, it is anticipated that the construction phase of the project will be circa 6-9 months. However, the overall volume of traffic generated by a solar scheme of this scale is considered **to be low** and the site benefits from an existing access.

4.6.5 Materials will be bought onto the site using HGV vehicles with the equipment stored within a temporary compound within the site boundary.

4.6.6 The existing access to Water Hall Farm will be utilised for the Construction Phase of the project and future ongoing maintenance.

4.6.7 Due to the proximity of the A1017 the routing of construction vehicles is not considered to be problematic.

4.6.8 During the operational phase of the proposed development vehicle movements will only be one or two trips per month made by a light van or 4x4 vehicle.

4.6.9 The number of vehicle movements during the decommissioning phase will not exceed the construction phase.

4.6.10 Considering the above it is concluded that likely transport and access impacts associated with the proposed development can be fully mitigated and impacts on traffic are **not considered likely to be significant.**

4.7 Noise

4.7.1 Solar panels do not generate noise. The solar arrays will be south-facing and stationary. The main noise source from solar farms relates to the inverters. This is due to an internal fan which cools the inverters during operation.

4.7.2 The nearest settlement to the proposed development is Wixoe, which is approximately 550m to the east of the application boundary and the nearest point. The closest residential receptor not in the ownership of the applicant is along Water Hall Road, circa 150m to the south east. Where appropriate, the layout of the scheme will respond to the nearby residential receptors to minimise any impacts on them.

4.7.3 Potential effects relating to noise are anticipated to be **not significant** due to the very low noise output of a solar farm and the distances between source and receptors.

4.8 Agricultural Land Classification

4.8.1 An agricultural land classification survey identified that 70% of the development site does not represent the best and most versatile agricultural land.

4.8.2 Whilst the proposal is to utilise the land parcels for renewable energy generation, the land will continue to be in use for agricultural purposes such as hay mowing or grazing.

4.8.3 It is considered the use of circa 42ha/103 acres of agricultural land which is predominantly *not* best and most versatile for renewable energy generation, for a temporary period is a local planning policy issue and does not require a detailed Environmental Impact Assessment, and the **potential impact is not considered significant.**

4.9 Glint and Glare

4.9.1 There may be small amounts of glint and glare from the metal structures associated with solar farms, although the main source of glint and glare will be from the panels themselves.

4.9.2 Solar panels are designed to absorb as much light as possible and not to reflect it. Potential effects on receptors can include:

- Glint – a momentary flash of bright light (typically experienced by moving receptors) and
- Glare – a continuous source of bright light (typically experienced by static receptors)

4.9.3 Glint is most likely to impact a ground based receptor close to dusk and dawn when the sun is at its lowest. The glint will be reflected to the west at dawn and east at dusk. Areas to the north and south of the solar farm can be discounted due to the position of the sun when reflections are close to the ground.

4.9.4 A Glint & Glare Assessment will be submitted in support of the application and will consider the impact in relation to the visibility of the solar reflection including levels of screening (existing and proposed), the sensitivity of receptors, location of origin of the solar glare, time and duration of any reflection, location of the sun at the time of solar reflection and solar reflection intensity (aviation only).

4.9.5 Ridgewell Airfield is within 30km of the site and will be considered taking into account the approach paths for the runways, though due to the separation distance and small scale nature of the aviation operations **no significant potential effects** are anticipated.

4.9.6 Overall, it **is not anticipated that glint and glare will have a significant effect on road safety, residential amenity or aviation assets**.

4.10 Other Considerations

4.10.1 The development is a passive development in that there will be no pollution or emissions of gas, light or waste, will not cause a risk of accidents or impact on human health

4.10.2 In terms of the other criteria, the magnitude and complexity of the impact is expected to be limited and confined to the local area and is predictable. The duration and frequency of the potential impacts are not significant and are reversible.

5.0 Conclusion and Summary

5.1.1 The proposed development does not fall within Schedule 1 of the EIA Regulation, but it does fall within Paragraph 3(a) of Schedule 2 of the EIA Regulations, as an industrial installation for the production of electricity.

5.1.2 The threshold for paragraph 3(a) development to qualify as Schedule 2 development is 0.5ha. Since the site area is circa 42ha/103 acres, this threshold has been exceeded. However, not all Schedule 2 developments automatically require an EIA.

5.1.3 Considering the selection criteria of Schedule 3 of the EIA Regulations it has been concluded from the initial site assessments of the proposed solar farm and associated infrastructure at Water Hall Farm that the environmental affects **will not be significant.** It can therefore be concluded that with mitigation (if required) there **will be no residual effects** from the proposed development.

5.1.4 It is anticipated that the proposed solar farm will have some **very limited visibility** for some nearby residents. It is located within a rural landscape and does not lie within any statutory environmental designation. The site benefits from mature hedgerows and blocks of woodland which will help screen and enclose the site. It is considered that any effect will **not be significant**, with suitable mitigation and sensitive design to further reduce the visual impact of the proposed development.

5.1.5 A Glint and Glare Assessment will be submitted in support of the application; however, due to the site topography, surrounding woodland and orientation of the nearby receptors, the impacts of glint and glare will **not be significant.**

5.1.6 The proposed development will be supported by the necessary Phase 2 ecological surveys to demonstrate that the development will not impact the existing ecology of the site. The scheme will use the Defra biodiversity net-gain metric to demonstrate at least a 10% net-gain in biodiversity.

5.1.7 Residual effects upon heritage assets and archaeology will be limited. The application will be supported by a Heritage Impact Assessment and Archaeological Site Assessment which will include a geophysical survey. Due to the existing screening, in addition to the proposed landscaping mitigation strategy, the impact on the setting and significant of the heritage assets is anticipated to be **low.**

5.1.8 The proposal will be supported by a full Landscape and Planting Plan to improve and enhance the field parcel boundaries. The local rights of way network will be considered through the development of the Landscaping Plan to minimise the impact of the development on users of the rights of way network in the locality.

5.1.9 As such, it is considered that the proposed development **is not** EIA development and does **not** require an Environment Statement to be submitted with a future planning application.

5.1.10 The location of the proposed development has been carefully selected to reduce any potential effects by being sited at a distance from any landscape, environmental, heritage or ecological designations.

5.1.11 Notwithstanding the Council response to this EIA Screening Opinion, the pre-application response from the Council recommended that any subsequent planning application be accompanied by the following technical assessments to fully assess the potential environmental impacts;

- Landscape Visual Impact Assessment;

- Heritage Impact Assessment (including Archaeological Assessment);
- Ecological Impact Assessment (including Biodiversity Net-Gain assessment);
- Tree Survey with Arboricultural Report;
- Flood Risk Assessment and Sustainable Drainage Strategy;
- Transport Assessment;
- Design and Access Statement;
- Noise Impact Assessment;
- Lighting Scheme;
- Existing and proposed car parking and access arrangements; and
- Agricultural Land Classification Report.

5.1.12 In addition we will provide the following:

- Drawing package;
- Planning Statement;
- Statement of Community Involvement;
- Construction Traffic Management Plan;
- Phase 1 Risk Assessment; and
- Glint & Glare Assessment;

5.1.13 Any additional surveys identified as the technical assessments progress will be undertaken pre-submission so that a robust, comprehensive planning application is submitted that fully assesses and addresses actual or potential environmental impacts, to enable the Council to determine the application in a timely manner.

6.0 Appendix A – Site Location Plan

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