



Academy of Light Solar Development

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Non-Technical Summary

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Sunderland Association Football Club

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Non-technical Summary – Academy of Light Solar Development

1.1 Introduction

This non-technical summary aims to summarise the key findings which have been detailed within the planning submission that has been submitted by Cundall to South Tyneside Council (STC) on behalf of Sunderland Association Football Club (SAFC) in support of a planning application seeking approval for:

Installation of renewable energy generating solar farm up to 40MWe (DC Peak), comprising ground mounted photovoltaic arrays, together with substation, transformer stations, switchgear, site accesses, security measures, access gates and other ancillary infrastructure and landscaping and biodiversity enhancements on land to the east and west of the Academy of Light, Sunderland Road, SR6 7UW.

This application seeks full planning permission for up to 40 megawatts (MW) ground mounted solar farm renewable energy scheme. Planning permission is being sought for a period of 30 years from the date of first exportation of energy from the Site.

The Solar Farm would provide a clean, renewable and sustainable form of electricity and will also make a valuable contribution to the generation of electricity at a local level. The scheme would contribute to the Region's progress in meeting its renewable energy targets and would also assist in meeting national targets for both energy supply and low carbon energy development.

The planning application is supported by the following documentation which is summarised in this report.

1.1.1 The Applicant

Sunderland Association Football Club (SAFC) founded in 1879 is one of the most successful clubs in the English game having been six-time champions of England.

Recently, SAFC have unveiled a sustainability strategy to reduce its impact on the environment and support the UK's low carbon ambitions. It is the Club's ambition to be energy self-sufficient from renewable sources by 2028. The Proposed Development plays a key role in the Club striving to meet its sustainability targets.

As Club's sustainability plan will also support the Club's backing of the United Nations' Sport for Climate Change. the initiative sets out specific goals to halve emissions by 2030 and aim to achieve net-zero by 2030. It is the ambition of SAFC to become the first Football Club in the UK to achieve these targets.

1.1.2 The Site

The Site of the Proposed Development is comprised of two areas of land located to the east and west of the Academy of Light (AoL), Sunderland Road, SR6 7UN. The entire layout of the photovoltaic (PV) arrays will be located within the administrative area of South Tyneside Council (STC) and is located within the green belt.

The AoL is Sunderland AFC's training facility and is located 6km south of the centre of South Shields and 4km north of Sunderland's City Centre. The site is surrounded primarily by agricultural land, although the villages of Cleadon, East Boldon and Whitburn lie to the north, west and east respectively. The Fulwell area of Sunderland lies directly south of the AOL. Cut Throat Dene runs along the southern boundary of the site separating it from allotments to the south.

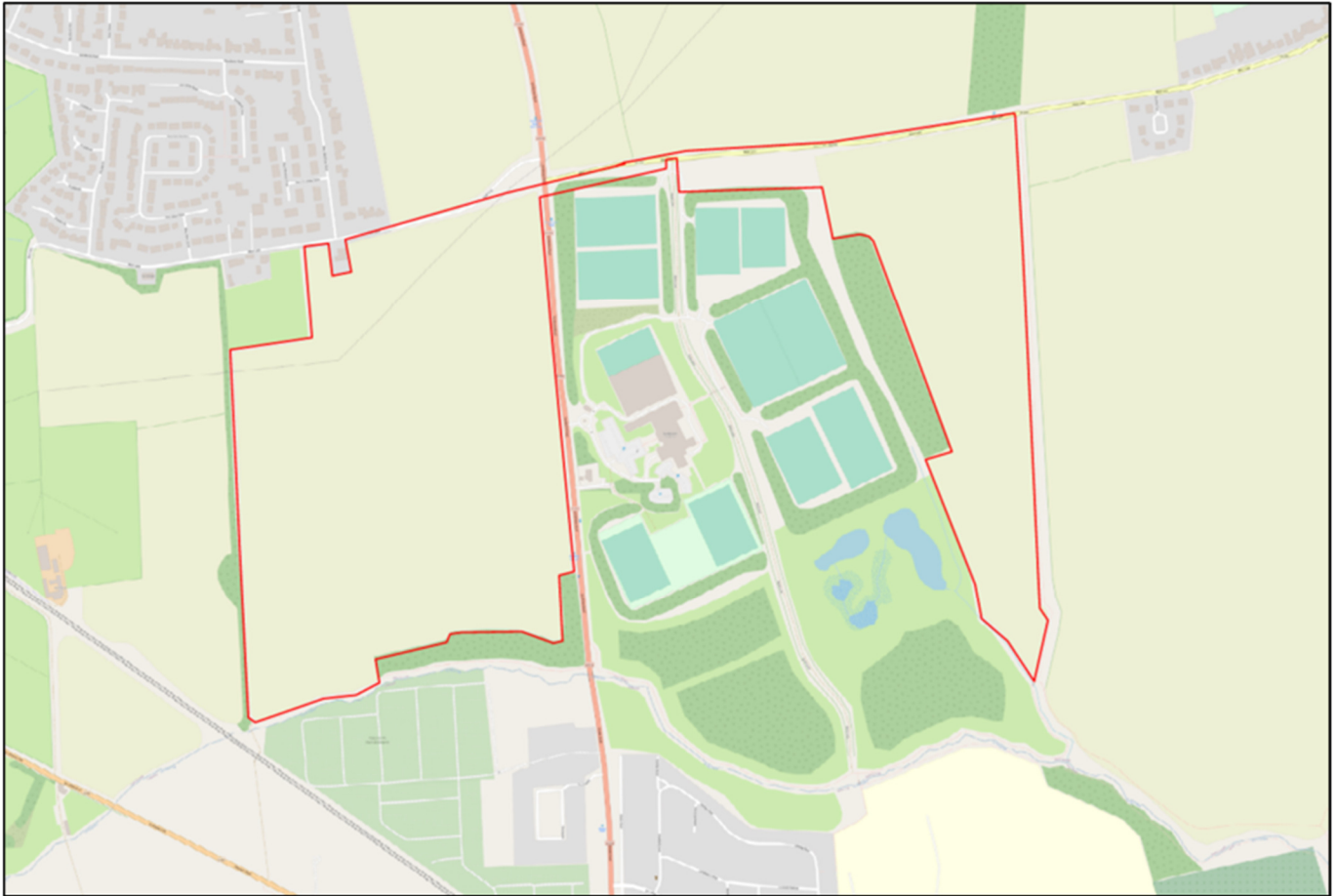


Figure 0-1: Site Boundary

1.1.3 The Proposed Development

The development proposal is for:

Installation of renewable energy generating solar farm with a generating capacity of up to 40MWe (DC Peak), comprising photovoltaic array with substation, transformer stations, switchrooms, site accesses, internal access, security fencing, access gates, ancillary infrastructure and biodiversity enhancements.”

The Proposed Development will comprise the following elements:

- Solar panels – static photovoltaic solar panels will be used to convert the sun’s energy into electricity. They will be arranged in an east/west orientation and be mounted on metal frames. The maximum height of the photovoltaic arrays would be 1.8m in height above ground level.
- Associated infrastructure comprising:
 - Transformer enclosures.
 - Switchgear enclosures.
 - Site access – the east and western development parcels will be accessed via upgraded agricultural accesses off the B1299 Moor Lane.
 - Construction compound – there will be temporary hardstanding area to the north west of the eastern development parcel required for the delivery and assembly of the solar array equipment.
 - Fencing – in order to provide suitable security measures on site fencing (with a maximum height of 2.4m) will be proposed around the arrays. Other security measures such as CCTV cameras will be positioned to face into the land within the application boundary to provide security and capture imagery within the land under the control of the applicant. The CCTV systems will be discrete and will be mounted no higher than 3m above ground level.

- Grid connection and cabling – the cable connecting the solar array to the proposed grid connection point will be buried underground to minimise visual impacts.
- Biodiversity improvements –various measures to enhance biodiversity net gain on both development parcels, including improvements to hedgerows and reinstatement of biodiverse habitats on site.



Figure 0-2: Proposed Site Layout

1.2 Design and Access Statement

The Design and Access Statement sets out the site assessment and design rationale for the Proposed Development. It details the; use, amount, layout, scale, appearance and access to the site as well as other design considerations. The report also provides information in relation to the construction, operation and decommissioning of the solar farm.

1.3 Archaeological Desk Based Assessment

An Archaeology Desk-Based Assessment has been produced in relation to the site. The assessment examines the potential impact of the proposed development on buried heritage assets. It shows that there are four known non-designated assets which have a degree of significance but are not protected by a planning designation on the site. There is also potential for remains from the medieval and post-medieval to modern periods. The assessment recommends that a survey is undertaken to determine the survival of any archaeological remains. The further work will allow any necessary measures to protect these remains to be identified. It was not possible to undertake a survey prior to the submission of the planning application therefore it is suggested that this additional work is secured through a planning condition should the scheme gain planning approval.

1.4 Agricultural Land Classification Survey'

An Agricultural Land Classification survey has been carried out on both development parcels. This consisted of a desktop investigation and field survey to analyse the quality of the soil types. This has shown that 17.77% of the site is considered to be grade 3a which is good quality agricultural land and constitutes best and most versatile agricultural land for planning purposes. 82.22% of the land is grade 3b which is moderate quality agricultural land (and not best and most versatile agricultural land).

1.5 Arboricultural Impact assessment

An Arboricultural Impact assessment has been carried out in relation to the Proposed Development. The report which considers the potential impacts of the scheme on trees during construction and operation. It also outlines ways in which potential damage can be minimised.

1.6 Construction Traffic Management Plan

An outline Construction Traffic Management Plan (CTMP) has been prepared in order to ensure the construction of the Proposed Development is efficient and has minimal impact to the surrounding area as well as lower emissions, enhance safety and reduced congestion.

The outline CEMP provides the anticipated construction programme and methodology, and details vehicle routing and access as well as measures to reduce potential impacts. It also sets out the programme for implementing, monitoring and updating the construction activity.

1.7 Ecological Surveys and Mitigation Report

An Ecological Impact Assessment has been carried out in support of the planning application. The report assesses associated potential ecological impacts of the Proposed Development. It concludes that "No significant adverse ecological impacts are predicted in the absence of mitigation during and post-construction of the Development." Notwithstanding this mitigation and enhancement measures are recommended in the report.

A Biodiversity Metric Assessment has been undertaken in relation to the Proposed Development. It considered the proposed landscape plan which includes habitat creation and site-specific ecological enhancements. The report shows that there will be an 80.54% net gain in biodiversity habitat units on the site overall as a result of the proposals Habitats Regulations Assessment. This is a significant improvement and exceeds the minimum 10% biodiversity net gain as stipulated by the Environment Act 2021.

A Shadow Habitat Regulations Assessment has been undertaken which considers potential effects from the Proposed Development on National Site Network designated sites. Although the site falls within an area where development could impact the Durham Coast Special Area of Conservation (SAC), Northumbria Coast Ramsar and Northumbria Coast Special Protection Area (SPA), as well as Northumberland Marine SPA the assessment showed that there is no Likely Significant Effects (LSE) from the Proposed Development.

1.8 Flood Risk and Drainage Assessment

A Flood Risk Assessment has been carried out in relation to the Proposed Development. The report evaluates the current knowledge of flooding in the local area, as well as providing an assessment of the flood risks posed directly onto the site. All forms of flood risk have been identified as low.

A Drainage Strategy has also been produced to set out the surface water drainage proposals at the site. The report explains that surface water discharge through infiltration is possible as well as discharge to Cut Throat Dene watercourse if permitted. Sustainable drainage systems are proposed to provide attenuation, amenity, and water quality improvement.

1.9 Glint and Glare Assessment

A Glint and Glare assessment has been carried out in relation to the Proposed Development. The assessment was undertaken to understand the impact of the Proposed Development in terms of risk posed to incoming flights, train drivers and surrounding residents as a result of glint (a momentary flash of bright light) and glare (a continuous source of bright light). The assessment focuses solely on direct reflected glare from the proposed scheme. The report find that the risk of intolerable glare, significantly impacting the pilots, train drivers, and the residents, is negligible. Therefore, there is very low risk to the incoming flights, train drivers and the surrounding residents.

1.10 Cultural Heritage Statement

A Heritage Statement has been prepared in support of the planning application for the Proposed Development.

It considers the significance of a heritage asset to this and future generations because of its heritage interest in relation to the identified cultural heritage assets and assesses the impact of the Proposed Development on them. It has identified that whilst there are no heritage assets within the Application Site itself, there are heritage assets within its immediate and wider context that have the potential to be impacted.

The impact assessment concludes that there will be a low level of harm caused to the contribution that setting makes to value of the identified assets by the construction of the solar farm. This harm will be limited to some views to and from the Proposed Development in relation to Cleadon Conservation Area, Cleadon Water Pumping Station, Cleadon Windmill, Undercliff and Whitburn Conservation Area.

1.11 Land Contamination Assessment

The Land Contamination Assessment (Phase 1 Desk Study) has found that the Proposed Development site has limited potential of contamination and is considered to have an overall moderate to low risk rating considering the proposed re-development end use.

The report recommended a further intrusive survey work however it was not possible to undertake this prior to the submission of the planning application. It is suggested this is secured through a planning condition should the scheme gain planning approval.

1.12 Landscape and Visual Impact Assessment

A Landscape and Visual Impact Assessment (LVIA) has been carried out in relation to the Proposed Development.

This LVIA has been developed at the same time as the design process for the proposed solar farm. The overarching aim of this LVIA is to reach a responsive design solution which is genuinely informed by the landscape and visual context of the Application Site, as well as the commercial aspirations for the scheme, and to present the landscape and visual impacts of the proposals to decision makers at South Tyneside Council.

The LVIA considered a 3.5km radius study area based on the potential visibility of the site and desk-based research that provided an understanding of the position, nature and extent of established landscape character areas, and landscape-related designations including landscape, nature, heritage and access designations.

The LVIA assesses the Proposed Development against the relevant national and local policy. The report explains that landscape and visual mitigation is provided by way of proposed native hedgerows that will run along the outer side of the proposed security fencing. The proposed northern hedgerow will also feature a number of proposed native trees.

In terms of visual effects, the LVIA provides a number of visualisations including key viewpoints at years 1 and 15. This shows that the proposed hedgerow will fully screen the proposed development from most viewpoints by year 15. In relation to elevated viewpoints the report shows that there is some visibility of the Proposed Development.

The report considers the purposes of the Green Belt and the potential impact of the Proposed Development. It concludes;

“In summary, the nature and scale of the Proposed Development responds appropriately to its surrounding landscape context and takes into consideration potentially adverse landscape and visual effects, which are mitigated through proposed planting and habitat creation, consistent with the aims and objectives of national and local planning policy.

Notwithstanding the transformative nature of developing this green field site, the landscape and visual impacts of the Proposed Development have been addressed as far as possible for a solar farm development of this size and are considered an appropriate response to the Site and surrounding context.”

1.13 Noise Assessment

A Noise Assessment report has been produced and is submitted in support of the planning application. The report considers the potential construction and operational noise impacts. Consideration has been given to nearby residents and noise limits have been proposed in order to reduce any impact on amenity.

Construction noise limits are recommended and will be managed through the Construction Environmental Management Plan (CEMP) which will be agreed with South Tyneside Council (STC) through a planning condition should permission for the scheme be granted. The noise assessment also recommends that all construction works should be restricted to the hours of 08:00 – 18:00 hours Monday to Friday (excluding bank holidays) unless otherwise agreed in advance with STC.

The report also provides suggested measures which reduce operational noise from on-site equipment to a level which does not exceed the existing background sound levels.

1.14 Planning Statement

The Planning Statement (PS) which has been prepared in support of the Proposed Development sets out;

- The Site and Surrounding Area
- Detailed Development
- Planning Policy and other Relevant Legislation
- Key Planning Issues

The PS explains that the essential objective of the scheme is to generate renewable energy and contribute to the national and local objectives to move towards a low carbon future. It demonstrates that this objective could not reasonably be met in a less harmful way as all alternative sites for a solar development of this size within South Tyneside would be located in the Green Belt.

The PS sets out how the Proposed Development would meet the objective to generate renewable energy and explains that it clearly outweighs the degree of harm caused by the proposal through the very special circumstances case. The benefits of the Proposed Development include:

- Renewable energy generation
- On-site Biodiversity Improvements
- Energy Security
- The temporary nature of the Proposed Development
- Community benefits

Furthermore, the duration of the proposal is limited to 30 years and the site will be reinstated to agricultural land with enhancements in terms of biodiversity, quality of agricultural land and community benefit through the investments made. In addition, the Proposed Development will have limited impact in terms of traffic. The cumulative benefits of the scheme should be afforded significant weight when the planning balance is considered. A very special circumstances case for the Proposed Development has been demonstrated.

1.15 Statement of Community Involvement

This Statement of Community Involvement (SCI) forms part of the suite of documents which have been submitted in support of the planning application. The document sets out the methodology for stakeholder engagement, comments received as a result and applicant response. The document shows that the development of the scheme has had a wide range of public outreach with different forms of public engagement and consultation, with multiple different opportunities for people in the community and key stakeholders, at different levels, to get involved and have their say on the Proposed Development. This has included;

- Pre-application advice request to STC and consultees.
- Key stakeholder engagement; and
- Public exhibition events
- Website

1.16 Sustainability Statement

A Sustainability Statement is being submitted in support of the planning application. The statement sets out how the Proposed Development demonstrates sustainability and environmental leadership in relation to local and national requirements explaining that it would make a material contribution to net zero targets.

The report explains that the Proposed Development could generate approximately 27,156 MWh of electricity per year, which is the equivalent to the electricity consumption of over 9,754 South Tyneside homes in 2021. Furthermore, this has the potential to offset 5,623 tonnes of carbon dioxide per year, equivalent to the total emissions of 3,748 South Tyneside residents. The report shows that the Proposed Development aligns with the aims of the South Tyneside planning policy and climate change goals.

1.17 Transport Statement

The Transport Statement (TS) which has been submitted in support for the planning application details the relevant national and local policy, existing local transport infrastructure, access, and parking at the site as well as potential trip generation. The report finds that the site is situated with good access to a network of public transport, walking and cycling facilities.

Both the Eastern and Western development parcels will be accessed to the north via Moor Lane. The existing informal agricultural access to western parcel will be upgraded as part of the proposals and the existing vehicular access to the eastern parcel will be retained as part of the proposals.

In relation to car parking, it is proposed that the existing laydown area located at the eastern parcel site access will be used for informal parking to accommodate servicing/maintenance vehicles which are expected to visit the site two to three times per year, once the site is operational. During the construction phase there are expected to be no more than 2-3 construction vehicle visiting per day.

The TS concludes that “the proposed development is considered acceptable in transport and highways terms, as it is expected to have a negligible impact on the surrounding highway and transport network.”

1.18 Tree Survey

A Tree Survey has been undertaken in relation to the Proposed Development to guide the planning design and construction process in order to minimise potential damage to retained trees. The survey considers potential impacts on trees and recommends measures to protect them. The report explains that during pre-construction and site preparation works an individual will be appointed to ensure tree protection measures are adhered to. During construction the report advises a number of measures including trees should not be used to attach notices, cables or other services.

Cundall Johnston & Partners LLP

4th Floor Partnership House Regent Farm Road
Gosforth Newcastle upon Tyne NE3 3AF
Tel: +44 (0)191 213 1515

Asia Australia Europe MENA UK and Ireland
www.cundall.com

