solarpartner

PLANNING, DESIGN AND ACCESS STATEMENT to support -FULL PLANNING APPLICATION for -

372 SOLAR PANELS GROUND MOUNTED at -

Durrance Farm Stewkley Road Leighton Buzzard LU7 0DF



DATED - March 2024

Prepared by - Solar Partner Ltd.

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INTRODUCTION

This Planning, Design and Access Statement is in support of an application for full planning permission submitted to Buckinghamshire Council Planning Department, prepared by Solar Partner Ltd for the proposed installation of 372 black Renusol Console+ Streamliner tubs ground mounted with 372 Trina x 440Wp solar panels, that will generate clean green electricity for use on site.

This statement incorporates Design and Access elements together with a discussion of the relevant development policies specific to the development proposal.

The report concludes that, having regard to all material planning considerations, planning permission should be granted. Account has been taken from the policies within the National Planning Policy Framework.

The following plans and drawings are included with the application:

- a) Location Plan 1:2500
- b) Existing Site Plan 1:1000
- c) Proposed Site Plan 1:1000
- d) Front Elevations 1:62
- e) Side Elevations 1:62

About the Site and the proposed solar PV installation -

Durance Farm is situated off on the B4032 between the villages of Stewkley and Soulbury in Buckinghamshire. The application site is set back off the B4032 and is accessed via a private vehicle access road to the North West corner of the site. The area around the business park is rural in character.



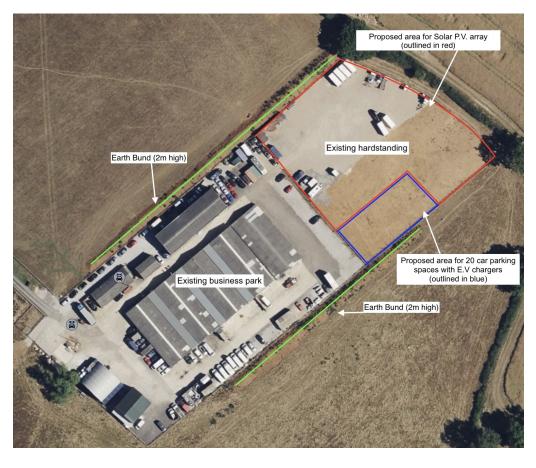
The closest properties to the application site are the houses adjacent to the entrance track and the farm and houses opposite on the North side of the B4032 road. See aerial photo above. None of the buildings on or near the site are listed. The site is not in a conservation area.



Location Map of Stewkley and Soulbury and surround villages. See photo above.

The application site is 27 acres that may be broadly described as a rectangular shape. The site frontage is along the North Western side of the rectangle fronting the B4032. See the Location Plan attached.

The proposed location where the solar panels are to be is on the existing hard standing behind the existing earth bunds to the North and South of the hard standing. See photo below.





The photograph above is a view from B4032 Stewkley Road looking towards Durrance Farm. The proposed location where the solar panels are to be sited behind the earth bund to the left side to the barns. Also see photo below showing the earth bund.

The application site has been used as a business park for over 35 years since 1989, from when it was an agricultural farm.

The application site topography is flat with bushes and trees to the boundaries. There is a mature hedge running along the perimeter to the B4032 providing dense screening. The site does not have many large trees, this will ensure the maximum amount of light to the solar panels.



The solar panels will be positioned 5.0 meters from boundary fences (indicated on the aerial photo of the site above) to enable access for maintenance.

The solar panels also have been sited on the hard standing as it it near to the main site incoming electricity supply and will reduce the length of the AC cable from the solar inverters to the main existing 3 phase distribution board. The AC cable from the solar inverters will run in a trench in the ground back the existing main distribution board on site. No AC or DC cables will be installed at high level so they are visible. See photo below of existing hard standing. The hard standing base is perfect for the Renusol tubs and the solar modules to sit on.





No concrete foundations or ground drilling will be used in the installation. Instead, heavy duty plastic tubs will be laid out on the hard standing for ease of installation. The ground mounted tubs will be weighed down to stop them from moving in high winds. This method is quick to install and is as quick to remove, should the system need to be relocated or removed in the future. After removal of the system, the site would be in the same condition as prior to the installation.

The proposed mounting tubs are low pitched and will support the solar panels in landscape configuration as depicted in the photo above. The solar panel dimensions are approximately 1762 mm x 1134 mm.

Scale -

The total site area is 27 acres, equaling circa 110,000 square meters. The area where the solar panels arrays are proposed is 4,554 square meters. Therefore, the area used for the solar panels, will equate to 4.0 % of the total site area.

The solar arrays will be spread across the proposed area, comprising 17 rows totaling 372 solar panels.

Utilities and infrastructure -

The proposed installation requires a connection to a 3-phase electrical supply that is already on-site. The installation has obtained pre-approval from UK Power Networks to proceed. The installation is very quick, requiring circa 15-20 days on-site, with only 3-4 operatives. Vehicle movements will be very low. Solar panels are static and require very limited maintenance over the 30-year operation period from external parties. Traffic movements to and from the site will be circa 1 qualified engineer every 3-5 years to check the system. There is existing hard standing parking on-site next to proposed solar panel arrays and barns to enable access for maintenance and emergency services.

Solar panels are built to last 30 years and solar inverters for 10 years. Cleaning is required twice a year but this can be done by the owners.

Appropriateness of Location -

The use of the existing roofs on the existing buildings within the business park was considered for the installation of the solar panels, however there is insufficient area of suitably orientated roof space to accommodate the amount of solar PV panels required. Much of the existing roofing area has been discounted as being structurally unsuitable, coupled with the fact that the roofs coverings are asbestos sheets and the barn purlins are concrete. A ground mounted array is therefore proposed as it is more suitable in terms of cost, health and safety to both the occupants and installers and on-going maintenance.

Social Impact -

People living locally will not be affected by the solar panel installation. Passing traffic will not be able to see the solar panels due to the earth bunds from the B4032.



Existing barns visible from the B4032. See image above.

Impact on Trees and Hedges -

No trees or hedges will need to be pruned, cut or removed to enable the installation of the solar panels.

Economic Benefits of the Solar Installation -

The economic benefits of the proposed development will be apparent from both the construction, operation and generation of low-cost green electricity. The construction works will involve investment and will provide employment opportunities. The solar panels when operational will provide a cheap source of electricity to support the applicant's business operations on the site, which in turn will support the local area's economy. The cost of solar panels has fallen significantly in recent months making solar energy an extremely viable energy source, compared to other forms of technologies.

Energy used on site -

The existing electricity demand on-site is circa 155,000 kWh annually. Most of this demand is for running plant and machinery for the companies on-site. Adjacent to the location where the solar panels are proposed will be EV charging points to enable persons on-site to charge their EV's from the clean, green electricity (see Location Plan drawing).

Saved CO2 -

A recent parliamentary paper estimated 'cradle-to-grave' emissions of solar power in the UK to be 88g CO2/kWh. Therefore, with an estimated production of 131,000 kWh of electricity produced each year by the proposed solar installation a saving of appropriately 11.5 tons of CO2 or 345 tons over a 30 year period.

Ecology -

The are no ecological impacts of the development on the site or the surrounding area.

Amenity and Noise -

The siting of the array will not be visible from the nearby residential properties to the North West of the commercial buildings. There is considered to be no direct impact from the proposed siting of the solar panels on the residential properties that would impact on the amenity of the occupants.

Solar panels are operationally silent and there is therefore no potential impact from noise. The panels recommend are mainly black in colour including the mounting tubs so there will be no potential for the development to impact on the amenity of the local area through glare. The solar panels are also coated with an anti-reflective coating to minimize reflective glare.

Air Quality -

The proposal will not have any detrimental impact on local air quality, overall, the use of a sustainable renewable energy technology will reduce reliance on the types of energy production that do impact air quality.

Heritage Impact -

None.

Reinstatement of land -

At the end of life of the solar system (circa 30 years) the solar modules and all associated equipment can be removed/recycled and the ground could be re-instated to ensure its condition is safeguarded. A condition to this extent as a requirement of planning approval is anticipated and welcomed.

Drainage and Flod Risk -

As indicated above, the proposed solar panels will sit directly on the ground/hard standing and all rain fall will simply drain onto the surrounding ground below at the same rate. The panels will not increase water capture or otherwise alter the manner by which the run-off of surface water from the area of the array is captured and channeled and drains away from the site. There will therefore be no material impact on the drainage of the site caused by the proposed development. There are no rivers, streams lakes or ponds, nearby to the proposed solar PV installation.

Public Rights of Way -

There are no public rights of way across the site.

National Planning Policy

National Planning Policy Framework

To support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by development of renewable energy).

Paragraph 93

Planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development'.

As part of this focus on sustainable development the NPPF states the environmental role of sustainable development as contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

The NPPF states that a planning authority should support the transition to a low carbon future in a changing climate, encouraging the reuse of existing resources, promoting the use of renewable resources through development of renewable energy that makes a positive contribution to conserving and enhancing the natural environment whilst reducing pollution.

The NPPF requires that in order to help increase the use and supply of renewable and low carbon energy, LPAs should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources. Indeed, the NPPF enhances this presumption in favour by stating that LPAs should design their policies to 'maximise renewable energy development', while ensuring adverse impacts are addressed satisfactorily.

Paragraph 97

'To help increase the use and supply of renewable and low carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources. They should:

Have a positive strategy to promote energy from renewable and low carbon sources;

Design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts;

Consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources;17

Support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.'

The proposed development will have a valuable contribution to the Government's renewable energy targets. The solar panels will allow the applicant to become less reliant from the national grid and not to rely on unsustainable fossil fuel.

Paragraph 98

'When determining planning applications, local planning authorities should; Not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions'

CONCLUSION -

Solar energy has been chosen, as it generates significant amounts of green electricity with the least visual impact to neighbouring properties. Furthermore, ground tubs and solar panels can be removed without leaving any effect on the long-term integrity of the area.

The small, if any visual impact is far outweighed by the benefit of reduced fuel usage and pollution. It is estimated that the panels over the course of a year will generate approximately 131,000 kWh of electricity. The purpose of the solar panel installation is not to export electricity, but to reduce consumption on-site. In turn, this will reduce carbon emissions locally and nationally.

There is broad Government support and encouragement for planning permission to be granted for renewable energy development particularly solar PV.

The proposed development is in compliance with planning policy and will help meet renewable energy targets.

It is requested that the council look favorably on the application for the proposed installation of ground mounted solar panels located near to the existing business park.

There will not be any adverse impacts on the site and there are adequate access and parking arrangements for maintenance. There are no reasons to withhold planning permission.

If the Council feels that there are any matters that need to be addressed before planning permission is granted, then their officers are cordially invited to contact Solar Partner in accordance with the advice contained in Paragraphs 186 and 187 of the NPPF with a view to finding solutions to any perceived problems.