

DESIGN AND ACCESS and PLANNING STATEMENT

*IN RESPECT OF PROPOSED ROOFTOP SOLAR
PV INSTALLATION AT:*

*HAMPSHIRE COSMETICS, BRAMBLES HOUSE,
WATERBERRY DRIVE, WATERLOOVILLE,
PO7 7UW*



REF: HBC1429

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1.0 INTRODUCTION

- 1.1 This planning, design and access statement has been prepared in support of an application for full planning permission on behalf of Low Carbon Solar UK for their development proposal at Brambles House, Waterberry Drive, Waterlooville.
- 1.2 The site is occupied by Hampshire Cosmetics, a firm engaged in the production of high quality cosmetics, and is located in purpose-built business park on the western edge of Waterlooville. Activities at the site include the manufacture, packaging and distribution of toiletries and cosmetics.
- 1.3 The proposal is for the installation of a 300kw solar PV system on the roof of the building, which will provide an annual output of approximately 300 MWh of renewable electricity.

2.0 SITE CONTEXT

- 2.1 As stated, the site is located on the edge of Waterlooville and is to the west of Hambledon which, with the exception of the business park, forms the boundary of the built up area with the open countryside. The application site is in the north eastern corner of the park, with open fields to the north, further industrial buildings to the west and south and residential properties to the east.



- 2.2 The existing building is a substantial industrial/warehouse unit, principally two stories in height, with a slightly higher section in the north western corner. With the exception of the western end, where the roof profile is a mono-pitch, sloping up from the front of the building towards the rear, the main roof is a shallow pitched roof that spans the entire width of the unit. The existing roofing materials are a pale grey in colour with a number of rooflights set at intervals across it. There are car parking areas to the north, east and west of the building with an access drive along the southern side, separating it from the adjacent unit. The boundaries of the property are well screened by mature trees, with the exception of a section of the western boundary.



3. DEVELOPMENT PROPOSAL

- 3.1 The proposed development comprises the installation of solar photovoltaic panels over much of the available roof area, with the exception of the area adjacent to the taller roof section which would result in the overshadowing and consequent shading of this part. There is a further raised section on the southern roof slope which can also not be used. These panels are designed to absorb sunshine and light, producing electricity that can be used in the industrial processes of the firm with any surplus being fed into the national grid.

4. DESIGN

Use:

- 4.1 The existing roof at the unit, whilst of a shallow pitch, are capable of accommodating a type of panel, known as 'thin film', which is designed to perform efficiently at this angle. Geographically, the site is located in the south of England, which has been shown to have sufficient sun hours to produce enough electricity to make an installation of the type proposed viable. The lack of any overshadowing from other buildings or trees, will serve to maximise the efficiency and power output of the solar panels. Furthermore the use is complementary to the existing industrial use of the unit, enabling the company to reduce the costs of their operation whilst also reducing their environmental impact.

Amount:

- 4.2 The panels are to cover nearly the whole extent of the available roof slopes, though not extending above the existing ridge height. The number of panels to be used will be able to generate 300MWh of electricity per year, providing approximately 25% percent of the power used by the company and offsetting about 160 tonnes of CO₂ that would otherwise be produced through the use of fossil fuel.

Layout:

- 4.3 The panels are affixed to a frame that is place over the existing roof and which will follow the same angle as that roof. The depth of the framework, together with the 'thin film' panels will be no greater than 25cm and will not significantly increase the bulk or impact of the building.

Appearance:

- 4.4 Solar PV panels are designed to absorb the sunlight and are a dark blue/black colour in appearance. As they are laid parallel with the existing roof and will not increase the height of the building to any great extent, the only visual impact resulting from the development will be due to the alteration in surface materials. The existing roof is clad is light grey in colour, though as can be seen from the photographs below, the height of the building and the shallow pitch of the roof, together with the tree screening and other buildings around it, considerably restrict views of the roof surface.



View from Hambledon Road from the north east



View towards the site from south east on Hambledon Road



View from Waterberry Drive

- 4.5 The proposed panels are much darker in appearance though due to their limited visibility it is not felt that this will have much effect on the overall visual impact of the building. It is accepted that, due to their glass construction, there will be some



element of reflection though, since they are designed to absorb up to 90% of the available light, this will not produce a high level of glare. This is illustrated in the pictures above and below which were taken of similar roof developments in Germany. Furthermore as any light will be reflected upwards this will not be apparent from ground level and there are no taller buildings in the vicinity which could be affected.



The roof in the foreground has no panels on it.

Landscaping

- 4.6 The proposal does not involve any alterations at ground level and it is not considered that a landscaping scheme is either necessary or appropriate.

5. ACCESS AND PARKING

- 5.1 The proposed development does not require any alteration to the access to the unit, which is adequate for construction vehicles and subsequent visits for essential maintenance. Given the nature of the panels, which have a productive lifespan of up to 40 years, there is very little maintenance required and it is anticipated that fewer than 6 visits a year will be required. The proposal will not therefore generate any appreciable increase in traffic or potential hazards to users of the highway. In addition the limited visits and short duration of each visit do not require any alteration to or increase in the existing parking provision.

6. POLICY CONTEXT

- 6.1 There is widespread support for alternative means of renewable energy at international, national and local levels, with increasing pressure to tackle climate change through reducing carbon emissions, such as those produced by the use of fossil fuels. Nationally, this concern has been recognised in the following policy guidance documents:

- **Planning Policy Statement (PPS) 1**, published in 2005, sets out the key principles that should be applied in order to ensure that plans and decisions contribute to the delivery of sustainable development. A subsequent supplement to this PPS in, **Planning and Climate Change 2007**, places considerably more emphasis on the necessity to tackle climate change with planning authorities being urged to provide a framework in their Core Strategies that promotes and encourages renewable and low carbon energy generation.
- **PPS 22, Renewable Energy** sets out the key principles which local planning authorities should adhere to in their approach to planning for renewable energy and emphasises the requirement for policies to promote and encourage, rather than restrict, the development of renewable energy sources. The statement reiterates the Government's desire to actively encourage renewable energy projects. Furthermore, the White Paper on Local Growth (October 2010) has a stated presumption in favour of sustainable development.

6.2 At a local level, it is understood that the Havant Borough Council Core Strategy is to be adopted in the near future and therefore its policies are a material consideration. The following policies are felt to be relevant.

- **Policy CS12 Efficient Use of Resources.** The policy recognises the adverse effects of carbon emissions on climate change and encourages development that contributes to the delivery of the PUSH (Partnership for Urban South Hampshire) target of 100MW of renewable energy for the whole area. The proposed development will provide a valuable contribution toward meeting that target and is entirely in accordance with the policy.
- **Policy CS10 Protecting and Enhancing the Special Environment and Heritage of Havant Borough.** Although many of the elements of this policy are unrelated to the proposal, it does refer to the need to protect the key landscape and built form principles. It is not considered that the proposal, which will have little impact on the built form of the industrial unit, nor on the wider landscape, will be in conflict with the aims of this policy.

7 SUSTAINABILITY

7.1 Producing electricity with PV emits no pollution, produces no greenhouse gases and uses no finite fossil-fuel resources. Where, as has been generally recognised, the current consumption of and reliance on fossil fuels is unsustainable, there is a very real need to find a viable long term alternative solution.

7.2 In addition, it is now widely accepted that climate change is happening and a key contributory factor are carbon emissions from the use of fossil fuels. The increased production of energy from renewable sources, such as solar PV, has very real benefits in off-set savings in carbon dioxide emissions and reducing the potential impact of greenhouse gases on climate change. It will also ensure a constant and affordable source of energy, contribute to economic stability and provide a further form of diversification to support rural economies.

7.3 The solar panels are constructed from materials that are recyclable. They

have a prospective lifetime use of between 25 years to 40 years without the need for replacement. At the end of their productive lifespan and when the site is to be decommissioned, the panels will be collected by the manufacturer for recycling, ensuring a minimum of wastage.

8. CONCLUSION

- 8.1 Solar electricity systems are in many cases economically superior to conventional power systems. The operating costs are low because solar electricity needs very little maintenance, very few spare parts, and no fuel. Solar electricity is fully automatic and therefore suitable for unmanned operation. There are no moving parts, so the system has a very long lifetime, and it is virtually maintenance-free. If a solar electricity system has been correctly designed, no other system can match its reliability.
- 8.2 The Government is keen to encourage greater deployment of such technologies as the benefits are many. They can help tackle climate change, reduce reliance on centrally generated electricity and increase security of energy supplies. The proposal will provide 300kw and offset 160 tonnes of CO2 per year.
- 9.3 The site is considered to be an appropriate location for the current proposal with the roofs being well orientated to maximise the exposure of the panels to sunlight, thereby ensuring that they operate as efficiently as possible. The panels can be accommodated with no disturbance to the existing activities of the business and with minimal impact on the surrounding area. The proposal is therefore in accordance with planning policy at both national and local levels.