PROPOSED SOLAR FARM

Ratton Performing Arts College

RETROSPECTIVE PLANNING APPLICATION BY

ethical power

DESIGN AND ACCESS STATEMENT

May 2015

ABDS ltd
architectural consultants

Introduction

1. This statement has been prepared in support of a retrospective planning application for the installation of roof mounted solar panels at Ratton Performing Arts College. The proposal is for installation of 208 No 240W Solar Poly-crystalline Modules which will generate 49.92kW of renewable electric.

2. The statement assesses the design and access arrangements, and how they relate to their context. This statement has been prepared in accordance with Circular advice.

3. The proposal is shown on the following drawings:-

   ABDS Ltd drawing: E/RP/15/001
   Ethical Power solar panel layout drawing and technical specification sheet
   JA Solar Technical sheet

Permitted Development Criteria

4. The installation of solar PV on non-domestic buildings falls within Class J works of the Town and Country Planning (General Permitted Development) Order 2015 and generally allows the installation of solar pv on buildings subject to the following criteria:-

Permitted development

A. The installation, alteration or replacement of—

(a) **microgeneration solar thermal equipment on a building;**

(b) **microgeneration solar PV equipment on a building; or**

(c) **other solar PV equipment on the roof of a building, other than a dwellinghouse or a block of flats.**

Development not permitted

A.1 Development is not permitted by Class J if—

(a) the solar PV equipment or solar thermal equipment would be installed on a pitched roof and would protrude more than 0.2 metres beyond the plane of the roof slope when measured from the perpendicular with the external surface of the roof slope;

(b) the solar PV equipment or solar thermal equipment would be installed on a flat roof, where the highest part of the solar PV equipment would be higher than 1 metre above the highest part of the roof (excluding any chimney);

(c) **the solar PV equipment or solar thermal equipment would be installed within 1 metre of the external edge of that roof;**

(d) in the case of a building on article 2(3) land, the solar PV equipment or solar thermal equipment would be installed on a roof slope which fronts a highway;

(e) the solar PV equipment or solar thermal equipment would be installed on a site designated as a scheduled monument; or

(f) the solar PV equipment or solar thermal equipment would be installed on a listed building or on a building within the curtilage of a listed building.

A.2 Development is not permitted by Class J(a) or (b) if—

(a) the solar PV equipment or solar thermal equipment would be installed on a wall and would protrude more than 0.2 metres beyond the plane of the wall when measured from the perpendicular with the external surface of the wall;

(b) the solar PV equipment or solar thermal equipment would be installed on a wall and within 1 metre of a junction of that wall with another wall or with the roof of the building; or

(c) in the case of a building on article 2(3) land, the solar PV equipment or solar thermal equipment would be installed on a wall which fronts a highway.

A.3 Development is not permitted by Class J(c) if the capacity of the solar PV equipment installed (together with any solar PV equipment installed under Class J(b)) to generate electricity exceeds 1 megawatt.

Conditions

J.4—(1) Class J development is permitted subject to the following conditions—

(a) the solar PV equipment or solar thermal equipment must, so far as practicable, be sited so as to minimise its effect on the external appearance of the building and the amenity of the area; and

(b) the solar PV equipment or solar thermal equipment is removed as soon as reasonably practicable when no longer needed.

(2) Class J(c) development is permitted subject to the condition that before beginning the development the developer must apply to the local planning authority for a determination as to whether the prior approval of the authority will be required as to the design or external appearance of the development, in particular the impact of glare on occupiers of neighbouring land, and the following sub-paragraphs apply in relation to that application.

This design and access statement suggests that although planning permission is required by virtue of the solar PV design breaching the requirements of A.1(c) of the permitted development act in although other respects the installation complies with the general principles of Planning Practice Guidance:-

- The roof slope faces south
- Sufficient roof area is provided

Pre-Application Discussions

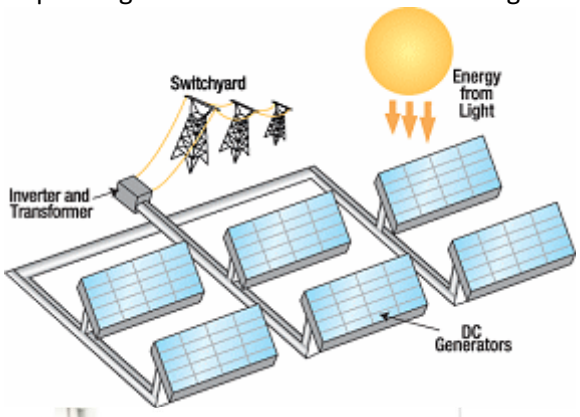
5. No pre-application discussions have taken place with the local planning authority with regard to this planning application. However Ethical Power advise that discussions have taken place

with the Local Planning Authority who have indicated that the existing panel installation is not in accordance with current Permitted Development Rights and therefore a retrospective planning application is necessary.

Solar Technology

6. Solar photovoltaic (or 'PV') technology is the process of collecting solar irradiation and converting it into electricity. Its common application is to individual properties – solar panels on the roof.

PV panels silently convert sunlight to electrical energy. They generate direct current (DC) that is converted to alternating current (AC) to be used by the electricity grid. There are various forms of PV technology (thin film, and crystalline) however these provide the same basic function. Regardless of the PV configuration, inverter hardware and transformers are required to change the direct current PV output to useable AC power for the grid. PV may be connected to the distribution network at the domestic level of 240V or at higher voltage, depending on the size and location of the generating plant.



Typical PV panel

7. The technology is in fact over 100 years old.
Ethical power has installed a 49.92kW solar Pv array on a series of flat roof structures at Ratton Performing Arts College with a total of 208 Polycrystalline modules installed.

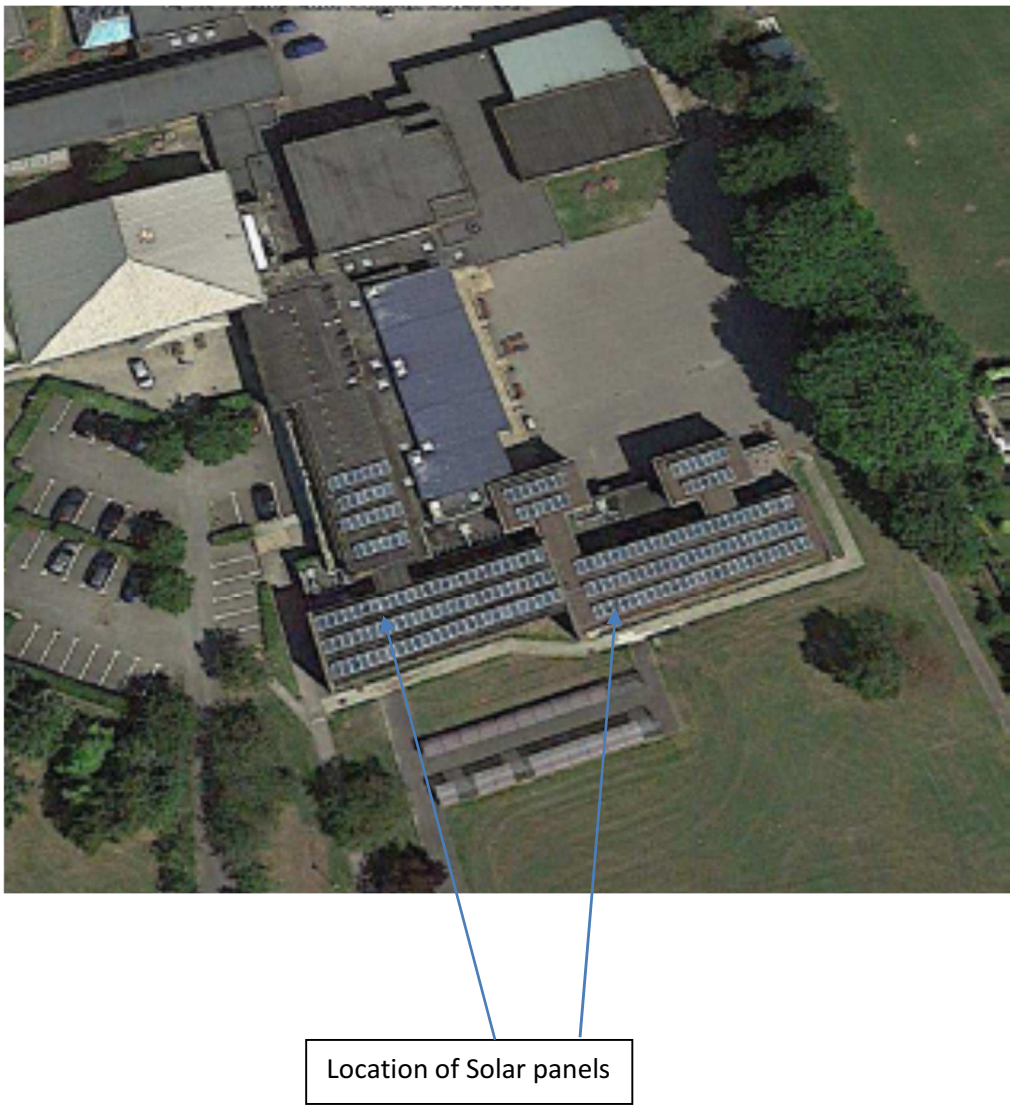
Typical Mounting system.

8. A major advantage of PV technology is that the panels convert sunlight to electrical energy without any noise output. The only noise generation will be from the inverter panels but on this scale the noise output is virtually silent. A total of 4 inverter panels have been installed.

The Site and its Context

9. The roof panels are located on a series of flat roof areas on Ratton Performing Arts College. The panels are all orientated to face south to maximise power generation.

Ratton Performing Arts College



Location of flat roof mounted panels.

Planning History

10. No relevant planning history exists for the site.

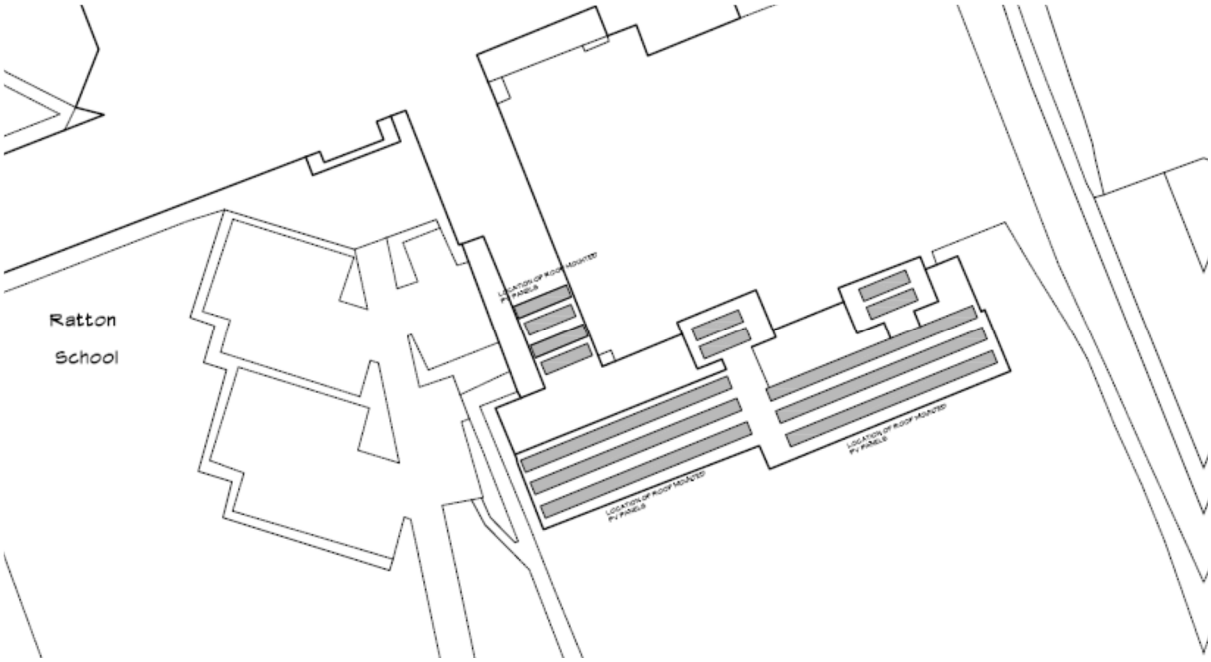
Policy

11. In formulating the scheme, regard has been paid to Government guidance on design contained within paragraph 97 and 98 of the National Planning Policy Framework (NPPF).

Paragraph 97 stipulates that LPA's should have a positive strategy to promote energy from renewable or low carbon sources, and that schemes which draw its energy supply from decentralised renewable or low carbon energy supply systems should be supported. Paragraph 98 goes on to state that applications for renewable energy projects should be approved if its impacts are or can be made acceptable.
This application is minor in nature and has no adverse impacts. The proposal makes a small contribution to meeting UK renewable energy targets and should therefore be supported.

Amount of Development

12. Panels are located on the southern block of the school. The approximate total roof area utilised is 76m2.



Part Roof Plan of School showing PV panels (hatched)

Layout

13. The Panels are laid out in portrait pattern and are fixed to the roof structure with a galvanised steel roof mounting system. The buildings are single storey and the panels can be viewed readily from ground level. The scale of development and separation from existing housing development ensures that these area not visually intrusive to the surrounding area. The photographs below illustrate that the PV panels are not concealed but they have negligible visual impact when read against the scale and massing of the existing school structure.

Scale

14. The application seeks permission retrospectively for a modest installation of 208 photovoltaic panels. The panels have extremely limited impact on adjacent properties.

Key Considerations

15. This development is proposed to assist the UK in meeting is stated renewable energy objectives renewable energy. A detailed technical data sheet forms part of this application providing details on annual electricity produced by the development. The proposal therefore supports both Energy Security and Climate change considerations.

16. The deployment will not result in the loss of any existing buildings or structures.

17. The proposed development will not introduce new building structures. The panels are located discretely on an existing roof structure.

18. The development proposal will have no impact on the local highway network.

19. The development proposal will not generate noise pollution. It has no moving parts and does not therefore generate any safety concerns in operation. It will not generate any electro-magnetic interference and will not cause glare issues.