Design & Access Statement

Proposal to install Solar Photovoltaic panels to William Bradford Community College.

Introduction

This statement accompanies an application for the installation of Solar Photovoltaic panels on to the roof at William Bradford Community College, Heath Lane, Earl Shilton, Leicester, LE9 7PD. We also plan to install monitoring equipment which can be used for educational purposes as it will enable students to study renewable energy generation.
In arriving at the current proposals, significant thought has been given to introducing a scheme that is designed specifically for this building, recognising the constraints that the site possesses.

Design

The site of the array has been chosen for practical reasons relating to the size, shape and orientation of the exiting roof that it will be mounted on. Solar PV panels work best when they are south facing at a pitch of 30 to 35 degrees, the roof we have specified is as close to this as possible to maximise the usage of the panels to generate the most electricity. The array will be considerately placed so that the appearance of the property can stay in keeping with the aesthetics of the surrounding area.

Use

The panels will be installed at William Bradford Community College which is a co-educational comprehensive school for students aged between 14-19. The building is currently used as a school and will continue to be used as a school after the installation.

Amount

We plan to install 348 Sharp 180 Solar PV Modules (or equivalent) which will equate to a 62.6KWP system, generating 44,926 KWH of Electricity per year which the school will use taking additional requirements from the grid.

Layout

The panels will be laid out over 3 roof spaces.

Appearance

The panels will be fixed to a frame mounting system and will be positioned south facing at a tilt of 30 degrees
Parts of the solar array may be visible from the road but we believe this will have a positive contribution in raising awareness to the needs of renewable energy. We believe that the array will be an iconic contribution that will enable students to understand the scale of the challenge we face in moving away from a fossil fuel based economy to a low carbon economy.

Scale

The dimensions of the individual panels are 1318mm x 994mm x 46mm (1.31m2) and will be fitted to the existing roof space.

Access

Access to the site will be via the main entrance. There are no requirements for excavations and scaffolding will be erected to facilitate the installation as required. Prior approval will be obtained from the existing energy supplier to make the final grid connections.

Conclusion

As a School we would like to become more sufficient and generating our own electricity would be a huge step in the right direction. We also hope that the sight of the panels will raise awareness not just with the students to the site but with the wider community and anybody who may see the panels from the road. The panels are an attractive design and will add to the character of an otherwise bland roof space. We believe the visual effects of the solar array are minimal and are outweighed by the economical, social and environmental benefits of the proposal as outlined above. We consider that this development is appropriate for the location and purpose for which it is proposed.