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Welwyn Hatfield Borough Council
Planning Department
The Campus
Welwyn Garden City
Hertfordshire
AL8 6AE

To whom it may concern

Re: Solar photovoltaic system Qweenswood School

Qweenswood school are proposing to install two solar systems on the roofs of the Sports Hall and Kennedy and Essame Hall respectively. The systems will be within 1m of the roof edge it is therefore understood that a formal planning application is required.

Please find enclosed the following documents in support of the planning application.

- Completed planning application form
- Design and access statement
- Location plan 1:2500 (l12018-100-10)
- Site plan 1:1250 (l12018-100-11)
- Sports Hall roof plan (l12018-100-19 & l12018-100-20)
- Sports Hall elevations (l12018-100-12, l12018-100-13, l12018-100-14 & l12018-100-15)
- Kennedy & Essame Hall roof plan (l12018-100-18A)
- Kennedy & Essame Hall elevations (l12018-100-16 & l12018-100-17)
- Detailed cross section of Sports Hall mounting (l12018-100-22)
- Detailed cross section of Kennedy and Essame Hall (l12018-100-21A)
- Module data sheet
- Sport Hall mounting system
- Kennedy and Essame Hall mounting system

If you require any further information please do not hesitate to make contact.

Yours faithfully

Duncan Brewer
Mob. [redacted]

Design and Access Statement

Proposal

Installation of two grid connected roof mounted photovoltaic arrays (solar systems) on two buildings Sports Hall (758m^2) and Kennedy and Essame Hall 136m^2. The total area of the proposed solar systems is 894m^2.

Aim

The proposed installation of solar arrays aims to reduce operating costs and carbon footprint at the school through on-site renewable generation.

The system will generate approximately 194,000 kWh / year. It is envisaged that the photovoltaic system will save approximately 37.5 tonnes of carbon, based upon current grid emission factors.

Location

Queenswood School, Shepherds Way, Brookmans Park, Hatfield AL9 6NS

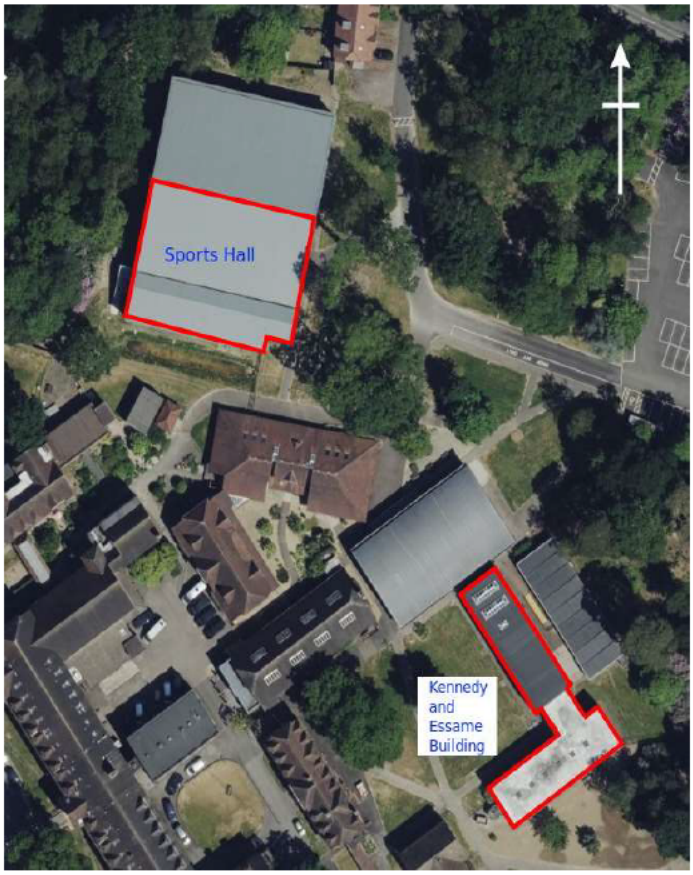

Figure 1 Proposed building locations

Scaled location plan (I12018-100-10) and site plan (I12018-100-11) accompany this application.

Policy

The proposed development of the solar systems on the two buildings at Qweenswood School is in accordance with Welwyn Hatfield District Plan 2005 and National Planning Policy.

In relation to the District Plan 2005 Document the scheme aligns with Policy R4.

Renewable Energy

5.20 Government policy aims to reduce dependence on fossil fuels and encourage greater use of renewable energy sources where proposals are economically attractive and environmentally acceptable. Government planning policy is contained within PPS 22: Renewable Energy. There are several potential sources of renewable energy e.g. solar, waste, landfill gas, sewage and farm slurry, wind, water, geo-thermal and wood. In Hertfordshire, according to a 1997 survey by the Department of Trade and Industry, the potential for solar power generation is very significant and considerably higher than any other form of renewable energy. This type of energy is ideally suited to being generated at the local level, particularly for single dwellings, and thus newbuild dwellings offer an excellent cost-effective opportunity to make a significant contribution to the harnessing of renewable energy in the district.

Other sources of renewable energy can themselves raise environmental concerns such as pollution, traffic generation and visual impact. Whilst supporting the use of renewable energy in principle the Council will wish to Welwyn Hatfield District Plan – to be adopted 2005 District-wide policies 37 take into consideration likely detrimental impacts. Applications will be required to be supported by an Environmental Impact Assessment where this is appropriate in terms of Circular 2/99.

Policy R4 - Renewable Energy Sources

Planning permission will be granted for proposals for the development of renewable energy sources subject to all of the following criteria:

(i) It would not have a significant visual impact;
(ii) It would not generate an unacceptable level of traffic;
(iii) It would not result in an unacceptably high level of atmospheric emissions;
(iv) It would not have a significant adverse impact upon features or areas of ecological, architectural, landscape or conservation importance;
(v) It would not have a detrimental impact upon adjoining properties and land holdings; and
(vi) It would not generate an unacceptable level of noise.

In relation to National Planning Policy the proposal aligns with paragraphs 152 and 158 in a bid to increase low carbon energy sources.

National Planning Policy

Paragraph 152

The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.

Paragraph 158

When determining planning applications for renewable and low carbon development, local planning authorities should:

a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and

b) approve the application if its impacts are (or can be made) acceptable[54]. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas.

Design

The proposed layout of the photovoltaic arrays are presented in drawings l12018-100-20 and l12018-100-18A. Elevation drawings of existing and proposed are presented in drawings l12018-100-12 to l1201-100-17.

Sports Hall
The solar modules will be black cells with a black frame (see PV module specification sheet) and be in line with the curved grey standing seam metal roof profile on the Sport Hall. Aluminium rails will be clamped onto the standing seam roof.

The system will not exceed 200 mm from the roof surface on the Sports Hall. Further detailed cross sectional design is presented in l12018-100-22 and K2 SpeedRail Datasheet.

Kennedy and Essame Hall
The Kennedy and Essame Hall building has a flat roof with a very slight parapet around the outside. The proposal is to install a low ballast interlocking mounting system as presented in elevation drawing l12018-100-17 and plan drawing l12018-100-18. A detailed cross section of the installation is presented in l12018-100-21A and product specific sheet Dome 6 System. The system will not exceed 300mm from the roof surface at highest point.

Structural

A structural survey of the buildings will be undertaken before works commence to ensure the roof can take the additional load.

Visual impact

Both installations do not front any public highway and as such are not visible from any public highway. As such there is no detrimental visual impact from installing the solar systems on the south facing roof of the Sports Hall. The Kennedy and Essame Hall roof is flat and the mounting system proposed protrudes just 300mm from the roof as such the will not be very visible from the ground.

The buildings are not within a conservation zone or within the curtilage of a listed building.

Ecological impact

There is no perceived impact on the surrounding flora or fauna in the area.

Transport

Access to the site will be via the main school entrance via Shepherds Way to the north.

Building Access

Scaffolding will be erected to access the roof during construction. The scaffolding will not impede safe access to and use of the building.

Waste

Waste will be minimal and will mostly consist of cardboard packaging and pallets which will be removed from site and recycled. A project waste skip will be brought on site.

Noise

Construction noise will be minimal with the use of handheld equipment e.g. screwdrivers.

Contractor Parking

Contractors will use the existing parking on site.