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Tendring Council
Planning & Building Control
Town Hall
Station Road
Clacton-on-Sea
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15th November 2023

Application for determination of permission to install solar panels at Rolph C of E Primary School & Nursery

Dear Sir/Madam

Re: Application for planning permission for the installation of Photovoltaics (PV) equipment on the roofs of Rolph Church of England Primary School & Nursery, High Street, Thorpe-le-Soken, Clacton-on-Sea, Essex, CO16 0DY.

Please find attached our Planning Application for the installation of solar panels on the roofs of Rolph Church of England Primary School & Nursery, High Street, Thorpe-le-Soken, Clacton-on-Sea, Essex, CO16 0DY.

We are aware that whilst the Town and Country Planning (General Permitted Development) Order 2015 under Part 14 Class J allows for permitted development of solar PV panels with a generating capacity of up to 1 megawatt on the roofs of non-domestic buildings, there are a number of restrictions, limitations and conditions.

The criteria have been considered and whilst the proposed development of solar panels meets some of them it fails to meet one of these conditions, so we are seeking full planning consent for the installation.

Below we have addressed the following:

- *To show that the proposed installation does constitute permitted development in terms of much of its design.*
- *To highlight why planning permission is being sought and*
- *To illustrate how the proposed installation meets with the national policy to encourage decarbonisation but maintains the integrity of the area.*

To assist in the planning approval process, this application is also accompanied by supporting documents, including:

- 01 Supporting statement
- 02 Proposed design
- 03A Site location plan
- 03B Building location plan
- 04 Scaled map

- 05 Supporting images
- 06 Cross section
- 07 Arrangement of Panels
- 08 Example of a standard panel data sheet

Site location:
Rolph Church of England Primary School is a village school in Thorpe-le-Soken, Clacton-on-Sea. Under normal circumstances such an installation could be considered as Permitted Development under 50kWp, but the proposed development does not meet the one-meter margin rule and so for this reason planning approval is being sought.

Rolph C of E is located beside and can be accessed from High Street. Although it is located by a highway, the school is set further inside and almost behind the residential property at the front. There are no other residential properties nearby and this particular property has no line of sight from the back towards the south facing roofs of the school building. Additionally, the proposed installation does not utilise the west facing slopes and so none of the roof slopes considered for installation are seen by the neighbouring and residential properties.

From the highway, apart from the school entrance the school building is not seen. It is hidden between properties well away from the highway, approximately 30 metres away. It is practically concealed amongst the houses and surroundings by being located farther within. Any passer-by would be unaware of the school and similarly unaware of the proposed installation. The possibility of the panels being seen and being detrimental towards its surroundings is highly unlikely, if not impossible.

The site is not within a scheduled ancient monument and the buildings, to which it is proposed to add panels, are not listed or within the curtilage of a listed building. Nor does it fall within a conservation area. There is a listed building 40 metres east of the school and the vicinity it resides in consists of many Grade-II listed buildings. None of panels are incident on the listed buildings and they are in no way detrimental towards their surroundings (see 05 Supporting Images).

National policy for decarbonisation
The proposed installation is in keeping with the school's ambition to install solar panels which will deliver zero-carbon electricity and an energy literacy educational programme. This is in line with the government's drive to encourage public sector decarbonisation and the installation of solar panels to publicly owned buildings.

Description of the proposed development
The proposed development is for around 158 panels on the pitched and flat roofs with a total install capacity of around 70kWp. To meet government targets for decarbonisation and to maximise the ambitions of the school to generate as much zero-carbon solar electricity as possible, the panels on the proposed development are as close to the edges as is possible. Under permitted development criteria on a non-residential building there is a requirement for a 1 metre margin. This requirement does not exist for residential properties with similar pitched and flat roofs as the school. The proposed development therefore follows permitted development criteria for residential properties with panels that go less than one meter to the edges of the pitched and flat roof plane, a system that maximises the opportunity for the school on the pitched south, east and west facing roofs. (04, 05,06 & 07).

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How the development would fit with Permitted Development:

The solar panels which will be installed on the school's pitched and flat roofs (Roof Cross section 06), can be considered under Part 14, Class J (c,) as "the installation, alteration or replacement of other solar PV equipment on the roof of a building".

In terms of design, the arrangement of the panels meet with most of the criteria for permitted development.

On the pitched roofs, the panels will be mounted on roof hooks to fasten a series of rails to the roof, with panels then being mounted on to these rails. As shown on the Roof Cross Section Drawing (06), the panels of the proposed installation will not protrude more than 0.2 meters beyond the plane of the existing pitched roof slope when measured from the perpendicular with the external surface of the roof, so Part 14 (J.1.) (a) will be complied with.

For flat roof areas, the panels will be mounted on ballasted frames that rest on padding to protect the underlying roof membrane at an angle of 10 degrees. At no point are the panels higher than 1 metre above the highest point of the roof (excluding chimneys); in fact, according to the proposed tilt of the panels they will be less than 0.5 metres high (see Roof cross section 06).

Why Planning Permission is required:

To comply with permitted development the layout of the panels on the pitched areas would need to be spatially arranged in such a way that the solar panels would be offset by at least 1 metre from the external edge of the roofs (Cross section 06 and Scaled map 04) to comply with J1. Part (c) and with no equipment within 1 metre of a roof junction for Part 14 (J.2.) (b) to be complied with and this is where the design fails to meet the criteria for permitted development on a non-domestic building.

For the flat roofs as well, the solar panels would need to be off-set by at least 1 metre from the external edges (Cross section 06 and Scaled map 04) to comply with J1. Part (C) and with no equipment within 1 metre of a roof junction, although it is not as close to the edges like for a sloped roof, there will be a minimum distance of 0.6 metres from the edges since the mounting system cannot support going lower than this. This is where the design fails to meet the criteria for permitted development on a non-domestic building.

The proposed panels on Rolph C of E Primary School & Nursery will not have the 1 metre margin to a roof junction or edge. The roofs of the school are being treated like a residential property solar installation under permitted development where there is no 1 metre-margin rule. So, like a residential property, the maximum roof area possible can be used for the benefit of the residents of the building, in this case the school. But given that this is a non-domestic property, we are seeking planning approval for the installation.

The exact number of the panels and total capacity will depend on the panels and their wattage at the time of installation, but the project will involve the roof areas indicated in the Proposed design (02). Any changes from this proposal will be 'de minimus' i.e., of a such a small scale to not be materially different to this planning application

The solar panels are of standard design and are proposed to run in rows, positioned on the roof, the panels will be mounted on roof hooks to fasten a series of rails to the roof, with panels then being mounted on to these rails on the pitched roofs. For flat roof areas, the panels will be mounted on ballasted frames that rest on padding to protect the underlying roof membrane at an angle of 10 degrees. As shown on the Roof Cross Section Drawing (06), the panels of the proposed installation will not protrude more than 0.2 meters beyond the plane of the existing pitched roof slope when measured from the perpendicular with the external surface of the roof and will not be higher than 1 metre above the highest point of the roof (excluding chimneys).

It is considered that the proposed solar panels would be complementary to the character of the school. The visual appearance of the solar panels is considered appropriate for the school building enhancing the visionary appearance of the site as an up-to-date centre for learning, creating responsible citizens for tomorrow's world with an appreciation for their surroundings and a duty of care for the environment. It is considered that the panels could have a positive impact on the character of the building and will have no overall detrimental impact on the surrounding area.

Adding positively to the school's image - The panels will provide a sustainable and "green" future that the school community wants to adopt. The panels enable the school to further improve its decarbonisation journey, as well as teaching and learning about how to live more sustainably. It is therefore considered that the panels would have a positive impact on the school's image and its goals to use its buildings.

Impact on Neighbouring Land uses

There are not many neighbouring and residential properties beside the school that have proper visibility towards the school buildings as they are situated behind them. Residents do not have a line of sight towards the school buildings, therefore allowing the panels to be unseen. Apart from the entrance on High Street, the panels cannot be seen from anywhere else and hence the chances of glint and glare affecting the amenity of the area is very unlikely.

Summary

Although the proposed scheme to install 158 solar panels on the roofs of Rolph C of E Primary School & Nursery meets most of the criteria for permitted development under Part 14 Class J (c) of the Town and County (General Permitted Development) Order 2015, there is no 1 metre margin on the pitched and flat school roofs (just like residential solar power permitted development so the potential to generate solar electricity can be realised). So given the design of the panels on the pitched and flat roof buildings, planning permission for the installation is being sought.

In terms of the design and appearance, the solar panels to be installed on sloped roof areas of the buildings are of standard design; they will have no adverse impact on either the character of the surrounding area or residents; nor on the amenities of the occupiers of adjacent properties to the site (neighbouring land uses).

In addition, the installation would be in keeping with the character and goals of the school, helping it builds its ambitions to use its buildings and land, as a centre of learning and beacon of sustainability and student wellbeing, helping decarbonise its activities and reduce its impact on the local environment.

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We would be grateful for your written confirmation that the proposed installation could be granted planning permission so the panels can start to generate low-carbon electricity for the school, which in addition to cutting carbon, is supported by an energy literacy programme for students.

Yours Sincerely

Charles Ahenda-Bengo
Project Manager
Solar Options for Schools Ltd