

1.0 Introduction

This document supports a General Permitted Development Order (GPDO) application for the installation of a solar photovoltaic (PV) system at Ellenor Hospice, located on Cold Harbour Road, Gravesend. The proposed system will consist of 120 solar panels connected to Enphase micro inverters, with a total system capacity of 52.8 kW. This project aligns with Ellenor Hospice's commitment to sustainability and reducing operational costs through renewable energy sources. This proposal adheres to the necessary guidelines to qualify as permitted development under current regulations.

1.1 Client Overview

Ellenor Hospice is a highly respected charitable organisation located on Coldharbour Road, Gravesham. It provides comprehensive palliative care services, including pain management, symptom control, and emotional support, to patients with life-limiting illnesses. Ellenor Hospice also extends its care and services to the families of patients, ensuring a compassionate and holistic approach to end-of-life care. The hospice is deeply integrated into the community, offering both inpatient and outpatient services and a range of support programs.

2.0 Site and Surroundings

2.1 Site Location and Context

Ellenor Hospice is situated on Cold Harbour Road, a residential area in Gravesend. The hospice serves the community by providing specialist palliative care, and its premises are well-integrated into the surrounding neighbourhood, which is characterised by detached and semi-detached homes, as well as mature trees and hedgerows. The building itself is a single-story structure with a pitched roof, surrounded by green spaces that offer natural screening from adjacent properties.

2.2 Physical Characteristics of the Site

The site features a pitched roof with multiple orientations, offering an ideal setting for the proposed solar PV installation. The southern, eastern, and western roof planes receive ample sunlight, making them suitable for solar energy capture. The building is not within a designated conservation area, nor is it a listed building, which simplifies the planning considerations for the proposed development.

2.3 Surrounding Land Use and Visual Impact

The surrounding land use is primarily residential, with the hospice being a community healthcare facility. The proposed solar installation is designed to be unobtrusive, with the panels mounted parallel to the roof surface and largely hidden from public view by the existing vegetation, the building's roofline and the new extension to the hospice. This ensures minimal visual impact on the surrounding area, preserving the character of the neighbourhood.



Site Location



Views North from Cold Harbour Road and Marks Square

3.0 Proposed Development

3.1 Details of the Proposed Solar PV System

The proposed solar PV system consists of 120 high-efficiency solar panels connected on Enphase micro inverters. These inverters offer enhanced safety, reliability, and performance by converting DC electricity to AC at each panel, reducing the risk of system-wide failure and improving energy yield. The system has a total capacity of 52.8 kW, expected to significantly offset the hospice's electricity consumption, thus reducing both operational costs and carbon emissions.

The proposed solar development is a key part of Ellenor Hospice's commitment to environmental sustainability and reducing its carbon footprint. By generating clean, renewable energy on-site, the hospice will significantly reduce its reliance on grid electricity, thereby lowering operational costs and redirecting more funds toward patient care. The system is expected to produce approximately 52,800 kWh of electricity annually, reducing CO₂ emissions by around 8.5 tonnes per year. This initiative aligns with national and local sustainability goals, supporting the transition to a low-carbon economy.

3.2 Installation Specifications

- Location: The panels will be installed on the southernmost southwest and southeast roof planes of the hospice building.
- Mounting System: The panels will be mounted using a low-profile racking system that ensures they parallel with the roof surface, with minimal spacing beneath reducing visibility and potential wind load.
- Orientation and Tilt: The panels will be installed at the same angle as the roof, optimizing sunlight capture while minimising visual intrusion.
- Wiring and Conduit: All wiring will be routed where possible, internally, with minimal external conduit, to preserve the aesthetic integrity of the building.



3.3 Justification for Design Choices

The choice of Enphase micro inverters is critical for both safety and performance. Unlike traditional string inverters, micro inverters isolate each panel, so shading, soiling, or damage to one panel does not impact the entire system. This feature is particularly important given the complex roof layout and potential shading from nearby trees. The design ensures maximum energy production and longevity of the installation while maintaining the building's visual appeal.

3.4 Integration with Existing Infrastructure

The proposed solar PV system will integrate seamlessly with the existing electrical infrastructure of the hospice. The installation will include an updated monitoring system to provide real-time data on energy production, consumption, and system health, allowing the hospice to optimise energy use and identify potential issues promptly.

4.0 Legislation and Planning Policy

4.1 Overview of Relevant Legislation

This application is submitted in accordance with the Town and Country Planning (General Permitted Development) (England) Order 2015 (GPDO), specifically focusing on compliance under Class J of Part 14 (Renewable Energy). The proposal also considers the statutory

framework of the Town and Country Planning Act 1990 and the Planning and Compulsory Purchase Act 2004.

4.2 National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) emphasises the need for sustainable development, encouraging the adoption of renewable energy technologies. This proposal aligns with the NPPF's core objectives by reducing carbon emissions and promoting energy efficiency.

4.3 Local Planning Policy Compliance

Gravesham Council's Local Plan supports the integration of renewable energy systems in new and existing developments. Key policies relevant to this application include:

- Policy DP26: Encourages sustainable construction and the use of renewable energy sources.
- Policy DP29: Supports the reduction of carbon emissions through the implementation of renewable energy technologies.
- Policy DP40: Focuses on the protection and enhancement of the environment, ensuring that new developments do not negatively impact the character of the area.

4.4 Compliance with Permitted Development Rights

The proposed solar PV installation meets the criteria outlined under Class J of Part 14 of the GPDO 2015, which allows for the installation of solar panels on non-domestic premises without the need for a full planning application, provided certain conditions are met:

- The panels will not exceed 200 mm in projection from the roof plane.
- The highest part of the panels will not extend beyond the highest part of the roof (excluding chimneys).
- The panels will be situated at least 1,000mm from the external edge of the roof.
- The installation will not be on a building within a conservation area or a listed building.

4.5 Environmental and Sustainability Considerations

The installation will contribute to the hospice's sustainability efforts, significantly reducing its carbon footprint and supporting the transition to a low-carbon future. The system is expected to generate a substantial portion of the hospice's electricity needs, reducing reliance on grid electricity and lowering operational costs. This aligns with both national and local policies aimed at promoting renewable energy and reducing greenhouse gas emissions.

5.0 Relevant Planning Considerations

5.1 Design and Visual Impact Assessment

The design of the solar PV system has been carefully considered to ensure minimal visual impact. The panels will be mounted to the roof, maintaining a low profile that does not detract from the building's appearance. The existing mature trees and hedgerows around the site provide additional screening, ensuring that the installation is not prominent from public viewpoints or neighbouring properties and the new extension provides cover for the main southwest array from the main road

The proposed solar installation at Ellenor Hospice will be located on a pitched roof that does not exceed the highest part of the roof by more than 200mm. The panels will be flush with the roof plane, ensuring minimal visual impact.

The installation will not involve the addition of any external wiring, other than cabling, ensuring that the aesthetic integrity of the building and surrounding area is maintained.

5.2 Impact on Residential Amenity

The proposed development is not expected to have any adverse impact on the amenity of nearby residents. The panels are designed to minimise glare, and their placement on the roof planes ensures that they are not directly visible from the surrounding homes. Furthermore, the installation will not result in any noise or other disturbances, maintaining the quiet residential character of the area.

5.3 Technical and Safety Considerations

The use of Enphase micro inverters enhances the safety of the system by reducing the risk of high-voltage DC electricity on the roof. In the unlikely event of a fault, the micro inverters can isolate individual panels, preventing potential hazards. The system will be installed by certified professionals, ensuring compliance with all relevant electrical and safety standards.

5.4 Heritage and Conservation

While the site is not within a designated conservation area, care has been taken to ensure that the installation does not negatively impact the broader character of the neighbourhood. The design respects the existing architectural features of the hospice building, and the installation will not alter the roofline or silhouette of the structure.

5.5 Climate Change and Sustainability

The proposed solar PV system is a key component of Ellenor Hospice's strategy to combat climate change by reducing its carbon footprint. The system will generate clean, renewable energy, contributing to the hospice's goal of achieving greater energy independence and sustainability. This is consistent with the UK government's broader objectives of reducing greenhouse gas emissions and promoting the use of renewable energy technologies.

6.0 Conclusions

The proposed solar PV installation at Ellenor Hospice is a well-considered and sustainable development that aligns with both national and local planning policies. The project is fully compliant with the GPDO 2015 and has been designed to minimize any impact on the surrounding area while significantly contributing to the hospice's energy needs and environmental goals.

Given the careful planning and design of the proposed development, and its clear alignment with relevant policies and regulations, we respectfully request that Gravesham Council approves this application under permitted development rights.