



# **Case Study**

Ground Source Heat Pump for Grade II Listed Building



### At a glance

- Replacement of an old oil system with a Ground Source Heat Pump system for a Grade II Listed building
- Nicholls Boreholes are highly experienced with retrofit GSHP systems
- 2 Heat Pumps generating
  17kW of heat
- Ongoing servicing by Nicholls Servicing Department

### **Objective**

Nicholls were entrusted to provide a renewable heating system for this Grade II listed Sussex farmhouse which was undergoing refurbishment and extension by Nicholls Countryside Construction.

### About the project

Nicholls designed, supplied and installed the Ground Source Heat Pump system which was more complicated due to the single phase existing power supply. This issue was overcome with the installation of two single phase heat pumps and the way that they were programmed and fitted. This system required four GSHP boreholes at a depth of 100m each, located in the drive close to the plant room. This system provides all the heating through a combination of underfloor heating and radiators and meets the full hot water demand for the client. The system also benefits from Solar PV which supports the electrical supply.

# **Award winning**



The project received the Sussex Heritage Trust Award in 2021, due to its renewable credentials and the attention to detail from our sister company Nicholls Countryside Construction.



"An exceptionally well executed project by a dedicated contractor with an excellent understanding of the existing building using a light touch. The project ensures the future of the building."

Judge's Citation, Sussex Heritage Trust Award 2021

"Nicholls undertook a total restoration of our Grade II listed property including a new build extension. Mutual trust was established from our first meeting, and wow did they deliver, exceeding all expectations to give us a beautiful home!"