

14th September 2021

APPLICATION NO: 21/01529/FUL	OFFICER: Miss Claire Donnelly
DATE REGISTERED: 30th June 2021	DATE OF EXPIRY : 25th August 2021
WARD: All Saints	PARISH:
APPLICANT: Mr Colin Smith	
LOCATION: Priory Cottage, 18 Priory Street, Cheltenham	
PROPOSAL: Addition of an air source heat pump to an existing wall	

REPRESENTATIONS

Number of contributors	0
Number of objections	0
Number of representations	1
Number of supporting	0

Priory Cottage
18 Priory Street
Cheltenham
Gloucestershire
GL52 6DG

Comments: 14th September 2021
Summary of justification from applicant attached.

[REDACTED], 18 Priory Cottage, Cheltenham Glos. GL52 6DG.

Re; Planning Application **21/01529/FUL** Priory Cottage - the installation of an Air Source Heat Pump (ASHP).

This document has been prepared for the committee by [REDACTED] dated 01/09/21

Reason for the request - we want to install an ASHP to replace a 20-year-old inefficient Gas Combi Boiler in a tight, town centre location, within the Cheltenham Conservation area whilst getting as far away from our neighbours doors and windows as possible.

The Problem; our preferred location is in an elevated position, within one metre of our boundary which requires planning approval. The initial request has been rejected on the following grounds:

Planning - it is in a conservation area, is within a metre of our boundary and is visible (just).

Environmental Health - there could be a noise pollution issue and advise an Acoustic survey to be under taken. This judgement was made whilst not considering the specification of the ASHP selected nor the distance we will be from our nearest neighbours doors and windows.

Important; should we choose another location which is over one metre within our boundary and at ground level the ASHP doesn't require planning permission and more bizarrely, an acoustic survey is not required!

We have chosen the location because:

Our house and land measures around 18 metres by 12 metres excluding the drive. It is bordered by 7 properties with only one aspect, the one chosen for this planning application (overlooking a Council Car Park), not being directly connected to a neighbour and affording us a distance of around between 6 to 8 metres from our nearest neighbours doors and windows and two metres from the end of their gardens. **Our two priorities are the environment and our neighbours!**

The position chosen is a partially visible south facing gable end and being elevated, will make the ASHP as efficient as possible (it will be operational for less time) and as quiet as possible because there will be no close walls to echo sound from.

The position is on the outside of the wall that currently has the existing boiler. Therefore, it will pump straight into the existing heating system with very little heat loss and low pump run time.

We are determined to reduce our carbon foot print and make our house future proof. We have already installed insulation to a high specification, underfloor heating and will shortly be installing a 5KW solar system to feed into a battery storage system (already approved) along with solar boost to a new hot water cylinder. With all of these measures an ASHP, correctly located for maximum heat transfer efficiency, will hardly be on between March and November, with some usage in the daytime winter months; we can't see a situation when the pump would need to run at night unless the external temperature went well below zero.

Acoustic and location explanation:

- The requirements for noise is generally based on a 30dB noise level being acceptable. In addition, "**Permitted Development**" i.e. **where planning is not required**, is a Sound Pressure Level of no more than 42dB from a neighbours nearest room (assessment position).

- The Mitsubishi Ecodan 8.5kW ASHP (specification enclosed) has been selected based on its low-noise level of 58dB maximum noise output.
- Based on the output of 58dB for the Mitsubishi Ecodan ASHP, the published sound level of 45dB measured at 1 metre from the ASHP, and the decay rate of 3dB/m, the expected noise at the nearest properties are 18dB to the rear of 18 Hewlett place and 27dB at the rear of 1 Sidney Street. These levels are below what is considered to be a nuisance level of noise.
- As it will be facing south-west it will benefit from direct solar gain and from indirect solar gain reflected and radiated from the wall of the house.

In conclusion, we believe the Environmental Health concerns do not make sense because they require an Acoustic survey for our installation, which is 6 to 8 metres from a neighbour, but not require an acoustic survey for an installation which could be 2 metres from a neighbour because it falls out of planning regulations! **The real issue here is the location in a conservation area, which is understandable and needs to be resolved.** We are unlikely to be the only people in the Cheltenham conservation area who will be wanting to replace a boiler with an ASHP over the next few years.