

RURAL AND COUNTRY ENERGY

## **Design and Access Statement**

Installation of Domestic Air Source Heat Pumps and to  
supply low carbon Heating and Hot Water at:

5 Lache Lane, Chester CH4 7LP

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Written By: Mike Lowes

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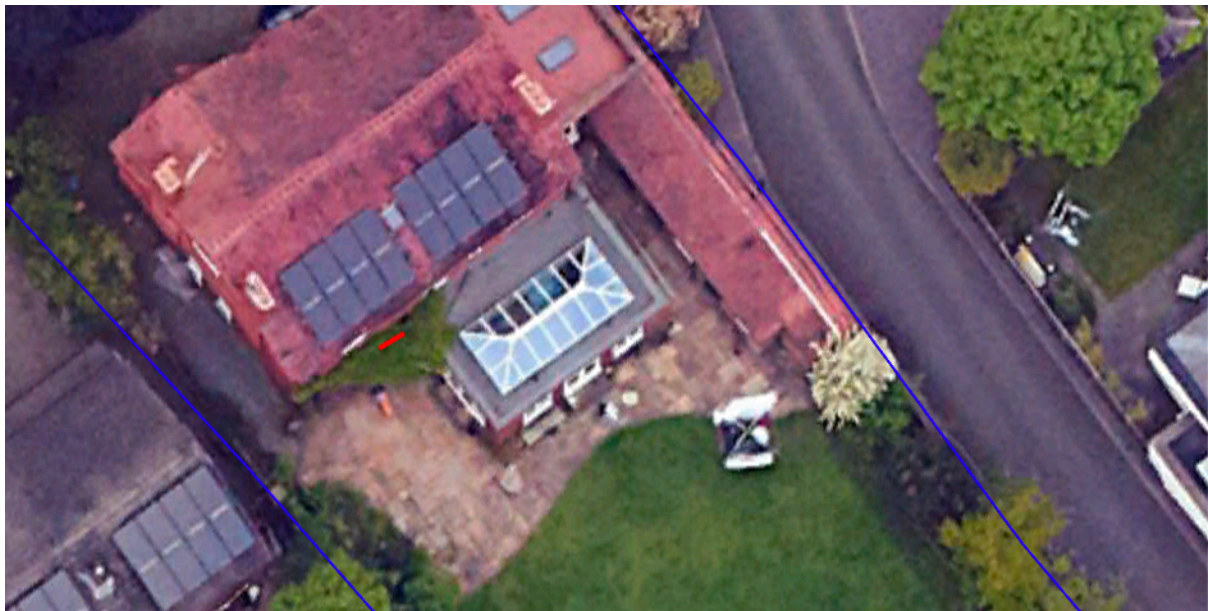
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**1/ Purpose of this Design, Access and Supporting Statement, and location of plant**

1.1 The purpose of this Statement is to provide, in addition to the Application itself, a better understanding of the scheme, which involves the installation of a Domestic Air Source Heat Pump system to supply Low Carbon Heating and Hot Water to 5 Lache Lane

1.2 The 2 Air Source Heat Pumps (ASHP) will sit above each other (lower one floor sited, the upper one bracket-mounted above it) to the rear of the property as indicated by the red-line below.



By nature of their location they will be hidden from neighbouring properties.

1.3 The ownership boundary is also shown on the image below in blue



1.4 This Statement will help to show how regard has been given to National Planning Policy Framework (NPPF) and other relevant guidance notes, including habitat, highways and visual issues.

1.5 We hope that this document and attachments will assist the Local Authority and the public on the merits of the project, **but please note important note below 2/ regarding Permitted Development Rights.**

## **2/ Reason for this Application**

2.1 Installation of Air Source Heat Pumps (ASHP) to this property would generally be covered by Permitted Development if the following apply:

The Property is not a Listed Building

The Heat Pumps are being installed more than 1mtr from a neighbouring boundary.

The Heat Pump mass is less than 0.6m<sup>3</sup>

There is just one Heat Pump unit in place.

Due to the size of the property we are needing to install 2-Heat Pumps (that collectively exceed the 0.6m<sup>3</sup> massing) and that triggers the need for an Application.

## **3/ Understanding the technology and its necessity**

3.1 Heat Pumps are a direct replacement for a fossil-fuel boiler.

3.2 Domestic Heating and Hot Water production accounts for around a fifth of all UK carbon emissions. The problem is huge, and the effects through Climate Change have long been recognised and are now accepted as a global threat.

3.3 Government have accepted this now, and are introducing a series of measures over the coming 15-yrs that will slowly see the abolition of Gas and Oil boilers for domestic property heating. This will start as early as in 2025, when new gas connections will be abolished.

3.4 It is expected that by 2035 there will a total phasing out of fossil fuel boilers for heating, in favour of Heat Pumps. These can heat properties using low-carbon (Solar and Wind in the main) electricity.

Heat Pumps will become a mainstream heating appliance that will be ultimately installed to the majority of UK housing stock over the next 2 to 3 decades.

3.5 Air Source Heat Pumps work by absorbing low-temperature energy from the air into an externally sited Heat Pump unit. A heat exchange process sees this energy transferred into a gaseous state where it is then Compressed, super-heating it in the process. A further Heat Exchange process transfers this super-heated energy into the water flowing around a central heating circuit, heating the property.

3.6 Heat Pumps create no Carbon. They are not combustible appliances. There are no Carbon Monoxide risks to occupants, and no flue gasses or pollutants expelled into the local and wider atmosphere. They are an incredibly safe and clean way to heat buildings.

#### 4/ Understanding the scale / Appearance of the installations

4.1 It is important to understand the scale of the installation. The Heat Pumps have a width of only 1m, and are only 1.3m in height. They will sit above each other to the rear elevation of the property as detailed on the accompanying 1250 and 500 scale plans.

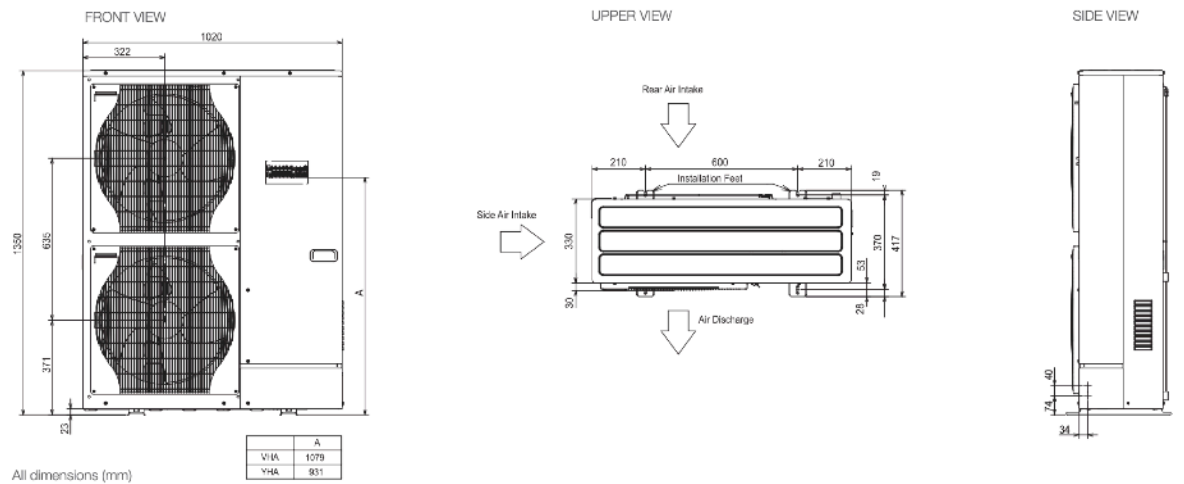
The Heat Pump looks as attached



4.2 The ASHP's will be finished in an off-white powder-coat. The unit is maintenance-free and has an expected lifespan of some 20-yrs.



### 4.3 The Heat Pump Dimensions are shown below



## 5/ Neighbour Opinion

5.1 Due to the nature of the Heat Pump Installation, its location and small domestic scale, we have not have sought to canvass opinion from the wider area.

## 6/ National Planning Policy Framework (NPPF)

6.1 The proposed development is in line with Renewable Energy guidelines set out in National Planning Policy Framework. The installation will make a positive and necessary impact (reduction) to the Carbon production of the property and, its environmental benefits should therefore be applauded.

6.2 The installation, if fed using electricity from a Green Utility provider as intended will produce Carbon-neutral Heating and Hot Water. It is estimated that a fifth of all Carbon emissions in the UK are as a result of Heating domestic property using fossil fuel.

6.3 NPPF Para 14 reinforces Government's belief that a Sustainable Development should be favoured, and is key to Planning decision-making.

6.4 NPPF Core Planning Principles outline that Planning should also 'encourage the use of Renewable Energy (for example, by the development of Renewable Energy)' and promote schemes that reduce pollution.

This is a direct fit with the scheme we propose.

6.5 NPPF Section 10: 'Meeting the Challenge of Climate Change, Flooding and Coastal Change', highlights that Planning plays a key role in helping to reduce greenhouse gas emissions, should assist in providing resilience to the impacts of climate change and support the delivery of Renewable and low Carbon infrastructure.

Importantly, Para 97 of this section states that 'Local Planning Authorities should recognise the responsibility on all communities to contribute to energy generation from Renewable or Low Carbon sources'. It goes on to say that Local Authorities should 'have a positive strategy to promote energy from Renewable and low-Carbon sources'.

6.6 Para 98 also states that when determining Planning Applications, Local Authorities should recognise that even small-scale Renewable or low-Carbon projects provide a valuable contribution to cutting Greenhouse Gas emissions and Approve the Application if its impacts are (or can be made) acceptable.

6.7 The proposed scheme achieves all these points and the Application should be Approved in all aspects – it meets the NPPF brief conclusively.

## **7/ Access**

7.1 The installations can be adequately accessed from the local road network for service and maintenance. There is no need to change or create new roads, paths or access.

## **8/ Conclusion**

8.1 As noted in Paragraph 1, this information has been provided to further explain the merits of the proposal, and to raise awareness and understanding of the proposed installation.

8.2 The proposed development fully embraces the guidelines set out in National Planning Policy and makes a positive and significant reduction to the client's carbon emissions. We would conclude that planning approval should be given for the project, and would ask that you contact us if you require any further information, or if we can further assist the planning process in any way.

STATEMENT ENDS