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Ref: PP-11718429

Dear Sir/Madam

Full planning permission for installation of 174 air source heat pumps at Arrowfield Estate, Chorlton
Submitted on behalf of Southway Housing Trust

Introduction and Overview

On behalf of our client, Southway Housing Trust, we have today submitted an application at the Arrowfield estate in Chorlton for:

'Installation of 174 air source heat pumps to apartments'

This application has been submitted via the Planning Portal (ref: PP-11718429), and the requisite application fee of £494.20 has been paid under separate cover.

The following information has been submitted as part of this application:

- This supporting statement and covering letter;
- Application form and certificates;
- Location Plan;
- Site Plan - Cressfield Way;
- Site Plan - Foxbench Walk;
- Site Plan - Sandstone Way/Pinetop Close/Cressfield Way;
- Site Plan - Wishaw Square/Marhan Close;
- Plant Sound Assessment Report (Lighthouse Acoustics, ref: 0989.PSA1);
- Daikin Altherma EDLA04EV3 dimension drawing;
- Daikin Altherma EKLN08A sound enclosure dimensions drawing; and
- Product Technical Details EDLA04-08EV3.

The application relates to the installation of 174 air source heat pumps across the Arrowfield housing estate in Chorlton, South Manchester. The domestic properties that are proposed to be served by the heat pumps are located on Brookstone Close, Castlefield Walk, Cressfield Way, Foxbench Walk, Marham Close, Pinetop Close, Sandstone Way, Terrington Close and Wishaw Square. These properties are two-storey 'maisonette' type apartment units.

The proposal will result in the replacement of existing, non-renewable fuelled forms of heat generation with air source heat pumps, and reflects a wider required change, by both national and local policy, to such forms of heating for domestic properties, this is discussed further below.

The Proposals

This application seeks permission for the installation of 174 air source hear pumps. The heat pumps that are proposed to be installed are Daikin Altherma low temperature monobloc (model reference: EDLA04EV3). The technical details for this model are set out in the submitted Product Technical Details EDLA04-08EV3.

The air source heat pumps are proposed to be installed on the external façade of the residential property to which it serves and have been sited up to 3 metres from habitable windows in order to minimise any potential amenity issues that may be caused by the installation of these units. All heat pump units will be ground mounted. As set out on the submitted Product Technical Details, the model reference EDLA04EV3 will result in sound pressure levels of 44dB when providing heat. The units will not provide cooling to the properties.

The submitted Plant Sound Assessment Report (Lighthouse Acoustics, ref: 0989.PSA1) indicates that atmospheric plant sound emissions from the proposed heat pump units are likely to achieve the requirements of Manchester City Council at the nearest noise sensitive receptors with the incorporation of the proposed mitigation measures. It is proposed that these will be Daikin Altherma EKLN08A sound enclosures.

As shown on the submitted site plans, the locations at which the proposed air source heat pumps will be installed are as follows:

- 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28 and 30 Brookstone Close
- 2, 4, 6, 8, 10, 12, 14 and 16 Castlefield Walk
- 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 and 40 Cressfield Way
- 1, 3, 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 24, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 71, 73, 75 and 77 Foxbench Walk
- 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 15, 16, 18, 19, 20, 21, 23, 24, 25 Marham Close
- 11, 13, 15, 17, 18, 19, 20, 22, 24, 26, 28, 30 and 32 Pinetop Close
- 1, 3, 5, 7, 9, 11 Sandstone Way
- 3, 5, 6, 7, 8, 9, 10, 12, 14, 15, 16, 17, 19, 21, 23, 25 and 27 Terrington Close
- 1-12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 27, 29, 31, 33, 37, 41, 43, 45 Wishaw Square

Context to the Proposals

In July 2019, Manchester City Council declared a climate change emergency. The Council have subsequently made a further commitment to halve carbon emissions in the next five years.

In order to achieve this, the Council set out the Climate Change Action Plan 2020-25, which sets out what the city, collectively, needs to do in order to realise this ambition. At Section 6 of the Action Plan, a range of ‘urgent actions’ are set out, including the need to switch to renewable forms of energy. This includes ‘heat pumps and zero carbon district heating’, with the Action Plan stating that key ambitions for making this transition include improving ‘the energy efficiency of our buildings as far as possible to reduce our demand for gas’ and replacing ‘our natural gas-based heating systems with renewable energy-based heating technologies as soon as possible’.

It is clear that the Council has an ambition to deliver the switch to low and zero carbon heating technologies in a short timeframe in order to realise their goal of halving carbon emissions. It is in this context that this application is submitted.

Southway Housing Trust have secured funding to retrofit the heating systems of the apartments and to switch the existing gas heating systems to air source heat pumps. This will have demonstrable benefits from a sustainability perspective, and clearly fits in with Council-wide ambitions to move away from non-renewable forms of heating to more energy efficient alternatives.

Indeed, in a recent letter[1] to the Prime Minister concerning Manchester's commitment to tackling the climate emergency, the Leader of the Council noted that, in discussing the need to retrofit domestic properties:

'Making our homes more energy efficient would be a triple win – saving hard-pressed people money on their fuel bills, cutting carbon emissions and creating new jobs in the green economy.'

The Executive-level support for the delivery of projects such as that hereby applied for is clear.

Planning Policy Context

Paragraph 158 of the revised July 2021 National Planning Policy Framework (NPPF) states that:

'When determining planning applications for renewable and low carbon development local planning authorities should:

a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and
b) approve the application if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas.'

The adopted development plan for Manchester comprises the Manchester Core Strategy (2012 to 2027), adopted in July 2021. We provide a summary below of the policies from the Core Strategy which are considered to be of relevance to the application proposals.

Policy EN4, which relates to reducing carbon dioxide emissions by enabling low and zero carbon development, states that where possible new development and retrofit projects will be used as a mechanism to help improve energy efficiency and provide low and zero carbon energy supplies to existing buildings.

At Paragraph 12.30, the Core Strategy states that :

'It is recognised that much of the City's CO2 emissions do, however, arise from the existing commercial and residential building stock. It is essential therefore that wherever the opportunity exists new development be used as a catalyst to enable the retrofitting of energy efficiency improvements and low or zero carbon infrastructure to the existing building stock.'

Policy EN7, which relates to energy infrastructure opportunities sets out a general presumption in favour of low and zero carbon decentralised energy schemes.

[1] https://www.manchester.gov.uk/news/article/9151/manchester_calls_on_government_for_support_to_tackle_climate_emergency

Policy DM1, which relates to development management, states that all development should have regard to effects on amenity, including noise, vibration and air quality. In particular, the policy notes that this policy applies for proposals which would be sensitive to existing environmental conditions, such as through noise issues.

The Manchester Residential Quality Guidance also sets out how the retention and adaptability of existing buildings will be key, and states that:

'There are clear environmental benefits to retaining existing buildings…because of the amount of embodied energy in their construction and materials'

Consideration of the Proposals

Taken together, it is therefore clear that there is an overarching ambition at both the national and local levels to secure greater use of technologies such as air source heat pumps as an alternative means of heating, in lieu of non-renewable forms of heating.

This is clearly set out in Paragraph 158 of the NPPF, as well as the ambitions of Core Strategy Policies EN4 and EN7. As such, the proposals are considered to accord with these policies, and will deliver demonstrable benefits in decarbonising domestic heating at this location.

In respect of Policy DM1, the heat pumps have been located in such a way as to minimise impacts upon the properties at which they are located. They will be located 3 metres from habitable windows in order to minimise any potential amenity issues, particularly in respect of noise. Furthermore, as set out Product Technical Details, the model reference EDLA04EV3 will result in sound pressure levels of 44dB when providing heat, which are not considered to represent a significant level of noise from an amenity perspective.

Notwithstanding this, as per the recommendations of the submitted Plant Sound Assessment Report it is proposed the mitigation measures, in the form of Daikin Altherma EKLN08A sound enclosures, will be incorporated. With these, the Plant Sound Assessment Report identifies that atmospheric plant sound emissions from the proposed heat pump units are likely to achieve the requirements of Manchester City Council.

Furthermore, the need to retrofit existing housing stock is recognised and acknowledged as forming a key part of meeting this need, both from an overall sustainability perspective but also in the context of improving the energy efficiency of the existing housing stock.

Summary and Conclusions

This application seeks permission for the installation of 174no. air source heat pumps across a number of 'maisonette' style apartments at Brookstone Close, Castlefield Walk, Cressfield Way, Foxbench Walk, Marham Close, Pinetop Close, Sandstone Way, Terrington Close and Wishaw Square. The proposal will result in the replacement of existing, non-renewable fuelled forms of heat generation with air source heat pumps and reflects a wider required change to such forms of heating for domestic properties.

This application is submitted in the context of Manchester City Council having declared a climate change emergency in July 2019. To achieve this, the Council set out the Climate Change Action Plan 2020-25, which sets out what the City, collectively, needs to do in order to realise this ambition. These actions include transitioning domestic heating to heat pumps, stating that key ambitions for making this transition include improving 'the energy efficiency of our buildings as far as possible to reduce our demand for gas 'and replacing 'our natural gas-based heating systems with renewable energy-based heating technologies as soon as possible'.

Accordingly, the proposals are considered to be wholly suitable and urgently needed as part of both Manchester's, and indeed more generally the national-need, to transition away from non-renewable forms of heating in favour of more sustainable alternatives.

As such, it is therefore submitted that the application can be positively considered by the Local Planning Authority.

Yours faithfully

Euan Connolly
Senior Planner