Our Ref: 3092/JF/LT20240220

29th February 2024

MARTIN ROBESON PLANNING PRACTICE

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Development Advocacy

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Development Management
London Borough of Camden
5 Pancras Square
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Via the Planning Portal

Dear Sir/Madam,

AIR SOURCE HEAT PUMP ENCLOSURE – 38 FROGNAL LANE, HAMPSTEAD NW3 6PP

On behalf of our client, we hereby submit an application for an air source heat pump (ASHP) enclosure to contain two condenser units and associated infrastructure along with bike store, at 38 Frognal Lane, Hampstead, NW3 6PP.

Background

Planning permission was granted on the 28th July 2021 for the *'erection of replacement 2 storey dwelling plus basement following demolition of existing building'* at 38 Frognal Lane (application ref. 2020/4667/P). Relevant conditions and obligations were discharged and work on site commenced in October 2021.

That application was supported by an Energy and Sustainability Statement which confirmed the proposed energy strategy would include an ASHP. In developing the detailed and construction design for the scheme as a whole and with the benefit of a M&E consultant instructed, the exact specifications for the condenser units themselves and the enclosure have been developed and thus it has been identified that the best location for this is at the front of the property.

Proposed Development

This application proposes two condenser units within an enclosure to be located at the front of the house in the north east corner of the site.

The ASHP enclosure is approximately 6.5m wide, 2.9m high and 6.5m at its deepest. The enclosure consists of a steel structure. The roof is a green roof with sedum mats. Visible materials on the facade are acoustic louvres with a brick slip surround.

The enclosure will also incorporate space to store two bikes ensuring that safe and covered provision for bike storage is provided on the site.

This application relates only to the provision of the ASHP enclosure at the front of the property and thus has been submitted as a standalone application bearing in mind the replacement dwelling is being constructed pursuant to the 2021 permission. As however the location of the enclosure has implications for the landscaping details at the front of the property, a separate submission to discharge condition 11 of the 2021 permission to include the ASHP enclosure within the layout for the front has also been submitted to ensure consistency across the drawings to be approved. Similarly given the enclosure is to also contain space to store bikes a separate submission to discharge condition 7 of the 2021 permission has also been made.

Appraisal

The Development Plan consists of the adopted Local Plan (July 2017) along with the London Plan (2021).

The site is located within the Redington and Frognal Conservation Area. The Redington/Frognal Conservation Area Statement acknowledges that the character and appearance of the Conservation Area is defined by trees and landscaping fronting the street and identifies that, together with the original pavement, boundary walls and signage, these features make a positive contribution to its character and appearance.

In light of this, the proposed ASHP enclosure has been located in the corner of the site where the levels within the site are at their lowest in relation to the public footpath that runs along the front boundary of the site. This ensures that the enclosure will not be viewed from any public vantage points, due to the level differences will the height of the enclosure being lower than the boundary wall. As such the proposed enclosure will ensure that the development preserves the character and appearance of the Conservation Area in accordance with Policy D2 of the Local Plan.

Notwithstanding this the enclosure has been specifically designed to ensure a high quality finish is achieved in connection with the replacement dwelling. Thus, the visible elevations are finished with a brick slip surround. The design thus accords with Policy D1 of the Local Plan providing a high quality design in development and Policy D4 of the London Plan, ensuring the design quality of the development is maintained through to completion.

The proposal is supported by an Acoustic Report which identifies measures to mitigate the noise from the condenser units by 7dBA in order to comply with the Council's requirements. It identifies that an 'acoustic kit' from the manufacturer of the condensers can be utilised or alternatively the units can be located within an acoustic enclosure. It is proposed to use Noico Ltd Acoustic Louvres for the acoustic enclosure. The louvres would be of metal construction with a blade depth of 150mm. A copy of the Noico Ltd Acoustic Louvres datasheet, including the acoustic calculations demonstrating the 7dBA noise reduction, is appended, which is appropriate for the proposed ASHP units to ensure that the proposal meets the Council's 'Noise and Vibration Thresholds' as required by Policy A4 of the Local Plan. Ther proposal can thus be operated without causing harm to amenity.

Summary

In order to provide the necessary carbon reductions approved as part of the energy strategy for the 2021 replacement dwelling through the provision of ASHPs, it is necessary

to install two condenser units for the scheme. In order to protect the amenity of neighbours and future residents the units are to be housed within an acoustic enclosure. This enclosure also has space to provide storage for two bikes. The enclosure has been designed to not only prevent noise disturbance but also to provide a design which is complementary to the approved replacement dwelling, the roof also incorporating a green roof. The proposal complies with relevant policies and as such permission should be granted.

The application is submitted via the Planning Portal (PP-12832319) along with this covering letter and the following:

- Application Form
- CIL Form
- 20022-PL-010-Location Plan
- 20022-PL-011-Existing Site Plan
- 20022-PL-100-Proposed Site Plan
- 20022-PL-110-Proposed ASHP Enclosure 01
- 20022-PL-111-Proposed ASHP Enclosure 02
- Acoustic Report

Payment of £578 to cover the planning application fee has been made separately.

We look forward to receiving confirmation that the application has been validates.

Yours Sincerely,

Jessica Ferguson
jessicaferguson@mrpp.co.uk

Enc.

NOICO LTD
NOISE CONTROL ENGINEERS

Tel: 01256 766207
www.noico.co.uk

Acoustic Louvres

Sound Transmission Loss (dB)								
Octave Band Centre Frequency (Hz)	63	125	250	500	1k	2k	4k	8k
150mm deep	2	3	4	8	13	11	9	8
270mm deep	4	7	10	12	15	16	13	12
540mm deep	5	8	14	27	38	40	33	31

Pressure Drop: Pascal's (N/m²)					
Face Velocity (m/s)	0.5	1.0	1.5	2.0	2.5
150mm deep	2	8	18	31	48
270mm deep	2	8	18	32	50
540mm deep	3	12	26	46	72

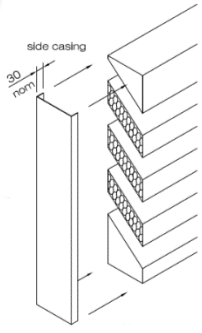
Construction & Finish
All metal construction from either pre-galvanised steel, aluminium or stainless steel.
Standard depths are 150mm, 270mm and 540mm deep.

Perforated metal forms the underside of the louvre blades to retain the absorptive mineral fibre which is packed under 10% compression.

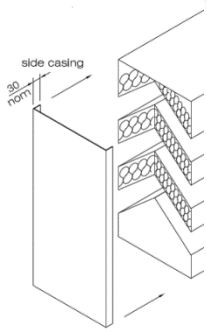
There are a range of finishes available:

- Un-painted
- Plastisol coated steel (to standard colour range)
- Polyester powder paint finish (to a standard RAL or BS colour)

Birdscreen and insect mesh are an optional feature mechanically fixed to the rear of the louvre.



150 & 270mm deep Single Bank



540mm deep Double Bank

Noico Ltd. Landmark House, Station Road, Hook, Hampshire RG27 9HA
Tel: 01256 766207 email: sales@noico.co.uk

Acoustic Calculations

NOICO LTD
NOISE CONTROL ENGINEERS

Project:	38 Frognal Lane	Our Ref:	2309001-8
Sound Source:	Mitsubishi CAHV-P500YA-HPB	Date:	22 February 2024
Sheet No:	1	Consultant:	FER

Octave Band Centre Frequency (Hz)	31.5	63	125	250	500	1k	2k	4k	8k	Lin	A	NR
Air source heat pump SPL		70	65	60	57	51	46	49	45	**72**	**59**	**54**
150 mm deep acoustic louvre SRI		2	3	4	8	13	11	9	8			
Resultant SPL		68	62	56	49	38	35	40	37	**69**	**52**	**47**
								Insertion loss		**7 dBA**		
SPL = Sound pressure level at 1 metre in free-field conditions												
SRI = Sound reduction index / transmission loss												

Sound Power Level dB re:10^{-12} W

Sound Pressure Level dB re: 2 x 10^{-5} Pa

Notes: