



Paul Butler Associates

Planning, Development & Heritage Consultants

3 September 2021

Mrs Julie Roscoe
Head of Planning
Planning Department
Manchester City Council
PO Box 532
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Manchester
M60 2LA

21.1557/HoughEnd/ljr02dt

Dear Julie,

Hough End Leisure Centre, 480 Princess Rd, Manchester M20 1HD

Application for planning permission for Ground Source Heat Pump: Town and Country Planning Act 1990

Application Cover Letter and Planning Statement

Introduction

On behalf of my client, Ameresco Limited, please find attached an application for full planning permission for the installation of a Ground Source Heat Pump (GSHP) and associated works at the Hough End Leisure Centre.

Site Location

The Hough End Leisure Centre is located off Princess Road. The facilities provided by the centre are accommodated in a recently constructed building (2015). The building has a steel frame, double glazed windows, cladding and a flat roof. The Leisure Centre attracts visitors to a wide variety of facilities including two pools, a sauna and steam room, a large gym & studio as well as two squash courts and a foyer seating area. The building is open 7 days a week. The public opening times are of 06:30-22:00hrs Monday to Friday and from 08:00-19:00 on Saturday and Sunday. The building is not nationally listed or locally listed. The building is not in a Conservation Area. No other specific land use designations have been identified which relate to the premises.

The Context

Greater Manchester has been awarded over £78m in Central Government funding to support energy efficiency upgrades to more than 150 public buildings across the city-region, helping to cut emissions and create new jobs.

The award was the result of a successful bid from Greater Manchester Combined Authority (GMCA) and 14 other partners to the Government's Public Sector Decarbonisation Scheme (PSDS).

Buildings and organisations across the public estate set to benefit from retrofitting measures include Manchester University NHS Foundation Trust, Greater Manchester Fire and Rescue Service, Transport for Greater Manchester, Greater Manchester Police, the Royal Northern College of Music, the National Cycling Centre, and facilities including leisure centres, schools, and offices.

The measures will include the installation of air and ground source heat pumps for heating, solar panels to generate and create electricity, insulation and LED lighting to improve energy efficiency, and energy monitoring and control systems to ensure these public facilities can accurately measure their energy usage.

The application proposal forms a discrete part of this wider initiative and aims to deliver ground source heat pump derived energy, thereby helping to lead the carbon neutral agenda in Manchester. The proposed retro-fitting of ground source heat pump technology to existing buildings will produce more renewable energy and offer an opportunity to immediately cut emissions.

In total, these 150 projects are expected to support the creation or safeguarding of around 2,000 jobs throughout the city-region, and will support the goals of Greater Manchester's Five Year Environment Plan, including becoming carbon neutral by 2038 – 12 years ahead of the national target.

The Proposals

As part of the Public Sector Decarbonisation Scheme (PSDS), Manchester City Council are seeking to decarbonise their heating system by introducing energy efficiency improvements within their facilities. This would support their long term goals of becoming carbon neutral by 2038 across all areas of their operation. The driver for this project is maximising long term carbon savings for the site and the project involves retrofitting a ground source heat pump system into the existing heating systems at the Hough End Leisure Centre.

An integrated ground source heat pump system of c.149.4 kWth is proposed. The number of boreholes is estimated to be 21 with the ground area for the works including drilling, trenching and temporary excavations being 0.216 hectares.

The heat pump and the system integration are designed to maximise annual efficiency and maximise annual running hours. The proposed pump location will be housed within an existing plant room. Each heat pump unit shall be supplied with independent MID compliant heat output and electrical input meters which are to be interfaced with the building management system for remote monitoring. Meters will be positioned to enable them to be removed for calibration without impacting any other services except the heat pump.

The design and installation shall comply with the latest UK Building Regulations and the latest European and UK standards. The design and specification of the installation seeks to minimise future maintenance whilst also being visually attractive where any components are visible.

With regard to mechanical and electrical requirements, the system shall comply with the following standards as are relevant to the installation, including:

- GSHVBS Vertical Borehole Standard (by GSHPA);

- GSHTPS Thermal Pile Design, Installation & Materials Standards (by GSHPA);
- GSHGPG Good Practice Guide for Ground Source Heating & Cooling (by GSHPA);
- GSHSGS Shallow Ground Source Standard (by GSHPA);
- CP2: Surface water source heat pumps: Code of Practice for the UK;
- CP3: Open-loop groundwater source heat pumps: Code of Practice for the UK (2019);
- BS EN 15450:2007 Heating systems in buildings. Design of heat pump heating systems;
- BS ISO 5149-1:2014+A2:2021 Refrigerating systems and heat pumps. Safety and environmental requirements. Definitions, classification and selection criteria;
- Other relevant British standards;
- BS 7671 – Requirements for Electrical Installations. IET Wiring Regulations 18th edition;
- BS EN 62305 – Protection against lightning. Risk management; and
- BS 7430 - Code of practice for protective earthing of electrical installations.

The proposed GSHP will complement a solar PV array and proposed Battery Energy Storage System (BESS) which is the subject of a separate planning application.

Planning Policy

Introduction

Section 38 (6) of the Town and Country Planning Act 2004 states that applications for development should be determined in accordance with the adopted development plan unless material considerations indicate otherwise. In the case of Manchester City Council the adopted development plan consists of the Core Strategy (2012) and the saved policies of the Unitary Development Plan (1995). Due consideration in the determination of the application will also need to be afforded to national policies in the National Planning Policy Framework (NPPF) which represents a significant material consideration.

Core Strategy (2012)

The policies of the Core Strategy which are considered relevant to the scheme are outlined in the following section. The Manchester Core Strategy recognises that climate change and its impact on the environment both urban and natural is one of the most significant challenges facing Manchester. The Core Strategy advises that it is essential that the way in which Manchester develops over the plan period and beyond is set within the context of mitigating the impacts of climate change and adapting to its effects on the local environment. The document recognises that this challenge affects all areas of the City.

The Core Strategy makes several references to climate change which is a thread throughout the document and additionally sets out specific policies aimed at increasing local decentralised energy and reducing carbon emissions and the impacts of climate change:

Spatial Objective SO6: 'Environment' seeks to protect and enhance the natural and built environment of the city, ensure the sustainable use of natural resources, and secure a high standard of design in all development proposals.

Policy EN 4: 'Reducing CO2 Emissions by Enabling Low and Zero Carbon Development' notes that the Council will seek to reduce fuel poverty and decouple growth in the economy, growth in CO2 emissions, and rising fossil fuel prices, through a variety of actions including:

- Wherever possible new development and retrofit projects, including energy generation plant, must be located and designed in a manner that allows advantage to be taken of opportunities for low and zero carbon energy supplies.
- 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.
- Where appropriate new development and retrofit projects will be required to connect to and/or make contributions to low or zero carbon energy schemes and/or to incorporate provision to enable future connection to any existing/potential decentralised energy schemes.

Policy EN 5: 'Strategic Areas for low and zero carbon decentralised energy infrastructure' advises that within Manchester it is considered that strategic areas will have a major role to play in achieving an increase in the level of decentralised, low and zero carbon energy supplies. Identified strategic priority areas include:

- The Regional Centre (which also includes the Oxford Road Corridor and Eastlands);
- District Centres and associated major development sites such as sports facilities and leisure centres;
- Airport Strategic Sites;
- Strategic housing locations; and
- Strategic employment locations.

[Note: NPPF defines 'Decentralised Energy' as '*Local renewable and local low-carbon energy sources*'].

Policy DM1: 'Development Management' sets out various issues that development should have regard to, including: appropriate siting, layout, scale, form, massing, materials and detail; impact on the surrounding areas and effects on amenity.

Saved Policies of the Unitary Development Plan (UDP) for the city of Manchester (adopted 1995)

The UDP was superseded by the Core Strategy, however, a number of UDP policies have been 'saved'. An extant policy contained within the UDP which is relevant to the proposed scheme is:

Policy DC26.1: 'Development and Noise' states that the Council will use the development control process to reduce the impact of noise on people living and working in, or visiting, the City. In giving effect to this intention, the Council will consider the effect of new development proposals which are likely to be generators of noise.

Planning Appraisal

Introduction

It is a requirement of Section 38(6) of the Town and Country Planning Act 2004 that where a development plan contains policies relevant to an application, the decision must be made in accordance with the development plan, unless material considerations indicate otherwise.

The statutory development plan therefore relating to the application site consists of the Manchester City Council Core Strategy and the saved policies of the Unitary Development Plan. Material considerations relating to this application include the National Planning Policy Framework.

Assessment

Visual

The GSHP will be located internally within an enclosed plantroom within the building and out of public view. Externally the majority of associated plant will be installed below ground so there will be little change to what is there presently. The visual impact of the development is considered to be acceptable and the proposal is therefore compliant with Policy DM1: 'Development Management'.

Noise

The proposed GSHP plant (Carrier 61WG 060A) will be located internally and contained within an existing plantroom and therefore a noise assessment is not necessary. The development is therefore considered to be compliant with Policy DC26.1: 'Development and Noise' and capable of proceeding from a noise perspective.

Amenity

The proposal is located in an existing plantroom. The GSHP will not impact detrimentally upon the acoustic environment in which it will function. The amenities of neighbours are not detrimentally impacted by the development and the proposal is therefore considered compliant with Policy DM1: 'Development Management' which seeks to protect amenity.

Trees

The application is accompanied by an Arboricultural Impact Assessment prepared by Urban Green. The report identifies that there are 26 trees on site and of these none require removal to facilitate the development. Temporary protective fencing is noted to be required at several identified locations prior to construction activities commencing, a mitigation which can easily be secured by an appropriately worded planning condition.

Benefits

The scheme will clearly help meet an identified need for reducing CO2 emissions by enabling low and zero carbon development in Manchester. The installation will achieve a significant carbon reduction over the present operational position. The development can be regarded to be sustainable and compliant with Policy EN4 and EN5 which seek to reduce CO2 emissions by enabling low carbon development.

National Planning Policy Framework

Whilst the above demonstrates that the principle of development is acceptable when considered against local planning policy, the NPPF is a material consideration carrying significant weight and as such an assessment of the principle of development against the framework is required.

The scheme will clearly help meet an identified need for reducing CO2 emissions by enabling low and zero carbon development in Manchester. The NPPF outlines a presumption in favour of sustainable development, whereby development proposals that accord with the development plan should be approved unless material considerations indicate otherwise.

Having regard to the adopted policies of the Core Strategy and Saved UDP and paragraph 11 of the NPPF, we consider that the principle of the development is appropriate. Furthermore, it is also demonstrated that the proposed development constitutes sustainable development when assessed against the policies in the Framework as a whole. There are no other policies in the NPPF that in our view would restrict the development proposed and any adverse impacts of granting planning permission would not significantly or demonstrably outweigh the environmental benefits of the proposal.

The following section demonstrates that the principle of development is considered to be consistent with the policies in the NPPF, specifically:

Para 8c) The planning system should encourage measures to mitigate and adapt to climate change, including by moving to a low carbon economy.

Para 152) The planning system should support the transition to a low carbon future by supporting renewable and low carbon energy and associated infrastructure.

Para 158) 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.'*

Findings

As evidenced above the proposal has been shown to be within a suitable and sustainable location for the proposed GSHP development, with no known adverse impacts arising from the development that would significantly and demonstrably outweigh its benefit. The application scheme is considered to be in full compliance with the adopted policies of the Core Strategy and Saved UDP. It is our view that no material planning considerations exist that would justify a refusal of planning permission. Consequently the proposals are considered to constitute sustainable development as defined by the NPPF and the presumption in favour of sustainable development should apply in the determination of this application.

The Submission

The following information has been submitted in support of the application:

- Completed Planning Application Form dated 03 September 2021 by Paul Butler Associates.
- 01 Covering letter prepared by Paul Butler Associates: 21.1557/HoughEnd/ljr02dt.
- 02 Site Location Plan prepared by Ameresco.
- 03 Proposed Borefield Plan Drawing 000595 Rev01 by Renewable Energy Alliance.
- 04 Proposed Plantroom Equipment Layout, Drawing EP2012A-01 Rev P02 by Enercret Ltd.
- 05 GSHP Technical Information (Carrier 61WG 060A).
- 06 Geology and Thermal Response Test Report, EP2012a-ENR-RP-X-XX-01-P-01 by Enercret.
- 07 Arboricultural Impact Assessment (AIA): Report No. UG1192 for Hough End Leisure Centre prepared by Urban Green, August 2021

My client is keen to work towards a planning approval without any pre-commencement conditions and to work with the Council by providing any relevant information prior to approval. We would be grateful for this to be borne in mind during the processing of the application.

The application fee (£702.00) will be paid shortly after submission by Ameresco Ltd. I look forward to receiving confirmation that this application has been registered and validated. In the meantime, if you require any further information please do not hesitate to get in touch.

Yours sincerely



David Tye BSc MTPI MRTPI
Director

CC Dipak Shah, Akash Vadher & Liam Pech (Ameresco Ltd)
Philip Owen (Zero Carbon Estate, Programme Manager, Manchester City Council)