



CASTLETON LIBRARY & COMMUNITY CENTRE DESIGN STATEMENT (HEAT PUMP ENCLOSURE)

Produced by Triangle Architects Ltd.
On behalf of Rochdale Borough Council
Feb 2024



BACKGROUND

This design statement has been prepared on behalf of Rochdale Borough Council and supports their submission of a full planning application for the installation of Air Source Heat Pumps (ASHP) and associated equipment/ boundary enclosure works at Castleton Library and Community Centre, Manchester Road, Rochdale, OL11 3AF.

The proposals for the heat pumps at this facility form part of Rochdale Borough Council and the Greater Manchester Combined Authority's environmental vision to improve energy efficiency and reduce carbon emissions of public sector buildings within the city region. It has an ambitious objective of becoming carbon neutral by 2038, ahead of the government's current target of 2050.

BUILDING & SITE PARTICULARS

Castleton Library and Community Centre is situated in the Castleton area of Rochdale. It is a large red brick Edwardian building built in the early 1900s; it is well-used by the local community but is in need of modernisation. Ad-hoc poor-quality brick extensions have been added to the building over time, notably on the corner of Keswick Street and Manchester Road, and also to the north elevation fronting the adjacent Baths (Castleton Health & Leisure Centre). There is a car park to the west of the building for staff and visitors, with vehicular access direct from Keswick Street. The car park comprises approx. 70no. spaces including 4no. disabled bays, 30no. of which are leased to Castleton Baths. There is no loss of parking spaces as a result of this planning application.



Google Maps Aerial Perspective (Globe View dated 2024).

The Library & Community Centre is sited within a residential area and is surrounded by dwellings with a mix terraced and semi-detached housing. Residential properties on Knoll Street and Keswick Street front onto the car park from the south and west, separated from the site perimeter by the streets themselves. The building generally addresses the more-prominent Manchester Road along its east (front) boundary. Historic Baths are located to the north of the site, now occupied by Castleton Health & Leisure Centre. The site is surrounded by low brick walls on all 4 sides.

The building is primarily accessed by pedestrians from the main entrance door fronting Manchester Road, with a further main entrance from the rear car park. Small steps and accessible ramps lead to both main entrance doors, with a number of other secondary egress doors dotted around the perimeter of the building. The bin store is located adjacent the rear entrance to the building, enclosed by approx. 3m high railings. It is accessed from the main car park and maintained via Keswick Street. A number of other external enclosures are fenced off with approx. 3m high railings in the south-west and north-west corners of the building.

REQUIREMENT FOR AIR SOURCE HEAT PUMPS

The building's current carbon footprint has been assessed by specialist consultants against a baseline of emissions emanating directly from the burning of fossil fuels and indirect emissions relating the generation of other energy forms (such as electricity used for heating and cooling). Carbon reduction measures have been assessed against a set criteria and the most appropriate and cost-effective energy conservation opportunities considered. Measures such as renewable energy sources, building fabric improvements and mechanical enhancements have been identified as optimum strategies for the building.

Air Source Heat Pump(s) for heating have been identified as the most suitable energy efficient and carbon reducing measures for this building, which should substantially reduce the current estimated annual emissions.

It is understood that the carbon saving boiler replacement initiative at the Community Centre is being supported by the Public Sector Decarbonisation Scheme and the project has been successfully awarded grant funding with the provision that commencement works progress before April 2024. As such, its important that this planning application is considered in a timely manner to ensure that the Community Centre can benefit from decarbonisation funding.

HERITAGE

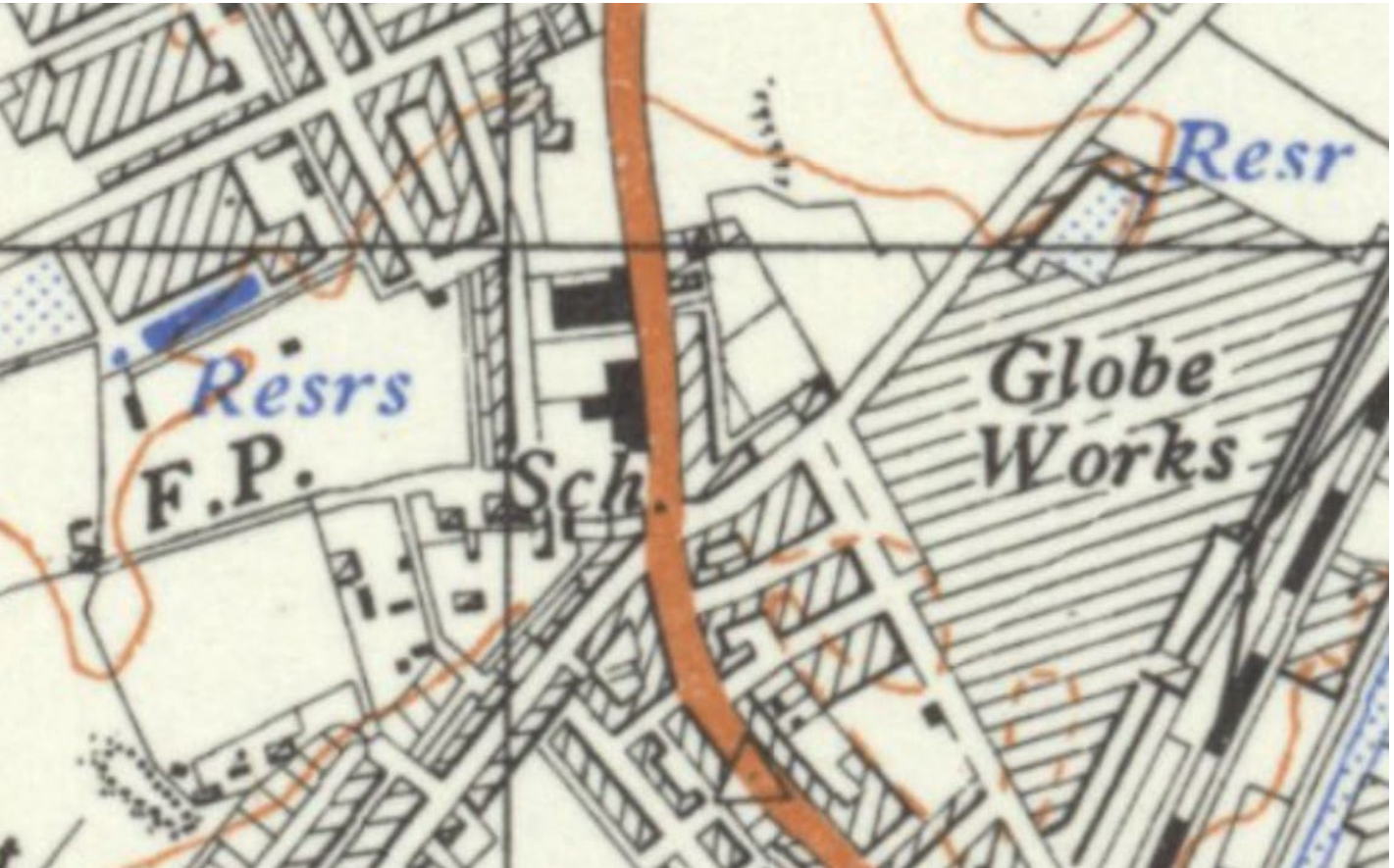
Castleton Library and Community Centre first appeared on Ordnance Survey historic maps dated 1892-1914 and 1888 - 1915, noted initially as a School adjacent Jermyn Street (now Keswick Street). The adjacent Baths were not constructed at that time. The building continued to be identified as a school on OS Maps until the mid-1960s, by which time the terrace of houses on Knoll Street had appeared facing its rear elevation and Baths to the north. The building was re-purposed as a Community Centre when St. Edwards CoE Primary School relocated to nearby Hanover Street (date unknown), with the Library function subsequently being added following the closure of Carnegie Library in 2006.



1892 – 1914 OS Map (25 Inch) [Credit: National Library of Scotland]

The building was built using traditional materials comprising red brickwork and slate roof coverings. Some of the key features throughout the building are projecting gables and brick piers (buttresses), stone parapet copings/ windows surrounds and large window openings. Similar to the style of the time, the west facade is typically less ornate than the east-facing elevation, given it was originally rear-facing towards fields behind (see OS Historic Map above).

The proposals recognise the key features mentioned above and is well considered with the siting of the proposed ASHP enclosure along the less detailed western elevation. It is sited adjacent an existing bin store and plantroom – the timber enclosure screens the heat pumps from view and does not conflict with the more prominent north/ east/ south elevations.



1937 – 1961 OS Map (1:25000) [Credit: National Library of Scotland]



1945 – 1965 OS Map (1:25000) [Credit: National Library of Scotland]

THE PROPOSALS

The proposal for an alternative clean, environment friendly and combustion free heating source system for the building is to comprise 2no. Air Source Heat Pump sited within an enclosure approximately 7.2m x 4.5m on plan with a height of 3.0m. The ASHPs are to be located externally within the main car park and will be screened by a timber acoustic fence, the requirements and details for which are established within the submitted acoustic report.

There is scant opportunity to screen a new ASHP enclosure from any side given its surrounding context. The buildings historic relationship with Castleton Baths to the north is considered important to its street setting, whilst its prominent frontages onto Manchester Road and key corner addressing Keswick Street limit opportunities to the east and south. The western side of the building is deemed to be most suitable for a new enclosure and functionally enables the ASHP to be serviced from the car park and link efficiently into the existing plant room. The proposed ASHP enclosure will be easily serviceable from the main car park, replacing the existing temporary boiler and Heras fence enclosure and further screening the bin store area.

Although it occupies a small portion of the existing car park (without loss of parking spaces), the functional 3m height of the timber enclosure is important to maintain the current acoustic environment for existing residents in relation to background noise levels (see Acoustic Report). Although a tall enclosure, the benefits of a public building that is more sustainable and powered more efficiently outweighs any perceived negative effect of the proposal.

As part of the decarbonisation works, it is proposed that the building fabric will be enhanced (internally) to improve the efficiency of the air source heat pumps. This is to include additional insulation fixed internally on external walls, additional ceiling-level insulation and associated mechanical/ electrical/ fire-protection works to the building.

The air source heat pump system and wider installation will be serviced and maintained by specialist contractors and it is not likely that access provision will be required by members of the general public or persons with disabilities or wheelchair users.

PROJECT TEAM

Applicant/Client	Rochdale Borough Council
Architect	Triangle Architects Ltd
Acoustic Consultant	Noise Control Solutions Ltd
Contractor	H. Bell & Sons Ltd
M&E Consultant	AGP Consultants Ltd
Project Management	Varsity Consulting Ltd



Photos of West Elevation showing existing temporary boiler enclosure (Feb 2024)