Design & Access Statement
PSDS3 Decarbonisation Works
Manchester City Council
July 2025

Didsbury Library
692 Wilmslow Road
Manchester
M20 2DN



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1.0 Introduction

This Design & Access Statement has been prepared by Drees & Sommer UK Ltd on behalf of Manchester City Council, to support the planning application submitted for the 'Manchester City Council Public Sector Decarbonisation Scheme (PSDS)' at Didsbury Library, 692 Wilmslow Road, Manchester, M20 2DN. The site is outlined in red on the plan below:



The purpose of this Design & Access Statement is to consider the accessibility of the proposals, regarding wheelchair users, ambulant disabled people and people with poor dexterity, poor comprehension or sensory impairments.

The criteria used for this assessment is listed below:

- Approved Document Part M of the Building Regulations
- BS8300 – 2:2018 (Design of Buildings and their Approaches to meet the needs of Disabled People)
- Consideration of disability discrimination issues under The Equality Act 2010 (EA)
- The Library's duties under the Disability Equality Duty

Instructions

Client
Manchester City Council
Town Hall
Albert Square
Manchester
M2 5DB

Lead Consultant
Drees & Sommer UK Limited
Jackson House
Sibson Road
Sale
M33 7RR

Property Discussed in this Report
Didsbury Library
692 Wilmslow Road
Manchester
M20 2DN

2.0 The Development

Background of the Scheme

New air source heat pumps (ASHP's) have been installed at Didsbury Library as part of a previous phase of this Public Sector Decarbonisation Scheme.

Since the installation of the new ASHP's, the ASHP's have not been functioning as intended, and have been temporarily replaced with boiler plant. Further investigations have been undertaken to determine why the ASHP's have not been functioning correctly. During these investigations, temperature readings were taken of the pipe surface temperatures, which were found to be at a temperature of around 70°C, and immersion gauges were used to record water temperatures, which were found to be at around 80°C. Further surface temperature readings of the radiators were taken on 2 occasions, once when the ASHP's were operating, and again when the temporary boilers were operating, and, on both occasions, large differences in temperature on each radiator were recorded.

New heat emitters/radiators are therefore required as the use of a CO2 ASHP operates on different temperatures. These operating parameters do not present an issue if additional heat emitters are added, as this will offset the reduced output on the existing radiators.

The existing heat emitters and pipework are life expired and are significantly beyond the life expectancy detailed by CIBSE Guide M. Due to the age of the system and the evidence gathered during the further detailed investigations, the heat transfer through the radiators is inhibited due to a buildup of scale, debris etc. It is not recommended that any alterations on this system are undertaken due to its age. Any physical work on the pipework (including any extensive cleaning due) may disrupt the system and cause failures in multiple places. It is also not recommended to connect into this pipework or replace the radiator valves, as there is a severe risk that any attempts to adapt the existing pipework would cause the pipework to crumble.

The Proposal

The proposal is therefore to provide new radiators/heat emitters and associated heating infrastructure to alleviate the issues noted above. The new heating pipework shall follow existing routes and be connected to the new pipework within the plantroom. The intention of the works is to ensure that the new heating system provides the correct level of heat throughout the building and minimises the future risk of a complete failure of the existing heating system in the future.

2.1 Disability Definition

In access terms, the term disability has two distinct definitions:

- People who have an impairment that limits their ability to walk
- People who have impaired sight, dexterity, comprehension or hearing

Provision for those with walking difficulties is not limited to people confined to wheelchairs, but includes all types of impairments such as arthritis, rheumatism or partial paralysis as a result of strokes or accidents, people who may not be able to bend limbs or have back problems.

When viewed in this way it becomes clear that this definition can include a substantial proportion of the population who may not consider themselves disabled.

2.2 The Statement

This Design & Access Statement is presented as a synopsis of the principles and guidance used during design development. It demonstrates the Project Team's work towards achieving the aspirations of the EA and shows compliance with the statutory regulations, in particular Approved Document M.

2.3 Outline Scope of Works

The arrangements for access described in this statement reflect the current design intention.

The proposed scope of works is summarised below:

- Installation of 34no. new radiators throughout the building. Radiators are zoned to accommodate varying space functions (Main Library, Annex Library, Toddler Library, Offices and WCs, FF Gallery etc)
- Each radiator branch is equipped with a Danfoss PIC TRV (Pressure Independent Control Valve) to ensure balanced flow and precise temperature control
- Each zone is individually controlled by a Danfoss NovoCon S actuator, installed on the Pressure Independent Control Valves (PICVs). These valves allow specific control of the return temperature ensuring the ASHP has 30 degrees return for COP efficiency
- The Controller will be enabled 30 minutes prior to building load requirements to charge the buffers 1-5. The Clade master controller is an independent control system and not part of the BMS
- Installation of new LPHW (Low Pressure Hot Water) pipework designed to operate at 70°C flow and 50°C return (primarily 15mm and 20mm F&R pipes serving individual radiators, with larger 25mm and 50mm branches from the plantroom)
- An additional zone located at the front of the building and extending to the first floor is included specifically to act as a thermal dump zone. This zone is designed to assist with thermal regulation, especially during part-load conditions, allowing excess flow temperature water (50°C) to be effectively cooled to the target 30°C return temperature before re-entering the system. Radiators in this area contribute not only to occupant comfort but also to ensure return temperature targets are consistently achieved, enhancing boiler or heat pump efficiency and supporting system longevity

Please refer to Appendix A for further details.

3.0 Design – The Process

The designs have been developed to RIBA Stage 4 where it is currently ready to be tendered to contractors. Please refer to Appendix A for further details.

3.1 Value

Best value in construction costs must be attained. Layouts should be as simple and as straight forward as possible which, in turn, promotes simple methods of construction, yet still fulfilling its function. Lifetime costs of all materials have been considered.

3.2 Appearance

The material choices for the new radiators are a blend of new cast iron radiators and contemporary panel radiators that have been carefully selected to ensure that they complement the existing heritage asset.

3.3 Building Approach, Access Points and Entrances

As the works are limited to the replacement of existing radiators and installation of new radiators, along with the installation of new LPHW (Low Pressure Hot Water) pipework, the proposed works will have no impact on the building approach, access points and entrances.

3.4 Means of Escape

Means of escape will not be affected by the finished works.

4.0 Conclusion

This Design & Access Statement has demonstrated the way in which the design of the present scheme meets various requirements with regard to both access and egress issues.

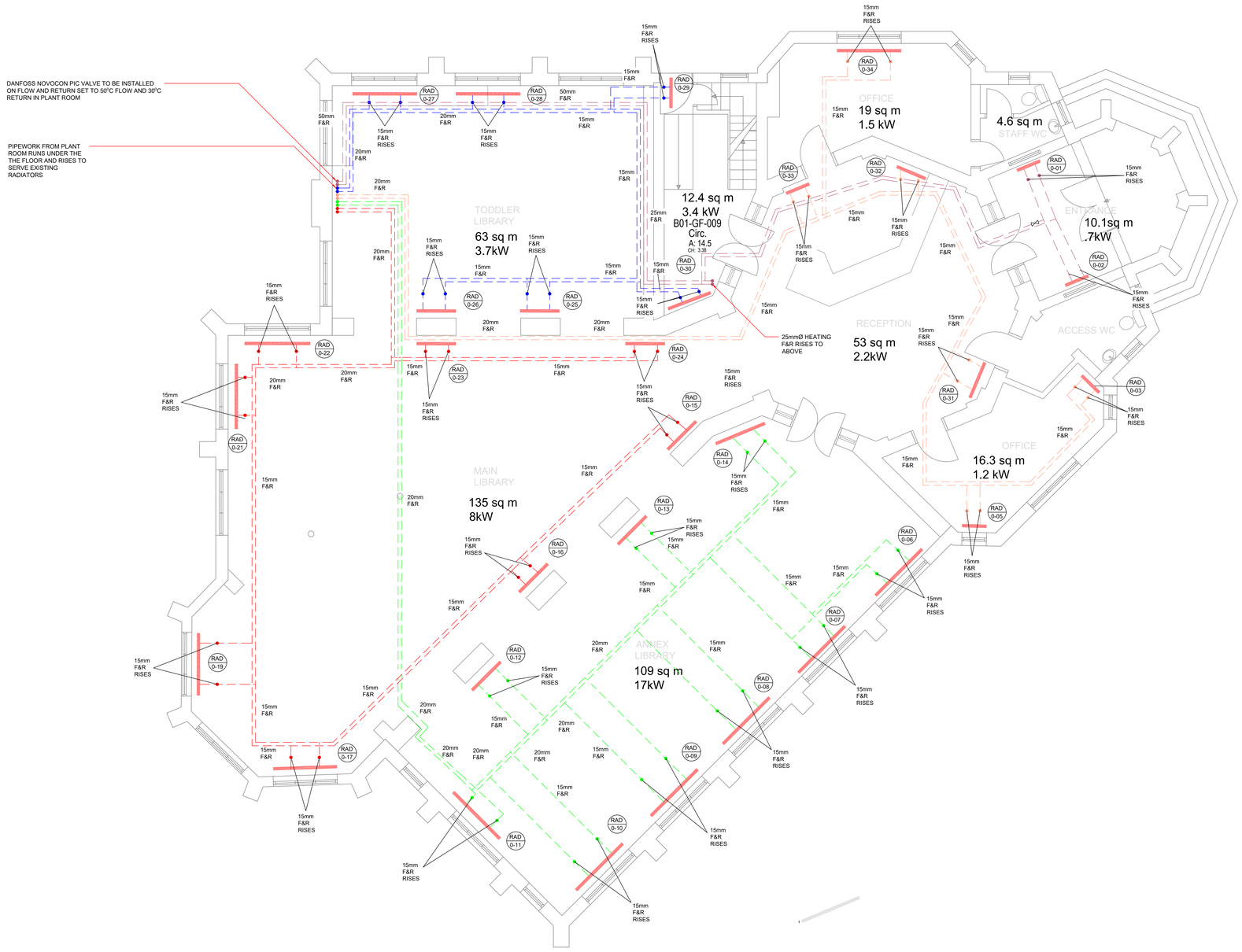
The design philosophy has enabled impact to building users and visitors to be minimised, offering almost no impact to the daily use of the building by people with or without disabilities.

5.0 Conditions of Use of this Report

This report is to be regarded as confidential to and for the sole use of the recipient. Consequently, no responsibility is accepted to any third party in respect of its contents in whole or in part.

APPENDIX A

Drawings



LEGEND

- RAD 0-00 — RADIATOR REFERENCE NUMBER
- PROPOSED PIPE CONNECTOR
- PROPOSED RADIATOR
- PROPOSED HEATING CIRCUIT No 1
- PROPOSED HEATING CIRCUIT No 2
- PROPOSED HEATING CIRCUIT No 3
- PROPOSED HEATING CIRCUIT No 4
- PROPOSED HEATING CIRCUIT No 5
- PICV

Rev	Description	By	Chk	App	Date
P3	ADDED HEATING CIRCUITS TO LEGEND	TS	RS	RS	21/07/25
P2	AMENDED HEAT LOSS	TS	RS	RS	07/07/25

DO NOT SCALE OFF THIS DRAWING. ALL DIMENSIONS SHALL BE VERIFIED ON SITE.

Client
AP MITCHELL

Project
DIDSBURY LIBRARY
DIDSBURY
MANCHESTER

Title
PROPOSED
GROUND FLOOR
LTHW HEATING

BRENG
low carbon, energy efficient solutions

Drawn By	Checked By	Approved By	Date
TS	RS	DH	MAR 25
Scale	Drawing Number		Revision
1:50 @ A0	M5601		P3

PRELIMINARY

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LEGEND

RAD 1-01 RADIATOR REFERENCE NUMBER

PROPOSED F+R CONNECTOR

PROPOSED RADIATOR

PROPOSED HEATING CIRCUIT No 1

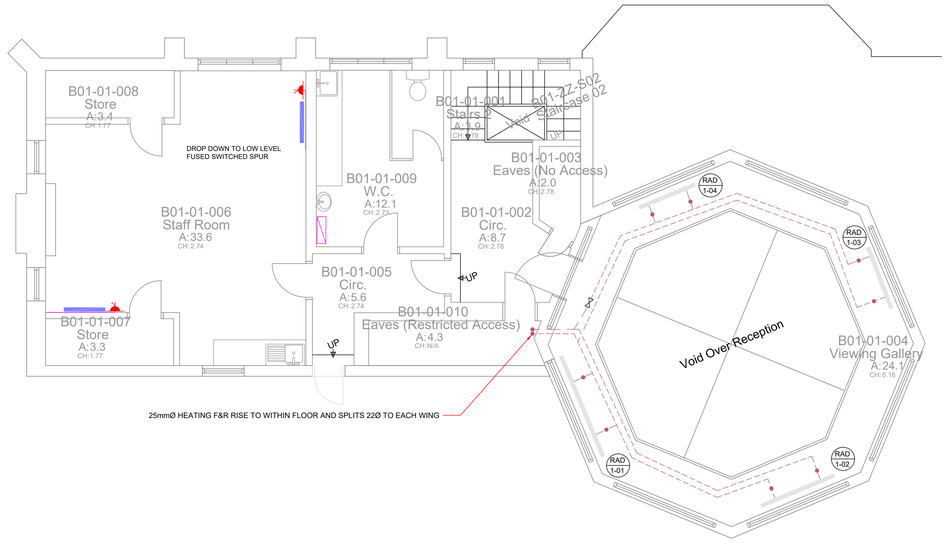
PROPOSED HEATING CIRCUIT No 2

PROPOSED HEATING CIRCUIT No 3

PROPOSED HEATING CIRCUIT No 4

PROPOSED HEATING CIRCUIT No 5

PICV



Rev	Description	By	Chk	Appr	Date
P2	ADDED HEATING CIRCUITS TO LEGEND	TS	RS	RS	21/07/25

DO NOT SCALE OFF THIS DRAWING. ALL DIMENSIONS SHALL BE VERIFIED ON SITE.

Client
AP MITCHELL

Project
DIDSBURY LIBRARY
DIDSBURY
MANCHESTER

Title
PROPOSED
FIRST FLOOR
LTHW HEATING

BRENG
low carbon, energy efficient solutions

Drawn By	Checked By	Approved By	Date
TS	RS	DH	MAR 25
Scale	Drawing Number		Revision
1:50 @ A0	M5602		P2

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