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Contents

1. Introduction.....	1
2. Environmental and Energy Design.....	2
2.1 Energy Efficiency	2
2.2 Renewable Energy	2
2.3 Environmental Design.....	2
3. Water management.....	3
4. Waste management	3
5. Construction management & Circular Economy Design	4
6. Biodiversity.....	5

Environmental Standards Statement

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Revised

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1. Introduction

This Environmental Standards Statement has been compiled as part of the planning submission for the works at Upper and Lower Campfield Market, Manchester on behalf of Allied London.

The purpose of this Statement is to summarise the relevant policy background and requirements of Manchester City Council (hereafter referred to as the council) and demonstrate the ways in which the design team have sought to address these aims through the scheme proposals, ensuring measures have been taken in order to provide a sustainable development at this site.

This statement reviews the sustainable design features of the proposed development including the environmental design, water management, waste management and biodiversity. Details of the design attributes, specifications and characteristics of the scheme are appraised in order to demonstrate how the proposals contribute to sustainable development in Manchester and seek to mitigate the environmental impacts of the scheme.

At the time of writing (September 2023) the proposal details are as follows:

Lower Campfield Market – An internal refurbishment of Lower Campfield Market. The building was the former the Air and Space Hall for the Science and Industry Museum in Manchester which is now permanently closed. This building will be aimed at delivering the Tech Hub targeted at young and aspiring entrepreneurs to act as an incubator for start-ups and growing small businesses, as well as SME businesses.

Upper Campfield Market - Internal refurbishment of Upper Campfield Market. Currently occupies design, craft, and workshop space. The future use is aimed at technology and media businesses and small scale television / social media businesses operating across a collegiate environment to foster growth and collaboration.

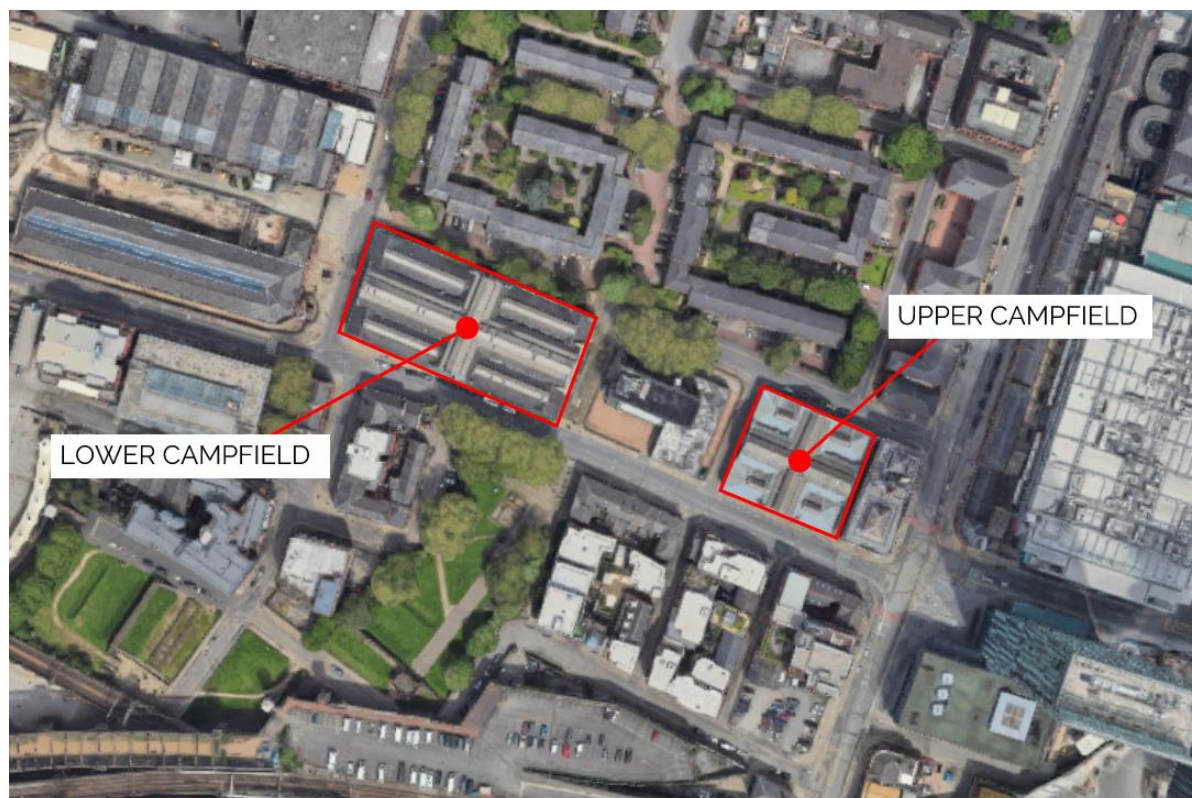


Figure 1: Overview of existing site, with approximate site boundaries shown in red.

2. Environmental and Energy Design

2.1 Energy Efficiency

In Manchester's Local Development Framework Core Strategy Development Plan Document, it states in Policy EN4 that action should be taken to:

"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."

And;

"The use of building materials with low embodied carbon in new development and refurbishment schemes."

As this project is a refurbishment of two historical buildings, the proposals are sensitive to the quality of the existing building fabric and limited to the extent of the existing buildings. It is considered that the changes proposed do not constitute "substantial improvements to an existing building" and hence the potential for low zero carbon energy supplies in line with Policy EN6 are not feasible or appropriate for the development.

Power supplies to both buildings are distributed from a new substation in Lower Campfield. All office and studio spaces are heated and provided with comfort cooling using reversible heat pump technology.

Lower Campfield heating and cooling is achieved by a mixture of radiant panels and VRF systems. Fresh air into the building is delivered by a mixed mode natural ventilation system controlled based on CO₂ and temperature levels. Upper Campfield heating and cooling is provided by VRF system, while ventilation is provided by a mechanical heat recovery system.

2.2 Renewable Energy

Due to the sensitive nature of the existing buildings, it is not considered feasible to support the weight of solar photovoltaic panels on the roofs of either building. Similarly, there is no space around them which could accommodate the panels. The location of the buildings does not make it feasible for hydro station or wind turbine to be installed. This means there are no options available with regards to on-site renewable energy generation.

However, to reduce the environmental impact of the buildings' energy consumption, the heating and cooling of the buildings will be provided by heat pumps as a low carbon alternative.

2.3 Environmental Design

A BREEAM Refurbishment and Fit-out 2014 Pre-assessment report has been prepared by Element Sustainability. The initial pre-assessment report details the possible strategies to be employed and estimates that the scheme's design has the potential to score 60.48% which is above the minimum for a Very Good rating.

Whilst the fabric of the existing buildings is proposed to be left in-situ due to its historical significance, the new internal spaces will be designed as independent spaces. This will enable them to be more energy efficient than the existing buildings, with the primary heating and cooling focus being on these internal spaces.

3. Water management

The nature of the project being an internal refurbishment means that no external surfaces are proposed to be changing as part of the project work. Therefore, it is anticipated that current run off rates will be unchanged and hence be appropriate to continue with as part of the project works. Conversations with UU are ongoing regarding this issue.

The proposed outfalls are the existing combined water sewers traversing the site. The proposed site outfall is subject to the obtention of necessary agreements and approvals from the Lead Local Flood Authority (LLFA) and UU (where connections are to be made to UU assets). A CCTV Drainage survey has been carried out to understand the condition/alignment/ location of the existing network/outfalls, however additional detailed survey work may be required in some areas. If it is necessary to reduce the run-off rates for the site, this will result in having to provide significant volumes of attenuation for each site. As both Upper and Lower Campfield are highly constrained site, with no external areas, this would be very difficult to achieve.

If detailed design work reveals that new connections are required, then the drainage design will follow the SuDs Hierarchy as per NPPF Planning Practice Guidance Paragraph 080, which state that: "...The aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable:

1. into the ground (infiltration).
2. to a surface water body.
3. to a surface water sewer, highway drain, or another drainage system.
4. to a combined sewer."

A review of the BGS infiltration records which indicated the main foundation to be made ground and containing a risk of contamination, infiltration is currently considered not feasible. There are no watercourses near the site that wouldn't require significant negotiation with crossing 3rd party land. There are no surface water sewers in close proximity of the site. There are a number of combined networks near the site and it appears that the site currently discharges to the combined network. Therefore, discharging at the existing rate to the combined network will likely be the optimum solution.

4. Waste management

The design has been developed to demonstrate that adequately sized bin storage areas, access for collection crews and vehicles, and other aspects of waste management have been incorporated in the proposals.

A consultation review session was held with Allied London, MCC and Local Councillors to discuss the scheme proposals. Amendments to the refuse and waste management strategy were made following receipt of session feedback. Refer to the Vectos report for more details on the proposed refuse strategy.

5. Construction management & Circular Economy Design

The circular economy is a strategy which brings forward the benefits of reclamation and re-use of components already created, minimising waste and energy put into what would otherwise be new products.

This is posed as an improved alternative to the currently widely used linear economy, which in the long term relies on infinite resources and unfeasible/unrealistic waste management procedures.

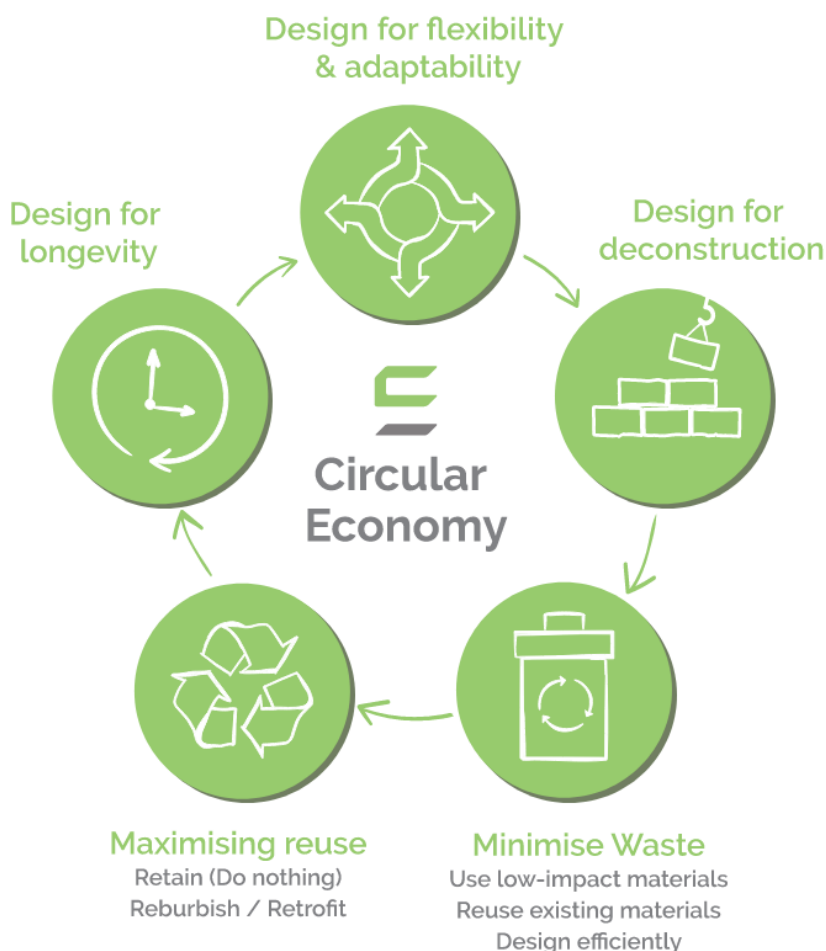


Figure 2: Summary of key circular economy design principles.

The design for both Upper and Lower Campfield focus on retaining as much of the existing structure as feasible. This includes the re-use of existing elements including cast iron columns, steel beams, timber joists, timber floor boards and timber balustrades.

The proposals use recycled materials as well as construction techniques and technologies to minimise impact on both the historic fabric and the environment. It is proposed that the new structure for the mezzanines and other areas are formed from recycled steelwork.

Additionally, the new elements of structure are proposed to be fully demountable and adaptable. The mezzanine's structure follows the historic grid but is completely independent of it and allows for future expansion and additional floors. It can also be removed should there be a need to revert back to the original frames in the future.

6. Biodiversity

Natural features are integrated into the more generous internal space of Lower Campfield. The heavily planted central Green Gally enhances Lower Campfield's function as a modern biophilic work environment. The Green Gally runs through the central aisle providing a clear circulation route throughout the building. It is heavily planted with large trees reaching upward and past the mezzanine level.

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