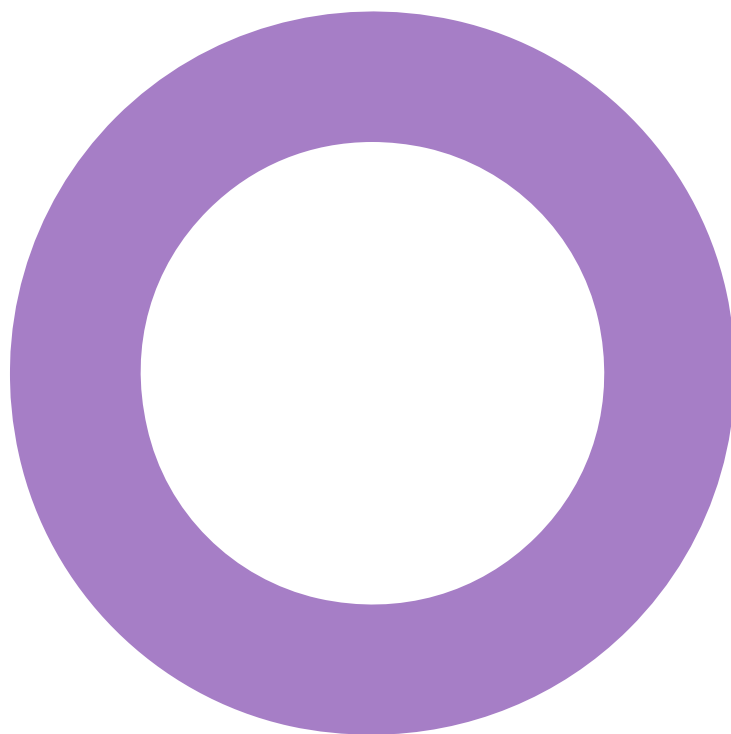


Hotspur Press. Manchester. Manner.

SUSTAINABILITY
ENVIRONMENTAL STANDARDS STATEMENT

REVISION 05 – 06 MARCH 2025



Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
01	11/09/2023	First Draft	S. Hunt	G. Papachristou	J. Nutall
02	13/10/2023	Stage 2 issue	S. Hunt	G. Papachristou	J. Nutall
03	08/11/2023	Re-issued with updates from Turley	S. Hunt	G. Papachristou	J. Nutall
04	23/11/2023	Final Issue	S. Hunt	G. Papachristou	J. Nutall
05	06/03/2025	Final issue for planning	V. Wall	S. Hunt	J. Nutall

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Executive summary.

This report presents the Environmental Standards Statement for the Hotspur Press Development, Manchester (hereafter referred to as the Proposed Development).

Planning Policy relating to sustainability.

Key national, local and trust policy documents are summarised in section 2 and include the following:

- Approved Documents Part L, F and O 2021
- Future Buildings Standard 2021
- Heat and Buildings Strategy
- Manchester Core Strategy
- Places for Everyone Joint Development Plan
- 5-Year Environment Plan for Greater Manchester

Sustainability Proposals.

Specific sustainability themes have been discussed against the policies outlined in Manchester’s Core Strategy to provide a holistic overview of the proposals. In many cases, these themes overlap with BREEAM.

In line with national and local policy, the energy hierarchy has been adopted to support the project sustainability ambitions. This includes passive design measures, such as improved building fabric performance, energy efficient building services and provision of low carbon and renewable energy i.e. air source heat pumps.

The mixed-use development is expected to contribute to sustainability in a broader sense through provision of:

- A well-connected city-centre development.
- Cycle storage facilities to promote active and sustainable travel.
- Promote local biodiversity.
- Incorporate various SuDS to manage excess rainwater.

Environmental Assessment Methods.

The Proposed Development is targeting a minimum BREEAM rating of “Excellent” under the BREEAM 2018 New Construction scheme, which requires a score of at least 70% and compliance with certain minimum standards.

Operational Energy Performance.

Operational energy performance is discussed in section 4 of this report, outlining the Operational Energy Performance calculations performed for the Proposed Development and the outputs of the assessment.

Understanding the importance of closing the performance gap between the simulation and reality, a high-level evaluation of the anticipated energy consumption of the building has been carried out based on modelling undertaken in line with Part L 2021 of the Building Regulations (Conservation of fuel and power). The results highlight the areas to target when looking to further reduce operational energy consumption in following stages.

Following the guidance provided on the operational energy approach and targeting key elements of the structure, the Proposed Development will aspire to take significant steps towards net zero carbon. Any shortfall will be addressed by a carbon offset payment.

Embodied carbon.

The embodied carbon emissions form a significant part of the overall carbon impact of a building. Historically focus has been on operational energy and carbon, however with many local authorities, including the Greater Manchester Combined Authority, setting targets for net zero carbon development – studies are required to demonstrate how much embodied carbon is within the building including mitigation measured on reducing the overall embodied carbon emissions.

A high-level calculation of embodied carbon, commensurate with the project stage, has been completed to provide an initial estimate of embodied carbon and an indication of potential carbon hot spots and inform the design with respect to selection of construction materials with lower embodied carbon where technically feasible.

1. Introduction.

This report is prepared to support the submission to Manchester City Council of a series of design amendments to the proposed redevelopment of the site which is subject to planning application reference 138805/FO/2023. A previous ESS was prepared by Hoare Lea in November 2023 relating to the scheme which was considered by the City Council's Planning Committee at its meeting of 30th May 2024. This report presents a new assessment of the scheme as now proposed. A description of the development, including of the changes to the design as proposed, are presented in an updated Design and Access Statement.

The development is undertaking the following assessments:

- Part L 2021 Compliance
- Operational Energy (as part of the ES Climate Change chapter)
- BREEAM with a targeted rating of "Excellent"
- Embodied Carbon (as part of the ES Climate Change chapter)
- Overheating

2. Sustainability Policy.

2.1 National Policy.

Key policy documents relating to sustainable development are summarised below.

2.1.1 Approved Document Part L 2021: Conservation of fuel and power.

Part L of the Building Regulations is the mechanism by which government is driving reductions in the regulated CO₂ emissions from new buildings. The Proposed Development will need to comply with Part L2A of Approved Document Part L 2021 (ADL 2021) which was enforced on 15th June 2022.

The main updates under ADL 2021 (since its 2013 predecessor) are as follows:

- It is now significantly more challenging to achieve compliance with fossil fuel heating, therefore an all-electric heat pump strategy is likely to be the preferred solution;
- A varying carbon factor associated with grid electricity is 73% lower on average than ADL 2013;
- A new non-domestic building will deliver a 27% reduction in CO₂ emissions on average across the new-build non-domestic building mix relative to ADL 2013; and
- A primary energy target has been introduced and the Fabric Energy Efficiency target retained.

2.1.2 Approved Document F (England), 2021: Ventilation.

Approved Document F was last fully updated in 2021. The flats and studios within the Proposed Development will be assessed under Volume 1, which applies to domestic buildings. The amenity spaces will be assessed under Volume 2, which applies to non-domestic buildings.

The main updates to Approved Document F 2021 are provided below:

- New guidance on performance-based ventilation standards will allow designers to assess ventilation strategies against individual volatile organic compounds as an alternative route to using a total VOC limit.
- The whole dwelling ventilation rates per bedroom have increased by nearly 50% in ADF 2021, compared to ADF 2010. The ventilation rates for continuous extract and intermittent extract have not changed, and passive stack ventilation (PSV) is no longer included as an option in ADF 2021.
- Air quality monitors (which may be CO₂ monitors) are required to be installed in offices; in rooms where “singing, loud speech or aerobic exercise or other aerosol generating activities” take place; in rooms “where members of the public are likely to gather”; and in rooms that are maintained at both low temperatures and low humidities.
- Occupiable rooms in offices require outdoor air to be supplied at the greater of 10 l/s per person or 1 l/s.m² (the l/s.m² criterion is new).
- Common spaces in offices (including circulation spaces) require either natural ventilation openings of at least 1/50 of the floor area, or a mechanical supply of outdoor air at a minimum rate of 0.5 l/s.m² (note that this is less than the 1 l/s.m outlined in the government’s draft proposals.)
- Amended guidance on recirculating systems states that systems should be capable of operating in a mode that prevents the recirculation of air between different spaces, rooms, or zones, unless suitable filtering or cleaning systems are in place.
- Government proposals to increase required ventilation capacity in offices and specify ventilation rates in ‘high risk’ rooms, in response to COVID-19, have not been adopted. This is in anticipation of more concrete evidence on the impacts.

2.1.3 Approved Document O (England), 2021: Overheating.

In December 2021, the government published a new Approved Document O, Overheating, to support a new Building Regulations (England) Requirement O1: Overheating mitigation. This subject was previously only

tackled through provisions in Approved Documents L and F. The new requirements include the need for overheating to be considered in all new residential buildings in England.

Previously, Building Regulations had rudimentary methodologies to assess overheating in new dwellings (Part L1A Criterion 3). The new Approved Document aims to incorporate a formalised and more detailed approach to the assessment of and mitigation against overheating in new homes.

2.1.4 Future Buildings Standard 2025¹.

The Government consulted on the forthcoming changes to the Building Regulations for non-domestic buildings between January and April 2021. The consultation was the second part and built on the Future Homes Standard consultation. The consultation establishes the pathway to highly efficient non-domestic buildings which are zero carbon ready, better for the environment and fit for the future.

The Future Buildings Standard 2025 is expected to deliver the following for new non-domestic buildings:

- From 2025, the Future Buildings Standard will deliver new non-domestic buildings that are zero-carbon ready, using low-carbon heat and the best fabric standards possible.

2.1.5 Heat and Buildings Strategy.

Released in October 2021, the Government’s Heat and Buildings Strategy outlines the mechanisms required to reduce the cost of low-carbon heating technologies to support transition away from fossil fuels.

All privately rented commercial buildings are required to have minimum EPC band B by 2030 in England and Wales. Further, all commercial buildings >1,000 m² will require an operational energy assessment, completed as part of the Part L2 2021 update. The building log book should include a forecast of the building’s actual energy use (kWh/year) broken down by fuel type, including all metered energy uses and unregulated loads. The forecast may be determined using design calculations, energy benchmarks, an energy forecasting methodology such as CIBSE’s TM54 or any other building modelling or spreadsheet tools.

2.1.6 National Planning Policy Framework.

The National Planning Policy Framework (NPPF) was first published in on 27 March 2012 and most recently updated in December 2024. The updated NPPF has superseded all Planning Policy Statements (PPS) and Planning Policy Guidance (PPG) documents, with the exception of PPS10 (Waste). The NPPF sets out the Government’s strategy on the delivery of sustainable development.

The NPPF states that there is a presumption in favour of sustainable development.

The following is extracted from paragraph 8 of the NPPF:

“Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways:

- *an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*
- *a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being; and*
- *an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.”*

¹ <https://www.gov.uk/government/consultations/the-future-buildings-standard>

Furthermore, in relation to energy policy, paragraph 161 sets out that:

“The planning system should support the transition to net zero by 2050 and take full account of all climate impacts including overheating, water scarcity, storm and flood risks and coastal change. It should help to:

- shape places in ways that contribute to radical reductions in greenhouse gas emissions,*
- minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings;*
- and support renewable and low carbon energy and associated infrastructure.”*

In respect of energy policy contained within the NPPF, paragraphs 162 to 167 set out that:

162. Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating and drought from rising temperatures. Policies should support appropriate measures to ensure the future health and resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.

163. The need to mitigate and adapt to climate change should also be considered in preparing and assessing planning applications, taking into account the full range of potential climate change impacts.

164. New development should be planned for in ways that:

- a. avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through incorporating green infrastructure and sustainable drainage systems; and*
- b. help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings in plans should reflect the Government’s policy for national technical standards.*

165. To help increase the use and supply of renewable and low carbon energy and heat, plans should:

- c. provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and life extension, while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts);*
- d. consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and*
- e. identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for collocating potential heat customers and suppliers.*

166. In determining planning applications, local planning authorities should expect new development to:

- a. comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and*
- b. take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.*

167. Local planning authorities should also give significant weight to the need to support energy efficiency and low carbon heating improvements to existing buildings, both domestic and non-domestic (including through installation of heat pumps and solar panels where these do not already benefit from permitted development

rights). Where the proposals would affect conservation areas, listed buildings or other relevant designated heritage assets, local planning authorities should also apply the policies set out in chapter 16 of this Framework.

2.2 Local Policy.

2.2.1 Manchester Core Strategy 2021-2027².

Manchester’s Core Strategy outlines the adopted Manchester City Council policies for selected sustainability themes including:

- Energy and CO₂
- Water and flood risk
- Materials
- Waste
- Transport
- Pollution
- Ecology and biodiversity
- Community

While these topics are discussed in turn in section 3, they are expected to be replaced by the Joint Development Plan (Places for Everyone – see section 2.2.2) when it is approved.

2.2.2 Places for Everyone³.

The Places for Everyone Joint Development Plan was adopted in March 2024 by nine of the ten councils in Greater Manchester, namely Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan. The strategy sets out the vision for sustainable growth in Greater Manchester for the period of 2022-2039, with a focus on improving the job and housing sector.

Of reference to the Proposed Development, the plan sets out the following strategic objectives:

- Objective 2: Prioritise the use of brownfield land;
- Objective 4: Focus development in the Core Growth Area (Manchester city centre) and improve sustainable and active travel access;
- Objective 6: Focus new development within 800m of sustainable transport hubs and ensure it is designed to encourage and enable active and sustainable travel;
- Objective 7: Promote carbon neutrality of new development by 2028, reduce car dependency, facilitate provision of infrastructure for cleaner vehicles and improve energy efficiency and generation of renewable and low carbon energy; and
- Objective 8: Enhance special landscapes, green infrastructure, biodiversity and geodiversity. Promote the role of green space in climate resilience and reducing flood risk.

Policy JP-S 2 Carbon and Energy establishes the aim of delivering a carbon neutral Greater Manchester by 2038. The Policy also includes an expectation that, up to 2028, new development will follow the energy hierarchy to achieve operational net zero carbon. From 2028 onwards, the development will seek to achieve net zero carbon ‘in construction’ too.

Note: At the time of writing, the Places for Everyone plan carries limited weight in the decision-making process.

2.2.3 5-Year Environment Plan for Greater Manchester.

The Greater Manchester Combined Authority (GMCA) set an ambitious target to be a zero-carbon city by 2038. As part of this plan, the Greater Manchester Spatial Framework sets out plans for all new development to be zero carbon by 2028.

² https://www.manchester.gov.uk/downloads/download/4964/core_strategy_development_plan

³ <https://www.greatermanchester-ca.gov.uk/what-we-do/planning-and-housing/places-for-everyone/pfe-adoption>

Included in the five-year plan are a number of key items, including, but not limited to; increasing local renewable electricity generation, increasing the diversity and flexibility of energy supply and decarbonising how buildings are heated (serviced). These items encourage passive design and a shift away from fossil fuels to service buildings. The five-year plan also notes that new developments should seek to generate 20% onsite / renewable energy generation.

Additionally, the strategy includes a clean air plan to help tackle poor air quality – safeguarding Manchester residents from high levels of Nitrogen Dioxide (NO₂).

3. Sustainability Proposals aligned to Manchester City Council.

In addition to specific project targets relating to ADL 2021 and BREEAM, the Proposed Development will align with the local policies that are outlined below.

3.1 Energy and CO₂ emissions.

3.1.1 MCC Adopted Policy Summary.

The following table summarises the adopted MCC policies for energy.

Table 1 MCC policies relating to energy.

Policy Reference	Target
Energy and CO ₂	CS Policy EN4 All development must follow the principle of the Energy Hierarchy, being designed: – to reduce the need for energy through design features that provide passive heating, natural lighting and cooling – to reduce the need for energy through energy efficient features such as improved insulation and glazing – to meet residual energy requirements through the use of low or zero carbon energy generating technologies In addition: – 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 – The use of building materials with low embodied carbon in new development and refurbishment schemes
	CS Policy EN5 The Proposed Development is located within the Regional Centre, a strategic area indicated on the key diagram, which is expected to have a major role to play in achieving an increase in the level of decentralised, low and zero carbon energy supplies available. Where investment or development is being undertaken into or adjacent to a public building/asset or district heating network, full consideration shall be given to the potential role that these can have in providing an anchor load within a decentralised energy network or in creating opportunities for CO₂ reduction funded by contributions.
	CS Policy EN6 An Energy Statement is required to demonstrate compliance with Part L in line with the energy hierarchy and, for electricity intense buildings i.e. commercial buildings with a high proportion of emissions from electricity use (>45kgCO₂/m²), a minimum +10% increase on Part L 2010. Where the CO₂ emissions reduction required under any future revision to Part L of the building regulations becomes greater than 10%, the reduction under building regulations would apply.
	CS Policy EN7 – Proposals must take account of potential opportunities to source heat from adjoining developments or nearby heating networks. – Heating and cooling systems will have capability of connecting to the decentralised heating network.

3.1.2 Approach.

The Energy Strategy [23057 Hotspur Press Manchester - Energy Strategy Report RevF] details how energy and CO₂ emissions have been assessed in accordance with the policies listed above.

The Proposed Development will have a reduced impact on climate change by reducing CO₂ emissions associated with energy use. The energy and CO₂ emissions appraisal has been based on the following approach.

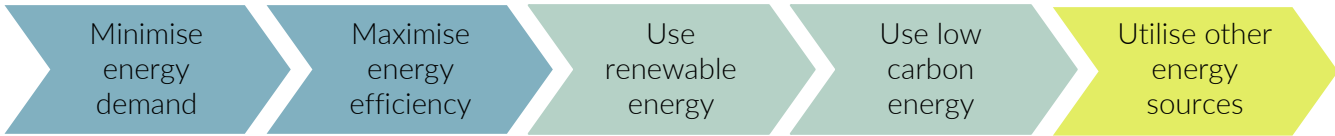


Figure 1 Places for Everyone Energy Hierarchy.

Manchester Core Policy EN6 states that applications for residential development of 10 or more units and all other development over 1,000m² will be expected to achieve at least a 15% improvement over Part L 2010 where feasible. The Energy Strategy indicates that the Proposed Development will achieve a 7.96% reduction over Part L baseline, falling below the EN6 target.

The decarbonisation of the grid has resulted in the carbon intensity of mains gas being higher than for electricity, and therefore strengthening the argument that moving forward building services strategies should be electric led to support wider net zero-carbon ambitions. The chart below illustrates the current and predicted carbon intensities of the national grid from 2005 up to 2050.

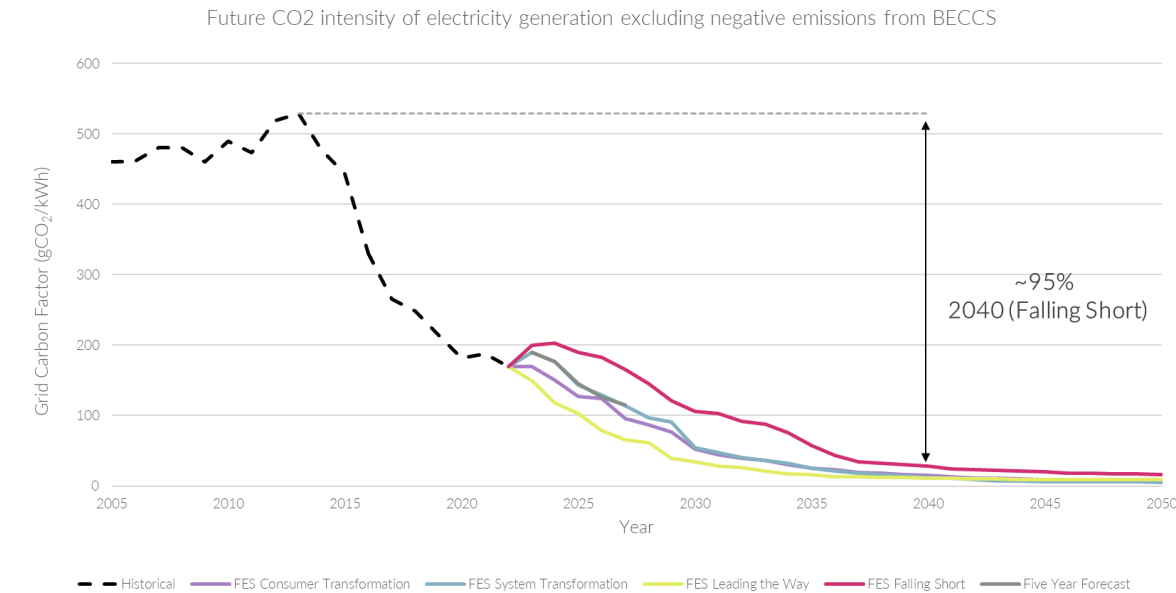


Figure 2 Future CO₂ intensity of electricity generation (excluding negative emissions from BECCS).

3.2 Water and flood risk.

3.2.1 MCC Adopted Policy Summary.

The following table summarises the adopted MCC policies for water and flood risk.

Table 2 MCC policies relating to water and flood risk.

Policy Reference		Target
Water	CS Policy EN14	– Limit the risk and impact of flooding. – Limit increases in surface water runoff.
	CS Policy EN17	– Ensure no decreases to water quality. – Minimise surface water runoff. – Open any culverted watercourses.
Flood Risk	CS Policy EN14	– Limit the risk and impact of flooding. – Limit increases in surface water runoff
	CS Policy EN17	– Ensure no decreases to water quality. – Minimise surface water runoff. – Open any culverted watercourses.

3.2.2 Approach.

The main priorities of the MCC policies do not relate to water conservation issues, but instead encourage no increase in surface water runoff and relate to preventing pollution from entering watercourses. The Proposed Development will aim to reduce the overall consumption of water within the building, in order to limit the resource requirements and ensure that any future impact of water scarcity is limited by the features within the scheme.

The proposed strategy will be water efficient, incorporating measures to reduce potable water consumption through efficient fixtures, and careful management strategies.

The following measures for water have been identified and will be implemented:

Water Efficiency Measures

Consideration has been given to water efficiency in order to meet the requirements of the Building Regulations Part G as a minimum. It is aimed that a 40% reduction in water consumption over the notional baseline will be achieved. The following water consumption levels should be achieved in order to reduce consumption and align with BREEAM targets under performance level 2:

- 4l single flush WCs
- Wash hand basin taps flow rate limited to 6l/min
- Shower flow rates limited to 8 l/min
- Domestic dishwashers 13 ltrs/cycl
- Kitchenette taps 7 ltrs/min



Major Leak Detection Systems (landlord)

A leak detection system capable of detecting a major water leak on the main water supply will be specified and installed on the buildings water supply.



Metering

Water meters will be installed on the mains water supply with a pulsed output to enable connection to a 'Building Management System' (BMS) for the monitoring of water consumption.



Unregulated water uses are assessed in BREEAM.

The Proposed Development will incorporate various Sustainable Drainage System (SuDS) solutions to manage excess rainwater. The proposed SuDS components comprise raingardens, permeable paving, attenuation storage tanks and trapped gullies, petrol interceptors and silt traps. These SuDS are subject to confirmation and alignment with the landscape architects proposal.

Further information can be found in the Flood Risk Assessment [1006-01-CIV-XX-XX-R-C-1001_FLOOD RISK ASSESSMENT]

3.3 Materials.

3.3.1 MCC Adopted Policy Summary.

The following table summarises the adopted MCC policies for materials.

Table 3 MCC policies relating to materials.

Policy Reference		Target
Materials	CS EN19	– Require all developers to identify consistency with the waste hierarchy. – Provide a project waste management plan. – Promote innovation in order to make progress towards a closed loop waste management system. – Provide accessible facilities.
	CS EN20	– Encourage the efficient use of minerals and promote the use of secondary/recycled aggregates, wherever possible as an alternative to primary extraction and identify and safe guard sites for its storage, processing and transfer. (See also Waste Policy EN19.) – Encourage and safeguard the sustainable transport of minerals, including by use of rail, wherever possible. – Ensure that any adverse environmental impacts of storage, processing and transfer on neighbouring uses are minimised.
	CS EN19	– Require all developers to identify consistency with the waste hierarchy. – Provide a project waste management plan. – Promote innovation in order to make progress towards a closed loop waste management system. – Provide accessible facilities.

3.3.2 Approach.

Different structural options have been considered through design development and some of these have been appraised for embodied carbon (see section 5). Opportunities to increase the concrete cover of the substructure have been discussed to potentially extend the lifespan of the building. Various façade options have also been considered for the tower extension, with unitised curtain walling, precast concrete traditional masonry, brick faced GRC and brick slips all assessed and compared.

At this stage unitised curtain walling is the favoured façade option. The system main components of unitised curtain walling are aluminium and glass which are high embodied carbon materials, to reduce the embodied carbon impact these materials should be sourced from sustainable supplies.

All materials, where viable, will additionally be procured through sustainable sources and products will be preferred with environmental certification such as BES6001 and ISO14001 certified supply chains.

The Proposed Development will achieve the following:

- Timber to be sourced from sustainable sources accredited by the FSC

Products certified with ISO14001 and BES6001. Robust materials will also be specified to enable a long life with low maintenance.

The following opportunities to improve the sustainability of material selection have been identified and will be implemented:



Material Sourcing

Where feasible, the Proposed Development will endeavour to source materials locally. This will assist in reducing the embodied carbon of the materials by limiting transportation related emissions and would support the local economy.



Maximise Recycled Content of Materials

A number of materials used commercially in the UK construction industry are manufactured using materials recycled from post-consumer waste. The design will endeavour to utilise recycled materials with low embodied impacts.



Responsibly Sourced, Certified Timber

The buildings will only use timber from a temperate, well managed source or manufactured from recycled timber waste. Timber certified by the 'Forest Stewardship Council' (FSC) contains a product-specific chain of custody number confirming that the timber used in the manufacture of the product originates from a sustainably managed source. 100% of the timber used to be FSC/PEFC certified.



Zero ODP and GWP Insulation

Preference will be given to insulation materials such as rock wool and mineral wool, which are manufactured to have an 'Ozone Depletion Potential' (ODP) of zero, and low 'Global Warming Potential' (GWP), while still giving consideration to thermal performance and fitness for purpose.



Low solvent / low VOC paints

Paints and other materials with high levels of Volatile Organic Compounds (VOCs) can emit organic compounds long after the building has been completed. These chemicals which are inhaled by the building occupants are considered to be a contributing factor in sick building syndrome, leading to nausea and headaches. The scheme will, as far as possible, use internal materials that have a low solvent / low VOC content.



Zero Formaldehyde MDF

'Medium Density Fibreboard' (MDF) is a timber panel product that can be manufactured with new or recycled timber. Typically, MDF is manufactured using Formaldehyde, which is hazardous to health. However, MDF can be manufactured without the use of Formaldehyde and the development will use zero Formaldehyde MDF as far as practically possible.

3.4 Waste.

3.4.1 MCC Adopted Policy Summary.

The following table summarises the adopted MCC policies for waste.

Table 4 MCC policies relating to waste.

Policy Reference		Target
Waste	CS EN19	– Require all developers to identify consistency with the waste hierarchy. – Provide a project waste management plan. – Promote innovation in order to make progress towards a closed loop waste management system. – Provide accessible facilities.
	CS EN20	– Encourage the efficient use of minerals and promote the use of secondary/recycled aggregates, wherever possible as an alternative to primary extraction and identify and safe guard sites for its storage, processing and transfer. (See also Waste Policy EN19.) – Encourage and safeguard the sustainable transport of minerals, including by use of rail, wherever possible. – Ensure that any adverse environmental impacts of storage, processing and transfer on neighbouring uses are minimised.
	CS EN19	– Require all developers to identify consistency with the waste hierarchy. – Provide a project waste management plan. – Promote innovation in order to make progress towards a closed loop waste management system. – Provide accessible facilities.
	CS H12	– Provide sufficient waste disposal facilities. – Ensure waste is disposed in accordance with the waste hierarchy.

3.4.2 Approach.

Aspects of the existing building is to be demolished during the construction phase. Prior to demolition, a pre-demolition audit will be conducted to identify any materials that could be salvaged for re-use on site or elsewhere and reduce the requirement for virgin materials to be used for aggregates and other such applications. Waste that can be reused will be processed through an approved waste management contractor and reused and recycled where possible.

At this stage, a glass and aluminium façade system has been proposed for the tower. Glass and aluminium façades generate low factory waste as the components are manufactured to precise specifications in a controlled factory environment. Aluminium is highly recyclable, with any off-cuts typically re-entering the production process. Glass waste from the factory is also often recyclable, although coatings and laminations may limit recycling options. These processes contribute to reducing material waste and promoting sustainability during production.

A Resource Management Plan (RMP) will be developed with the aim of minimising and monitoring waste.

Careful waste management procedures will be put in place during construction and on into operation to reduce the amount (volume and mass) of waste sent to landfill during the lifetime of the building. The principles of the waste hierarchy will be applied at each stage.

The development itself will be likely to produce moderate waste volumes through operation due number of residents and its continuous use. However, to encourage or move towards closed loop waste management, suitable waste storage and facilities will be provided for the tenants. This will allow for segregation of recyclable and non-recyclable general waste.

The selection of materials will also consider end of life and recyclability. Materials that can be salvaged at the end of life will be incorporated wherever possible to reduce the instances of waste produced in the future.

The following opportunities to reduce waste have been identified and will be implemented at the Proposed Development.



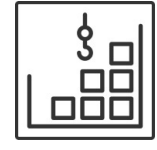
Re-Use of Materials

The material use strategy for the Proposed Development will minimise the environmental impact. A key component of this strategy is the re-use of existing materials. The Proposed Development seeks to retain and refurbish the façade where possible and incorporate lean design principals to minimise the amount of raw material needed for the concrete frame. Further, Manner plans to retain and reuse the original equipment from within the mill where possible such as some of the architectural fittings and furnishings.



Minimisation of Demolition & Construction Waste

The contractor will be required to produce a ‘Site Waste Management Plan’ (SWMP) to define measures for how to minimise the volume of waste arising from any demolition and all construction activities sent to landfill. Performance of the contractor waste reduction and their environmental impact in this regard will make up an element of tender process.



Off-site Construction

Off-site modular construction will be considered where possible, which would allow less waste to be produced on-site as the construction method takes on a form of an assembly of components. Features may include stair-core components or upper floor elements although further opportunities will be sought through design and construction.



Operational Waste

The buildings will be provided with sufficient bin storage capacity to allow for storage of recyclable and non-recyclable waste streams.

Each student room will be provided with four waste bins, one for general waste, one for paper/card, one for food waste and one for plastics/metals/glass.

The building users will manually transfer waste to a central waste storage area that is in an appropriate location for collection by MCC or another waste management contractor. It is expected that the 405 units will generate a range of municipal waste types, producing an estimated 42,120 litres of waste per week. The waste store will be designed in accordance with BS5906 (waste management in buildings) and will be designed to accommodate 18 x 1,100 litre bins. Additionally, 4 x 240 litre bins would be provided for food waste.

Further details can be found in the Waste Management Strategy [Hotspur Press Waste Management Strategy V3]

3.5 Transport.

3.5.1 MCC Adopted Policy Summary.

The following table summarises the adopted MCC policies for transport.

Table 5 MCC policies relating to transport.

Policy Reference		Target
Transport	CS CC5	– Provide access to public transport and sustainable modes of accessing the Proposed Development. – Promote sustainable modes of transport including walking and cycling. – Provide storage and facilities for cyclists/walkers.
	CS SP1	– Encourage sustainable transport and facilitate sustainable transport.
	CS H12	– New Purpose Built Student Accommodation must be located in close proximity to the university campuses or high frequency public transport routes. – Ensure no increase in on-street parking. – Located within walking distance of local retail facilities
	CS T1	– Provide suitable alternative to car transportation. – Promote regeneration and access to jobs. – Improve access to transportation services. – Improve pedestrian routes. – Improve access to cycle facilities. – Facilitate modes of transport that are low carbon.

3.5.2 Approach.

Most building users are anticipated to arrive at the building on foot, by bike or via public transport given the Sites central city centre location and excellent public transportation links close by and facilities provided within the building itself.

As the Site is located within the city centre, there are extensive retail facilities in the surrounding area.

A car park will not be provided for the proposed development, aside from one disabled parking bay and one loading bay which are to be located adjacent from each other along Cambridge Street/ Gloucester Street. The accessibility of active travel facilities and public transport routes reduces the need for car parking.

The following measures for sustainable transport have been identified and will be implemented:



Public Transport
The site is highly accessible by public transport with the proposed development benefiting from excellent access to local bus, train and tramline routes. There is good access to local and national transport destinations that will allow sustainable transport for visitor and commuter transport, from and to the site.



Cyclist and pedestrian Facilities
The basement level has been designed to provide secure, covered cycle storage for up to 142 bicycles.

Further details can be found in the Transport Statement [084456-CUR-XX-XX-T-TP-00001]

3.6 Pollution.

3.6.1 MCC Adopted Policy Summary.

The following table summarises the adopted MCC policies for pollution.

Table 6 MCC policies relating to pollution.

Policy Reference		Target
Pollution	CS DM1	– Effects on amenity, including privacy, light, noise, vibration, air quality, odours, litter, vermin, birds, road safety and traffic generation. This could also include proposals which would be sensitive to existing environmental conditions, such as noise.
	CS EN14	– Limit the risk and impact of flooding. – Limit increases in surface water runoff.
	CS H12	– Ensure no increase in noise, disturbance or impact on the streetscene.
	CS Policy EN17	– Ensure no decreases to water quality. – Minimise surface water runoff. – Open any culverted watercourses.
	SPDPG Section 4.9 (Superseded)	– Provide SUDS to management surface water runoff. – Minimise increases in impermeable surfaces. – Prepare FRA for areas at risk of flooding.

3.6.2 Approach.

Building services plant will be selected based on efficient and ultra-low emissions of NOx SOx and COx (where applicable), and will not substantially contribute to local air pollution. Air Source Heat Pumps are the proposed energy sources for the development and will generate heating, AC and hot water. No gas combustion devices will be installed on site thereby contributing significantly towards the aims of the Greater Manchester Clean Air Plan. For further information please consult the Air Quality Assessment [784-B050197 Hotspur Press Manchester AQ 11Oct23]

Noise pollution has been assessed by an acoustic consultant. To ensure noise limits are not exceeded a good standard of acoustic glazing will be required and windows will need to remain closed. Further details are set out in the Noise and Vibration Environmental Statement Chapter.

The following measures to control pollution have been identified and will be implemented:



Light Pollution
Potential sources of light pollution as a result of the new build will be mitigated through measures such as aiming to install automatic lighting which switches off between 23:00 and 7:00, unless used for safety, security and clinical purposes.



NO_x Emissions & Air Quality
The Proposed Development will utilise ASHPs minimise potential air quality effect. Nitrous Oxide (NO_x) and Particulate Matter (PM) have been assessed; there is not expected to be any exceedances of the NO₂, PM₁₀ or PM_{2.5} pollutant concentrations and therefore, mitigation is not required.



Waste Storage
Adequate waste storage facilities will be provided with capacity to allow storage of non-recyclable and recyclable waste, preventing odour pollution from the site. Further information is set-out within the Waste Management Strategy [-Add reference-] submitted in support of the planning application.



Noise impacts
Noise impacts have been assessed. A good standard of acoustic glazing will be required to ensure noise does not exceed the established limits.

3.7 Ecology and Biodiversity.

3.7.1 MCC Adopted Policy Summary.

The following table summarises the adopted MCC policies for ecology and biodiversity.

Table 7 MCC policies relating to ecology and biodiversity.

Policy Reference		Target
Ecology & Biodiversity	CS EN9	– Encourage green infrastructure where possible.
	CS EN10 / EN11 / EN12	– Maintain levels of open, sports and recreation spaces.
	CS EN13	– No impact on the Green Belt.
	CS EN15	– Encourage features to ensure no loss of biodiversity. – Maintain or enhance sites with specific designations or value. – Justify any adverse effects on ecology. – Provide suitable mitigation and compensation.

3.7.2 Approach.

The existing site is a brownfield site, principally comprising the existing building. The appointed ecologist has provided advice on site ecology and biodiversity including recommended planting species to encourage local wildlife.

The following measures relate to ecology and biodiversity have been included in the project:

Environmental Effects



The Hotspur Press building is confirmed as being used by bats for roosting or as a place of shelter. It is therefore required that a Protected Species Mitigation Licence (A13) is obtained from Natural England, prior to the onset of works within the site. Mitigation, under licence will require the provision of integrated roost features within the proposed new structure.

The site recorded suitability for breeding birds including Schedule one species Black redstart and Peregrine Falcon. Further survey effort is recommended to ascertain presence / likely absence. A brown or green roof should be incorporated within the scheme design capable of providing several different ecotones capable of supporting black redstart.

Further details can be found in the Preliminary Ecological Appraisal [PEA Report. Hotspur Press SQ-1289], the Bat Activity Report [Bat Activity Report. Hotspur Press 2023 (HSQ-1288)] and the Biodiversity Net Gain assessment [Biodiversity Net Gain assessment. Hotspur Press (SQ-1289.A)]

3.8 Community.

3.8.1 MCC Adopted Policy Summary.

The following table summarises the adopted MCC policies for community.

Table 8 MCC policies relating to community.

Policy Reference		Target
Community	CS EN1	– Design facilities that will fit the local character of the development site.
	CS EN10 / EN11 / EN12	– Maintain levels of open, sports and recreation space.
	CS EN13	– No impact on the Green Belt.
	CS H12	– Ensure compatibility with existing developments and initiatives, – Demonstrate a positive regeneration impact with its own right. – Provide safe and secure accommodation which does not increase crime risks, – Ensure no increase in noise, disturbance or impact on the street scene. – Contribute to the re-use of Listed Buildings and other buildings with heritage value. – Demonstrate a need for the student accommodation.

3.8.2 Approach

The project team aims to engage with the local community throughout design, construction and operation to deliver a sustainable development, built for purpose.

The Proposed Development sought to deliver a comprehensive consultation process which demonstrated a wide-reach and the opportunity to provide feedback prior to the submission of a planning application to Manchester City Council. From this wide-reaching awareness raising and engagement activity, 26 consultees provided written feedback via email and the feedback form, alongside commentary on social media and through the live public webinar.

The following themes for community engagement and facilities have been identified for further consideration:



Principle of development

The development will maintain the fabric of the original building helping to preserve it for generations to come.

The redevelopment of the site will offer an opportunity to develop a new public realm, characterised by tree planting and urban greening and enhance the River Medlock's biodiversity.

The development will improve the quality of both townscape and public realm, making efficient use of land in this location.



Design

A lighting scheme for the site will be established in due course and will prioritise the safety and security of both residents and those who will use the public realm and linking route through to First Street.

Further measures related to the 'Design' theme can be found in the Statement of Community Engagement [DUKM3000 – The Hotspur Press – Statement of Community Engagement].



Community

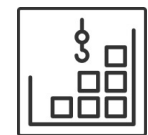
The scheme will seek to boost the local economy by using local business and suppliers wherever possible.

Further measures related to the ‘Community’ theme can be found in the Statement of Community Engagement [DUKM3000 – The Hotspur Press – Statement of Community Engagement].



Management and operation

Measures related to the ‘Management and operation’ theme can be found in the Statement of Community Engagement [DUKM3000 – The Hotspur Press – Statement of Community Engagement].



Construction

Through planning and design consideration has been given to the impact of the development on the surrounding areas, ensuring minimal disturbance through construction and operation.

The project team will ensure the site is fully enclosed and dust producing equipment and/or materials are removed from site as soon as possible and adequately covered when onsite.

A sound / noise meter will be available on site to check noise levels at the site boundaries, ensuring that the 75dB level is not exceeded.

A Construction Traffic Management Plan will be prepared by the principal contractor which will set out the proposed routing of construction traffic and measures to enforce such routing.



Technical issues

Measures related to the ‘Technical issues’ theme can be found in the Statement of Community Engagement [DUKM3000 – The Hotspur Press – Statement of Community Engagement].

4. Operational Energy Performance.

4.1 Estimates of operational energy and carbon.

Operational Energy Performance (OEP) estimates are informed by the Energy Strategy, produced as part of the ES Climate Change Chapter.

The evaluation of the anticipated operational energy use of the building has been carried out based on modelling undertaken in line with Part L 2021 of the Building Regulations (Conservation of fuel and power).

The calculations were performed using dynamic thermal modelling software (TAS version 9.5.6) which allowed the impact of internal gains and external weather conditions to accurately be considered. Adopting a OEP approach looks to close the ‘performance gap’ between the simulation and reality.

Building Regulations Part L2 compliance outputs are largely used for energy analysis in the UK. This is supplied by the National Calculation Methodology (NCM) and involves the use of pre-determined building operations. Part L produces generic outputs for a limited number of energy consuming factors such as lighting, space heating and cooling and ventilation.

The development is currently at Stage 2 and includes as many of the known energy consuming systems as possible and accurate hours of operation.

For further information on the dynamic thermal modelling that was undertaken and the results of calculations refer to the Energy Strategy [23057 Hotspur Press Manchester - Energy Strategy Report RevF].

5. Embodied Carbon.

Embodied carbon emissions refer to the carbon contained within the building materials, through manufacture and transport. Embodied carbon typically accounts for over 50% of the total carbon emissions of a building, but this proportion is expected to increase as the national grid decarbonises resulting in reduced operational emissions. Figure 3 below details the different stages of assessment.

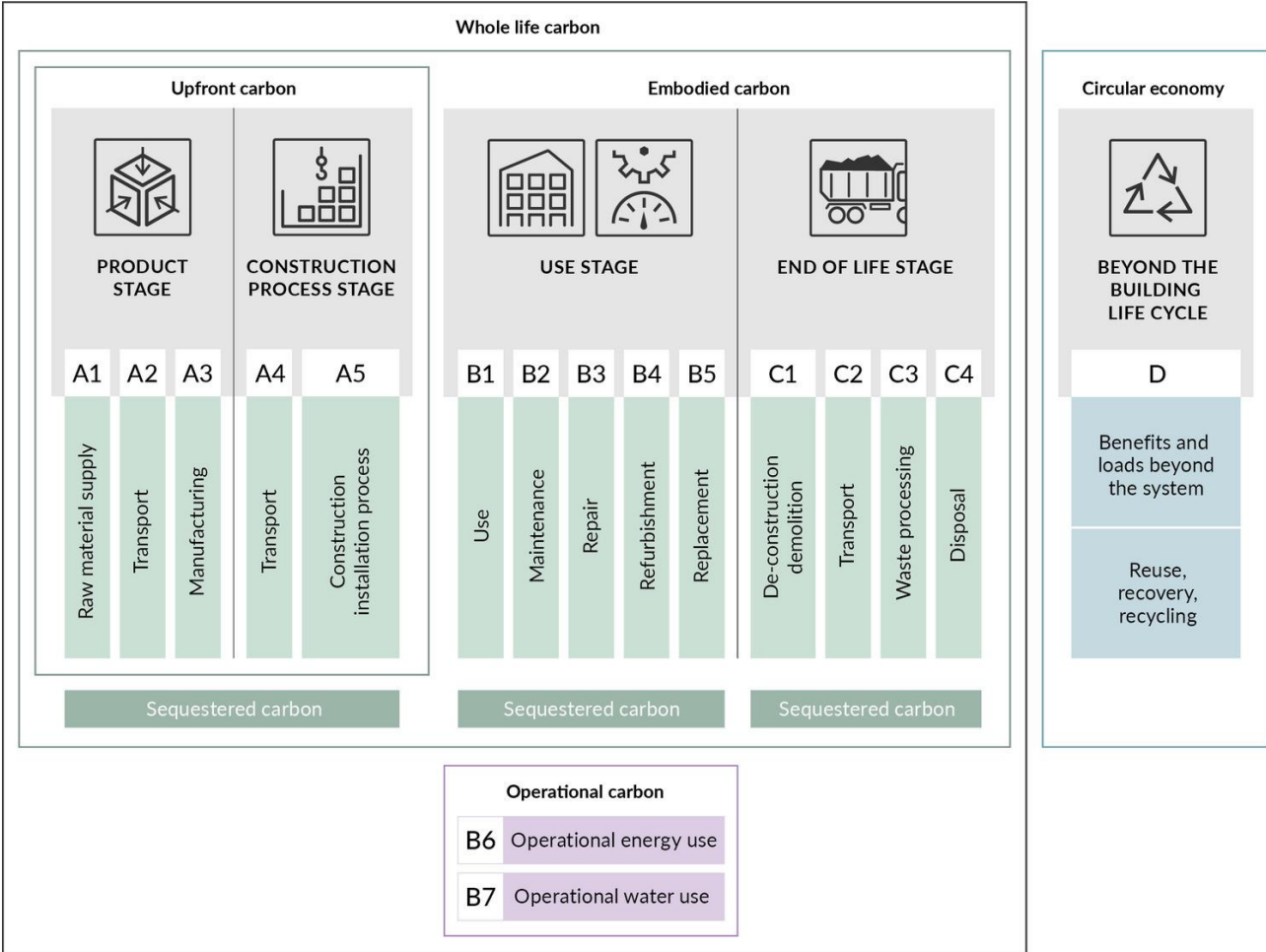


Figure 3 System Boundary: EN 15978:2011 Display of modular information for the different stages of the building assessment.

Figure 4 provides an indication as to how this might break down across the different building elements.

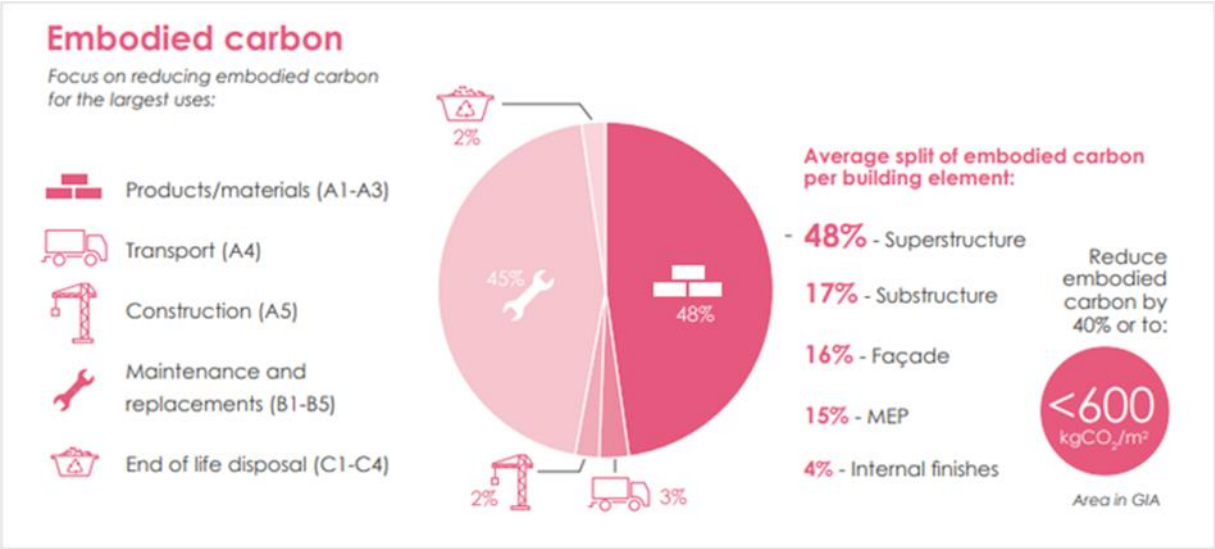


Figure 4 Embodied carbon emissions (LETI).

The pie chart on the left in Figure 5 shows the difference in importance of carbon in the upfront carbon lifecycle modules. Modules A1-A3 can clearly be seen to be the major proportion of the carbon, with modules A4 and A5 of much lower importance. At this early design stage, resource efficiency should be prioritised to ensure that the structural design minimises the volume of materials used. It should be noted this pie charts consider the 60-year whole life impacts.

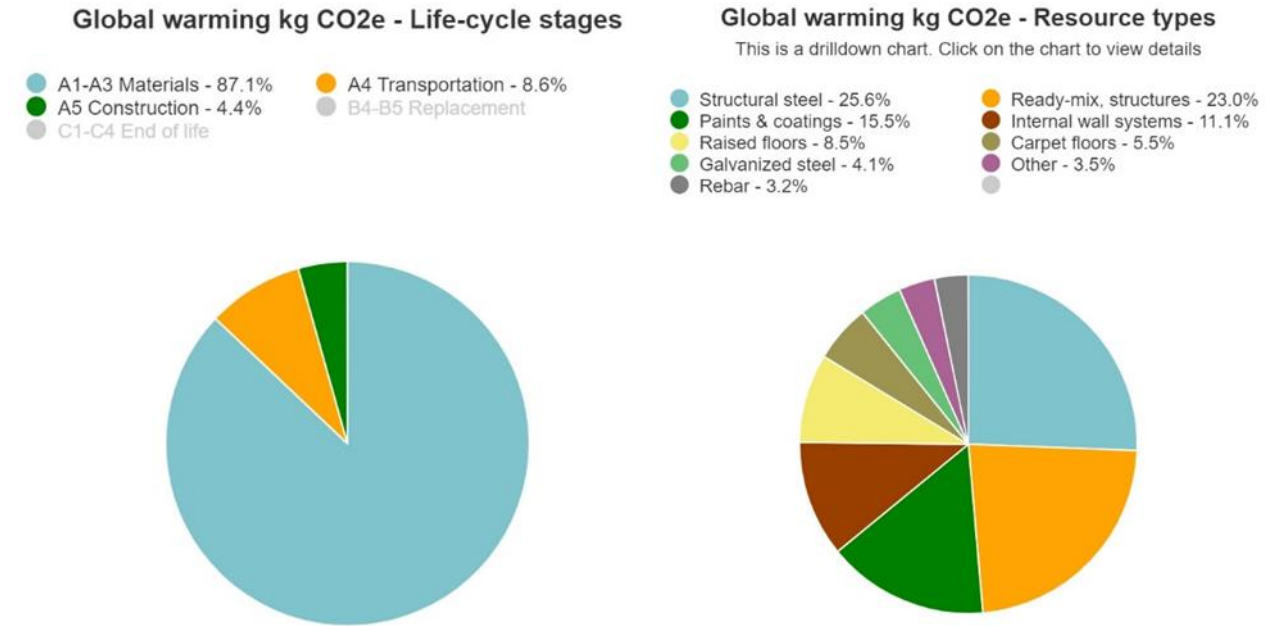


Figure 5 Embodied carbon by life cycle stages and resource types (60-year analysis).

5.1 Whole Life Carbon.

Whole life carbon refers to the sum of the operational and embodied carbon emissions over the life of the building. With an aspiration to be net zero carbon, both operational and embodied emissions must be addressed during the concept stage and developed through design and construction. Following the guidance provided on the operational energy approach and targeting key elements of the structure, the Proposed Development will aspire to take significant steps towards net zero carbon. Although, the project is not expected to achieve net zero carbon.

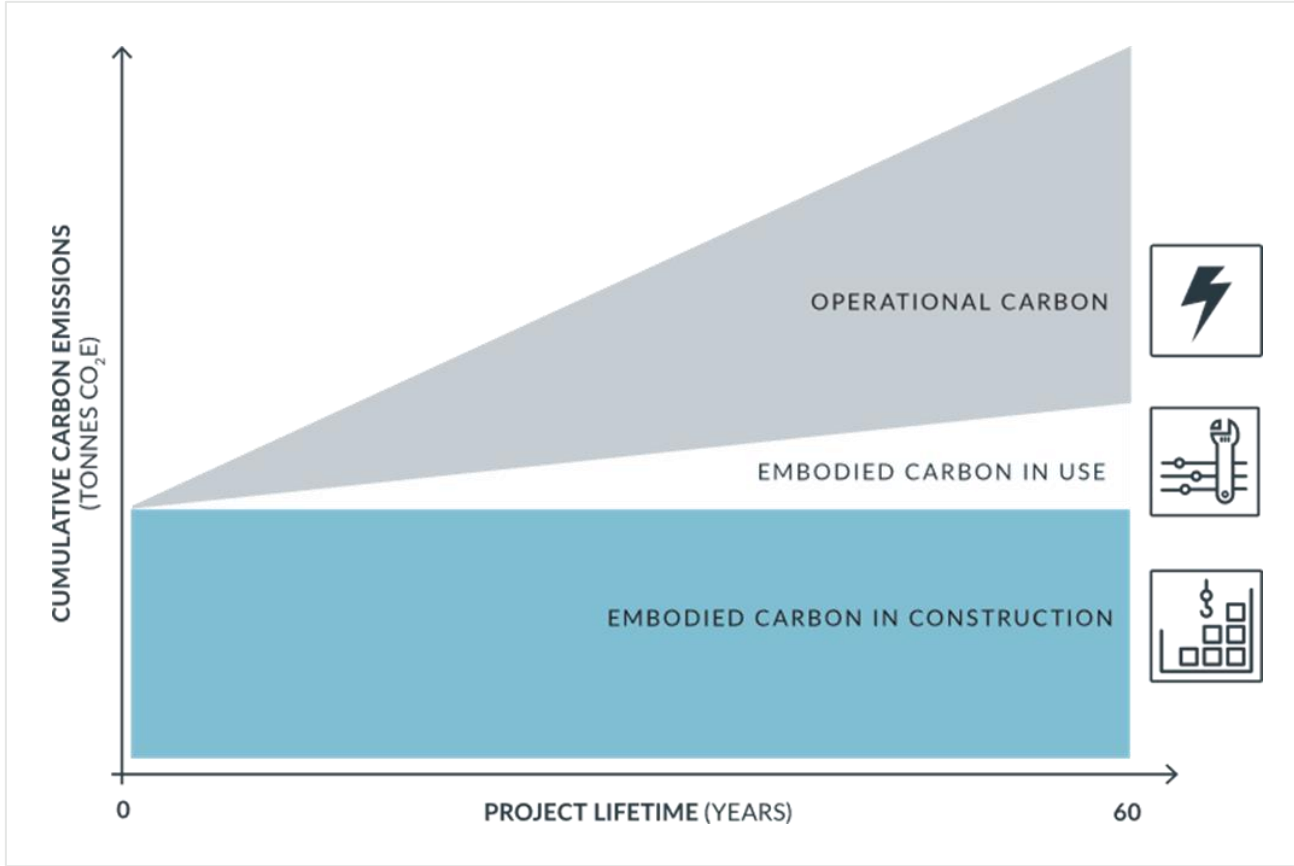


Figure 6 Whole life carbon.

5.1.1 Carbon offsets

It will be difficult to achieve a totally zero whole life carbon development, therefore carbon offsets such as afforestation, creation of off-site solar/ wind farms should be considered. Reducing operational and embodied carbon will result in a lower investment in carbon offsets.

5.1.2 Whole Life Carbon Assessment.

A Whole Life Carbon Assessment was completed for the Proposed Development to capture the emissions generated from the site over the project lifespan.

The table below shows the results of the WLC assessment for the Hotspur Press development, split by life cycle module, and demonstrating the split between Upfront Embodied Carbon, Embodied Carbon and Whole Life Carbon.

Table 9: Whole Life Carbon results, per module.

Life cycle module	Total carbon per life cycle module	Upfront Carbon		Embodied Carbon	
	kgCO ₂ e	tCO ₂ e	kgCO ₂ e/m ²	tCO ₂ e	kgCO ₂ e/m ²
A1-A3: Construction materials	7,928,706	10,090	478	17,251	818
A4: Transportation to site	840,414				
A5: Construction/installation process	1,320,539				
B1-B5: Maintenance & replacement	7,879,206	-			
C1-C4: End of life	602,342	-			

Carbon hotspot analysis has been undertaken to determine where the main embodied carbon hotspots within the building design are located. Figure 7 below splits the results by upfront carbon (A1-A5) and the replacement and end-of-life emissions (B1-B4, C1-C4) to demonstrate the development's main carbon hotspots.

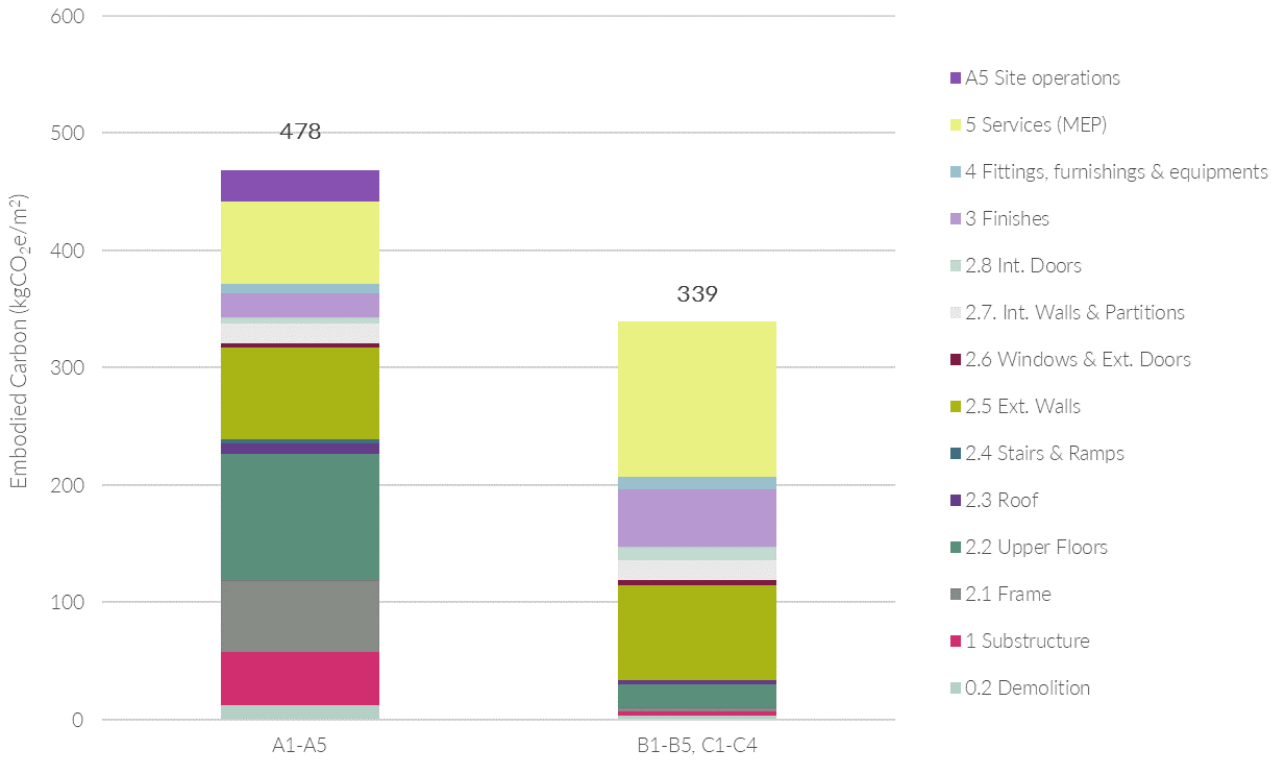


Figure 7 Carbon Hotspots.

5.1.3 Updated scheme design (March 2025)

The analysis above was based on the scheme design in December 2024, where the Gross Internal Area (GIA) was reported to be 21,094m². The latest Schedule of Accommodation reports the GIA to be 21,724m² which is an increase in floor area of ~3%. Broadly speaking, the embodied carbon numbers reported in Table 9 above might be expected to increase by approximately this same rate so the upfront embodied carbon for lifecycle modules A1-A5 might be ~10,390tCO₂e. The carbon intensity would remain at 478kgCO₂e/m².

6. Environmental Assessment Methods.

A number of environmental assessment methods are applicable to the proposed development, with BREEAM being prioritised during Stage 2. Others, including WELL, will be considered further during the next stage.

6.1 BREEAM.

Founded in 1990, the Building Research Establishment's Environmental Assessment Method (BREEAM) is the most commonly adopted environmental assessment method for developments in the U.K. BREEAM takes a holistic approach to sustainability, awarding credits across nine categories and for innovation.

Hotspur Press is targeting a minimum BREEAM rating of "Excellent" under the BREEAM 2018 New Construction scheme, which requires a score of at least 70%. A buffer of ~3-5% is advisable to allow for changes during design development and/or performance targets being missed during the construction stage.

A pre-assessment exercise has been completed by a BREEAM Accredited Professional (AP) and the preliminary strategy suggests that a rating of "Excellent" can be achieved using BREEAM New Construction criteria. Further information can be found in the BREEAM pre-assessment report, which forms a part of the Energy Strategy report [23057 Hotspur Press Manchester - Energy Strategy Report RevF].

7. Conclusion.

This report is prepared to support the submission to Manchester City Council of a series of design amendments to the proposed redevelopment of the site which is subject to planning application reference 138805/FO/2023. A previous ESS was prepared by Hoare Lea in November 2023 relating to the scheme which was considered by the City Council's Planning Committee at its meeting of 30th May 2024. This report presents a new assessment of the scheme as now proposed. A description of the development, including of the changes to the design as proposed, are presented in an updated Design and Access Statement.

The development is expected to comply with all relevant national and local policy, as outlined in sections 2 and 3 and aims to achieve the following sustainability target:

- BREEAM rating of "Excellent"
- The reduction in emissions currently achieved is 7.96% over the Part L baseline.
- A 40% reduction in water consumption over notional baseline.

In summary, the project ambitions are expected to be achieved during the next stage following further design development and collaboration.



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