

All Saints West Refurbishment Application

Environmental Standards Statement & Energy and Carbon Statement Combined

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1 Executive summary

This Environmental Standards Statement (ESS) has been prepared in support of the Application for Full Planning Permission for development of the refurbishment of a 3-storey retained element of a former library building, to provide new educational facility (Use Class F1), and erection of new four-storey staircore and associated works by Manchester Metropolitan University.

This Statement seeks to demonstrate how Manchester City Council's (MCC) policies within the Manchester's Core Strategy Development Plan Document (2012), Places for Everyone (2024); and the Addendum to the Manchester Core Strategy (2024), have informed the Proposed Development in embedding sustainability in the design.

This Statement should be read along with the Sustainable Construction Tracker, SKA assessment accompanying this report, and other relevant technical reports submitted as part of the planning application.

The topics covered in this report include carbon and energy; water and flood risk; air quality; waste and resource efficiency; and sustainable development.

In summary, the development is actively targeting and achieving the required environmental standards in line with the planning policy and will align with the carbon reduction requirements of the Part L Building Regulations.

2 Introduction

2.1 Scope of the document

This Statement has been prepared in support of the Application for Full Planning Permission for the Refurbishment of 3-storey retained element of a former library building, to provide new educational facility (Use Class F1), and erection of new four-storey staircore and associated works. The works will be carried out by Manchester Metropolitan University.

This Statement seeks to demonstrate how Manchester City Council's (MCC) environmental sustainability policies will inform the proposed development.

The Statement comprises the following sections:

- **Planning Policy Review** to set the context for the development and identify current planning-related environmental sustainability targets
- **Environmental Standards Review** to outline how the development will respond to the Environmental Standards set out in Manchester's Core Strategy Development Plan Document (2012), Places for Everyone (adopted March 2024), and the MCC Core Strategy (2024 addendum). These each form part of the Manchester Local Plan

It is recognised that sustainable development cuts across several issues and disciplines. Reference should be made to the accompanying planning documents for further technical details, namely:

- Buro Happold – Ground Conditions Planning Documentation - 1350B-BHE-XX-XX-RP-G-200001
- Buro Happold – Stage 3 Civil Engineering
- Buro Happold – Sustainable Construction Tracker
- Ryder Levett Bucknall (RLB) – SKA Assessment
- Hawkins Brown – Whole Life Cycle Assessment

2.2 Description of the development

Refurbishment of 3-storey retained element of a former library building, to provide new educational facility (Use Class F1), and erection of new four-storey staircore and associated works.

2.3 Site description

This 0.15 hectare Site in Manchester Metropolitan University's All Saints Campus, within Manchester City Centre, is bound by the University's vacant All Saints Library building to the east, by the Faculty of Business and Law to the west, the Sandra Burslem building to the north and All Saints Park to the south. The Site currently comprises a three-storey portion of the vacant All Saints Library Building. This part of the library is set to be retained (as established within application ref. 143943/FO/2025) and refurbished as part of this proposed development. The adjacent portion of the library is subject to demolition (as established within application ref. 143943/FO/2025) and redevelopment as proposed under a separate planning application (application ref. 144697/FO/2025).

The figure below shows the proposed site boundary (red line).

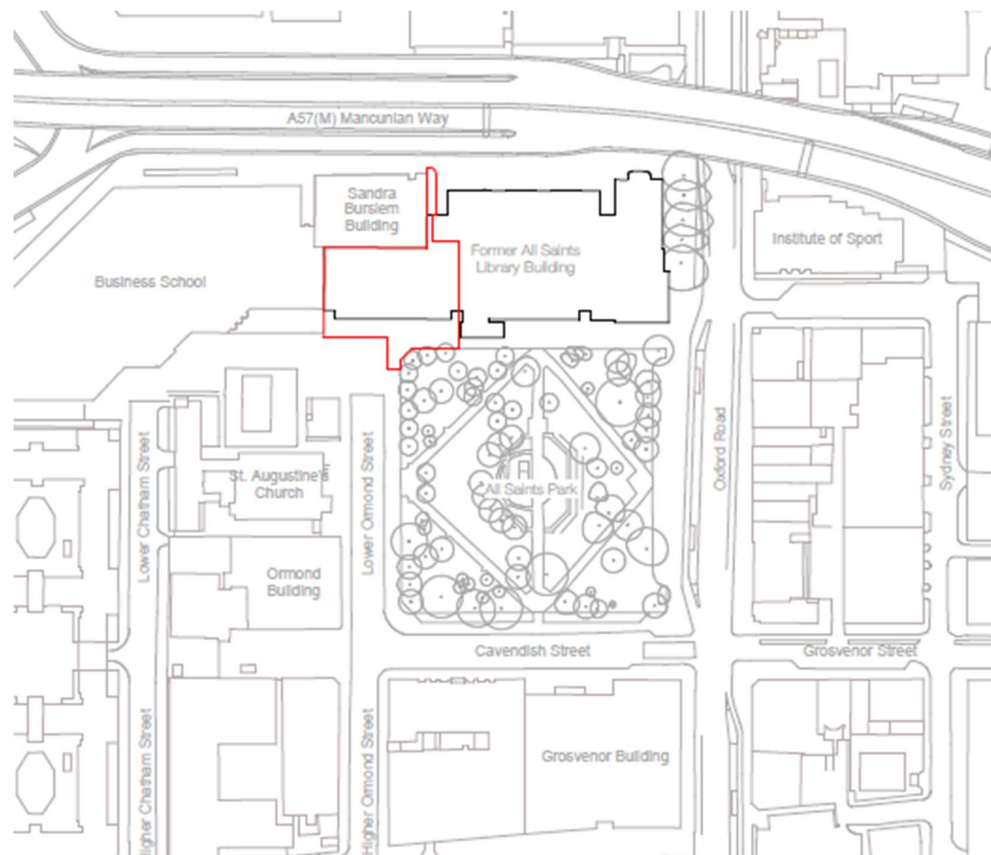


Figure 1 Site location plan

3 Planning Policy Context

3.1 Scope of the policy review

To better understand the sustainability drivers for this development and set the policy context, a summary of the key sustainable development policies, legislation and guidance at both the national and local level has been provided.

3.2 Legislation

3.2.1 Climate change Act 2008

The Climate Change Act Parliamentary Bill (2008) sets out the UK Government's pathway to reduce greenhouse gas emissions by at least 80%, relative to 1990 levels, by 2050. This includes the requirements to set legally binding carbon budgets over five-year periods to act as intermediate milestones.

On 27th June 2019, a more ambitious target of net zero carbon by 2050 was adopted by the UK Government in response to public sentiment and the release of the Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5oC (October 2018).

3.2.2 Approved document: Part L (2021) Building Regulations (2023 amendment)

The Conservation of Fuel and Power: Approved Document Part L (2021) Building Regulations (2023 amendment) sets the energy and carbon targets that must be achieved in new buildings other than dwellings. These have been set to address the upcoming progressive energy improvement policies which strive towards achieving a net zero carbon standard in the future.

This development will be designed in accordance with these building regulations.

3.3 Notional Policy & guidance

3.3.1 A Green Future: Our 25 Year Plan to Improve the Environment (2018)

The HM Government's 'A Green Future: Our 25 Year Plan to Improve the Environment' (2018) sets out the Government's ambition to '...champion sustainable development, lead in environmental science, innovate to achieve clean growth and increase resource efficiency to provide benefits to both our environment and economy'.

The plan provides fresh impetus for the principles of sustainable development to be at the heart of decision-making, setting out clear objectives and common language for policy and decision makers to adopt.

Policies and actions are structured around six key areas:

- Chapter 1: Using and managing land sustainability
- Chapter 2: Recovering nature and enhancing the beauty of landscapes
- Chapter 3: Connecting people with the environment to improve health & wellbeing
- Chapter 4: Increasing resource efficiency and reducing pollution and waste
- Chapter 5: Securing clean, healthy, productive and biologically diverse seas and oceans
- Chapter 6: Protecting and improving our global environment.

3.3.2 National Planning Policy Framework (December 2024)

The National Planning Policy Framework (December 2024) and relevant planning practice guidance sets out the Government's planning policies for England. The presumption in favour of sustainable development is at the heart of the framework, cascading through to local plans and the approval process for planning applications. Key issues addressed are summarised below:

- Building a strong, competitive economy
- Ensuring the vitality of town centres
- Promoting healthy and safe communities
- Promoting sustainable transport
- Supporting high quality communications
- Achieving well-designed place
- Making effective use of land and protecting green belt land
- Meeting the challenge of climate change, flooding and coastal change
- Conserving and enhancing the natural and historic environment
- Facilitating the sustainable use of minerals.

3.4 Local policy and guidance

The table below provides a timeline of the relevant planning policy and guidance for MCC and how they interrelate.

Table 1 Planning Policy Timeline & Summary

Release	Policy Document	Status
1995	Unitary Development Plan (UDP) Served as the primary framework for making decisions about planning applications and future development	"Saved" policies only, not relevant to ESS
2007	Guide to Development in Manchester - Supplementary Planning Document and Planning Guidance (SPD) Provided updated guidance on design quality complementing the 1995 UDP	Live
2012	Manchester's Core Strategy Development Plan Document Replaces significant elements of the 1995 UDP setting out long term policies for Manchester's development	Live
2024	Places for Everyone (Pfe) Joint Development Plan Introduces new policies over and above the 2012 Core Strategy document, superseding some aspects of the Core Strategy	Live
2024	Addendum to Manchester Core Strategy 2024 Lists sections of the 2012 Manchester Core Strategy policies that were replaced by the Pfe and must be read alongside the Core Strategy	Live

3.4.1 Guide to Development in Manchester – Supplementary Planning Document (SPD) and Planning Guidance

The Supplementary Planning Document (SPD) for the Guide to Development in Manchester does not create new policy but expands on and provides further detail on existing policies. Although the SPD refers to the former Unitary Development Plan (UDP) policies, the guidance is to be applied instead to the new policies described in the 2012 Core Strategy Development Plan and the 2024 Places for Everyone (Pfe). The principles and guidance on the Environmental Standards Statement remain current and complimentary to the Local Plan.

'Section 4 Environmental Standards' sets out the Council's commitment to making Manchester "the Greenest City in Britain". An Environmental Standards Statement is required to accompany all planning applications, demonstrating the required environmental standards are met:

- Energy Strategy
- Renewable Energy
- Environmental design
- Water management and weather resilience
- Waste management
- Construction management
- Biodiversity

- Waterways.

These will be addressed in responses to the Core Strategy and Places for Everyone policies.

3.4.2 Core Strategy Development Plan Document (Adopted 11th July 2012)

The Manchester Local Plan guides development within Manchester. The Core Strategy is the key document in Manchester's Local Plan, covering a period of 15 years from 2012 to 2027. It sets out the long-term strategic policies for Manchester's future development, forming the framework for planning applications.

The key policies relevant to the Environmental Standards and Energy and Carbon Statement are as below. The 'Addendum to Manchester Core Strategy' (2024) describes where elements of these policies have been superseded by the Places for Everyone (PfE) 2024 plan.

- CC 5 Transport
- T 1 Sustainable Transport
- EN 4 Reducing CO2 Emissions by Enabling Low and Zero Carbon Development
- EN 5 Strategic Areas for low and zero carbon decentralised energy infrastructure
- EN 6 Target Framework for CO2 reductions from low or zero carbon energy supplies
- EN 8 Adaptation to Climate Change
- EN 9 Green Infrastructure
- EN 14 Flood Risk
- EN 16 Air Quality
- EN 17 Water Quality
- EN 19 Waste
- DM 1 Development Management.

3.4.3 Places for everyone (2024)

The Places for Everyone (PfE) Joint Development Plan (2024) sets out how the regions should be developed between 2022 and 2039 and provides a strategic framework for local plans. It also sets out policies relevant to planning applications, which are listed below.

- JP-Strat2: City Centre
- JP-S1: Sustainable Development
- JP-S2: Carbon and Energy
- JP-S3: Heat and Energy Networks
- JP-S4: Flood Risk and the Water Environment
- JP-S5: Air Quality
- JP-S6: Resource Efficiency
- JP-G1: Landscape Character
- JP-G6: Urban Green Space
- JP-G7: Trees and Woodland
- JP-G8: A Net Enhancement of Biodiversity and Geodiversity
- JP-P1: Sustainable Places
- JP-C1: An Integrated Network
- JP-C8: Transport Requirements of New Development.

3.4.4 Policy response strategy

Due to the crossover between the many sustainability related policies in both the Core Strategy and the Places for Everyone documents, the response to the above policies will be grouped into topics as categorised below in Table 2 Policy Consolidation.

Discussions also took place between the design team, the university and Deloitte Town Planning and it was determined that not all policy requirements were suitable due to the nature of works being both a refurbishment and limited in scope.

With the above in mind this application does not seek to demonstrate compliance with policy associated with:

- Ecology and Biodiversity
- Transport and Connectivity

Table 2 Policy Consolidation

Carbon & Energy Strategy	
Core Strategy	EN4 Reducing CO2 Emissions by Enabling Low and Zero Carbon Development
	EN5 Strategic Areas for low and zero carbon decentralised energy infrastructure
	EN6 Target Framework for CO2 Reductions from Low or Zero Carbon Energy Supplies
Places for Everyone	JP-S2: Carbon and Energy
	JP-S3: Heat and Energy Networks
Water Management, Weather Resilience, & Flood Risk	
Core Strategy	EN14 Flood Risk
	EN17 Water Quality
Places for Everyone	JP-S4: Flood Risk and the Water Environment
Air Quality	
Core Strategy	EN16 Air Quality
Places for Everyone	JP-S5: Air Quality
Waste & Resource Efficiency	
Core Strategy	EN19 Waste
Places for Everyone	JP-S6: Resource Efficiency
Sustainable Development	
Core Strategy	DM1 Development Management
Places for Everyone	JP-Strat2: City Centre
	JP-S1: Sustainable Development
	JP-P1 Sustainable Places

4 Environmental Standards Review

4.1 Policy response

This section summarises how the proposed development has, as a minimum, responded to the environmental sustainability policies set out in the 'Manchester Core Strategy (2012)' and 'Places for Everyone 2024 Joint Development Plan' taking cognisance of the 'Addendum to the Manchester Core Strategy 2024'.

As environmental sustainability encompasses a wide range of issues and is addressed to some degree by all key disciplines, references have been made to accompanying planning submission documents for technical details.

4.2 Carbon and Energy

4.2.1 Policy Summary

- Core Strategy (as amended by 2024 Addendum): EN4, EN5, EN6 now partially replaced by PfE JP-S2/JP-S3 for carbon and energy.
- Places for Everyone (PfE, adopted Mar2024): JP-S2: Carbon and Energy; JP-S3: Heat and Energy Networks.
- MCC Climate Emergency: City ambition to be net zero by 2038 with science-based budgeting.
- This project took a bespoke sustainability tracker approach combining SKA with the Sustainable Construction Tracker (SCT) jointly developed by the University and design team and managed by Buro Happold. This was done because of the unique scale and scale of the building. Relevant targets from the bespoke tracker, agreed by the client, include:
 - E-02 Fossil fuel free: Fossil fuels precluded except for clearly defined exceptions per UKNZCBS (submission requirements apply when exceptions arise).
 - E-05 Energy Reduction and Efficiency (Regulated): Target EPC A.
 - E-10 Low Energy Equipment and Controls: Use ETL-listed (or equivalent performance) equipment and simple, optimized controls. Low-energy LED lighting, external lighting to be ILE dark-skies compliant.
 - E-11 On-Site Energy Generation: > 40 kWh/m² footprint per year target, PV upfront carbon < 750 kgCO₂e/kWp

4.2.2 Baseline Regulated Energy & Carbon

The ASW developments regulated energy demand has been predicted using CIBSE TM54 (advanced simulation), with regulated loads extracted from operational model for planning purposes. TM54 assess both regulated and unregulated energy to provide a realistic operational range. For planning compliance, we report regulated demand and CO₂.

Table 3 Regulated energy

Item	Value
Building area (GIA)	2,600 m ²
Predicted regulated EUI	63.73 kWh/m ² ·yr (TM54 output)
Baseline regulated energy (kWh/yr)	165,698 kWh/yr
CO ₂ methodology	Calculated using Part L 2021 (SAP10.2) electricity emission factors, as required post June 2022. SAP10.2 electricity emission factor of 0.233 kg CO ₂ per kWh

Baseline regulated CO ₂	38,608 kgCO ₂ /yr
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Note: unregulated energy remains large for this typology and is addressed in the TM54 narrative but is excluded from the “regulated CO₂” figures to meet the Statement requirement. Regulated loads included in table above: Heating - heat pumps, DHW - Direct electric, Cooling - heat pumps, Fans - central, Fans - terminal, Pumps - HVAC and Lighting - interior.

4.2.3 Carbon-reduction target & compliance (EN6 / JP-S2)

Following the Core Strategy EN6 (as modified) and PfE JP-S2, the scheme demonstrates reductions from low/zero-carbon energy supplies against the regulated baseline. We apply the energy hierarchy and quantify the regulated CO₂ savings of measures. EN6’s tabulated targets are superseded; therefore, compliance is framed under JP-S2 with local net-zero context (2038).

1. Demand reduction (fabric and passive):

The refurbishment retains key envelope elements; therefore, fabric changes are limited. Nevertheless, the design improves U-values, airtightness, and solar control where feasible and implements passive measures (e.g. glare/solar-gain management, daylighting).

2. System efficiency & controls:

The proposal adopts an all-electric strategy, ASHPs, LED lighting, ETL-listed equipment, and zoning/BMS optimization to minimize regulated loads.

3. On-site renewables:

Roof-mounted PV of approximately 500 m², have an annual generation of approximately 98,638 kWh/yr (design estimate), contributing to a reduction in regulated demand where coincident and exporting surplus to grid.

Table 4 On-site renewable calculations

Item	Value	Calculation
CO ₂ saving vs baseline	22,983 kgCO ₂ /yr	= 98,638 × 0.233 kgCO ₂ /kWh
Full annual PV credit	15,625 kgCO ₂ /yr	= 38,608 – 22,983
80% on-site use credit (conservative)	20,222 kgCO ₂ /yr	= 38,608 – (22,983 × 0.8)

Post-measures regulated CO₂ (PV credited): 15,625 kgCO₂/yr (or 20,222 kgCO₂/yr at 80% on-site use).

The scheme demonstrates reductions from low/zero-carbon energy supplies against the regulated baseline in line with PfE JP-S2 (which supersedes relevant parts of EN4/EN6) and supports Manchester’s 2038 net-zero trajectory.

4.2.4 Energy Hierarchy (JP-S2)

- Be Lean: Fabric first and passive design to reduce loads.
- Be Clean: Efficient all-electric systems and smart controls, consider connection to heat networks where viable.
- Be green: On-site renewables (PV) and readiness for future low-carbon integration.

This hierarchy and its reporting approach reflect JP-S2 and GMCA guidance.

4.2.5 Renewable / decentralized energy & least-cost option

A Low & Zero Carbon (LZC) feasibility review considered PV, heat pumps, CHP, and heat-network connection.

- Heat network connection: The Civic Quarter Heat Network currently operates via gas CHP/boilers. Given the project's fossil-fuel-free SCT requirement, the connection is not aligned with project standards and is not economically/practically viable at this time. This position aligns with EN5 (decentralised energy areas) and PfE JP-S3 (supporting heat/energy networks where feasible and compatible with low-carbon objectives).
- PV emerges as the least-cost LZC measure for regulated CO₂ reduction on this site, meeting JP-S2 expectations for on-site renewables and contributing toward SCT E-11.

4.2.6 Building Regulations & Part L

The development will comply with Approved Document L 2021 (2023 amendments) for buildings other than dwellings, including the primary energy metric and updated SAP10.2 factors. An EPC A rating is targeted for the refurbished building.

4.2.7 Operational Energy (TM54)

A TM54 assessment has been undertaken to predict operational energy (regulated + unregulated) and to quantify performance ranges based on realistic occupancy and equipment densities typical of higher-education functions. The current model indicates:

- EUI range: 182 - 228 kWh/m²·yr
- High equipment loads (IT suites/small power) drive unregulated consumption. Controls and space management will address this.
- On-site PV will offset a portion of electrical demand, the net impact will be reported at detailed design. TM54 is recognised by CIBSE and referenced in Part L updates as an accepted forecasting method for non-domestic buildings such as ASW.

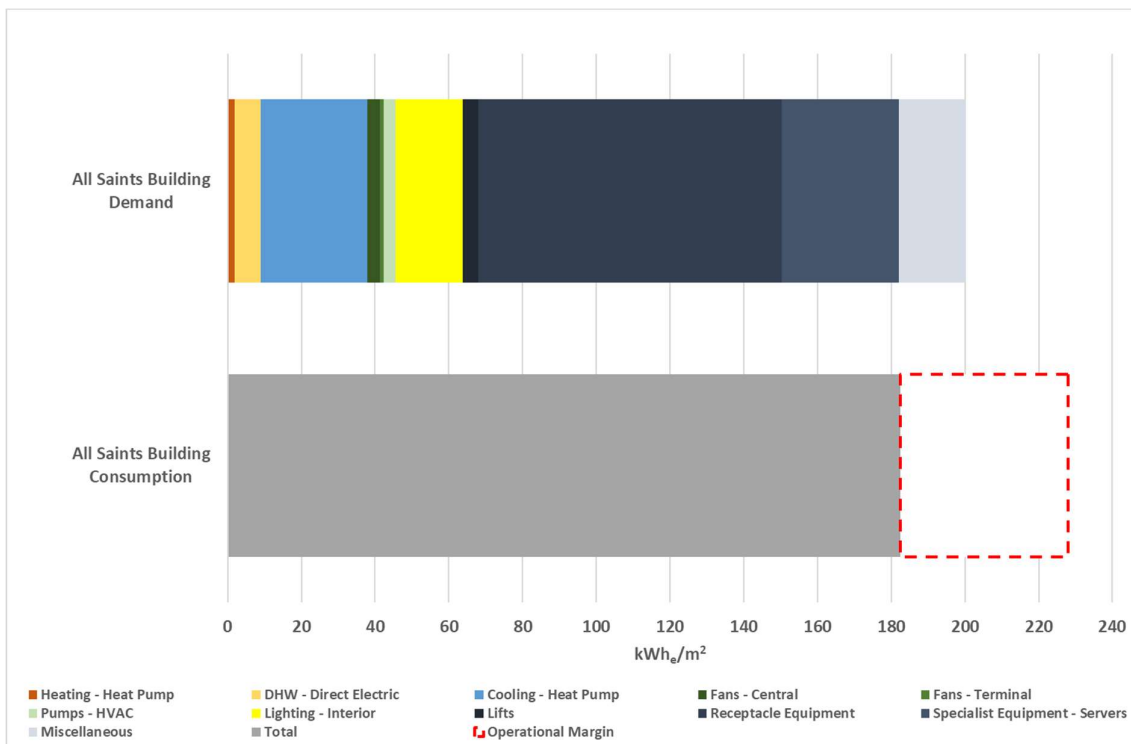


Figure 2 Energy use breakdown and net consumption with operational margin

4.2.8 BREEAM / SKA / SCT alignment

The project is progressing a bespoke sustainability tracker route combining SKA with SCT (Sustainable Construction Tracker). Relevant SCT topics: E-02 (fossil fuel free), E-05 (regulated energy reduction / EPC A), E-10 (ETL equipment & controls), E-11 (on-site generation of 38 kWh/m² footprint yr, slightly falling short of >40 kWh/m² footprint yr)

4.2.9 Summary regulated energy & CO₂

Table 5 Energy summary

Item	Value	Notes
Baseline regulated energy (kWh/yr)	165,698 kWh/yr	TM54 regulated extraction
Baseline regulated CO ₂ (kgCO ₂ /yr)	38,608 kgCO ₂ /yr	Part L 2021 SAP10.2 factor
PV saving (kgCO ₂ /yr)	22,983 kgCO ₂ /yr	
Post-measures regulated CO ₂ (kgCO ₂ /yr)	15,625 kgCO ₂ /yr	Compliance vs JP-S2

4.2.10 Embodied and Whole Life Carbon of Materials

The New Library Project will consider the application of materials with recycled content and potential of specifying materials with recycled content during the procurement process. These materials to be considered will include aggregates, concrete, steel and aluminium products.

The project aims to use resources responsibly, minimise pollution, enhance structural longevity, and reduce waste during construction and operation. It will also incorporate 'design for disassembly' (DfD) principles into its end-of-life strategy, while striving for regenerative systems, wherever practical and feasible.

The embodied carbon strategy complements decentralised infrastructure goals by minimizing emissions from materials and enabling future integration of low-carbon technologies.

A whole life-cycle carbon assessment has been prepared by Hawkins\Brown and provides updated estimate of the carbon impact at Stage 3 of the Library Redesign project.

The report has provided the results of the whole life-cycle analysis (WLCA), based on Stage 3 design information. The study estimated the embodied and operational carbon emissions of the proposed development and offers reduction strategies. The primary aim is to inform the design team about the project's carbon at practical completion and over the building's reference study period of 60-year life cycle.

Through discussion with Hawkins /Brown the avenues of embodied carbon reduction being explored in the report are as follows.

- Retention of existing concrete structural frame
- Retention of existing façade to southern elevation with replacement of glazing to higher-performance system
- Re-use of existing pile foundations for new extension element
- High thermal performance to new external walls
- New high efficiency MEP systems including ASHPs and PV panels for on-site energy generation

Results

The development will set targets for carbon through the application of the SCT. The following Topics from the SCT are applicable for this issue:

ID	Topic	Target
E-03	Refrigerants	GWP limit for refrigerant systems = 677 kgCO₂e/kg (equivalent to R32). This applies to all fixed air conditioning, fixed heat pumps and other fixed refrigeration systems (e.g., for cold storage) with the following exclusion: • Refrigeration equipment that is used in an industrial process. In addition, where in scope systems within the building collectively contain refrigerant equivalent to 3,000 kgCO₂e or more, the carbon impact of refrigerant leakage must be assessed and reported in accordance with the guidance within UKNZCBS. Note: Above is taken from Pilot version, Sept 2024. Projects should refer to the latest version available at point of design if above is superseded.

E-04	Embodied Carbon Refurbishment	Embodied carbon calculations must be undertaken through the design and construction stages and shall be completed in accordance with the requirements of UKNZCBS. Building to be designed and constructed to meet UKNZCBS 'upfront carbon limits' for development type (i.e. new or refurb), building typology and corresponding year e.g. Refurb, Higher Ed. is as follows: - 2026 = 455 kgCO₂e/m² GIA - 2027 = 425 kgCO₂e/m² GIA - 2028 = 405 kgCO₂e/m² GIA - 2029 = 385 kgCO₂e/m² GIA - 2030 = 335 kgCO₂e/m² GIA Note: Above is taken from Pilot version, Sept 2024. Projects should refer to the latest version available at point of design if above is superseded.
X-02	Recycled Materials	Consider circular economy of materials. As a minimum, design team must identify recycled content of key materials. 55% GGBS or 35% PFA in concrete to be achieved. Contractor to use recycled aggregate where possible.

Actual Results

Results Summary	Overall Carbon (tCO ₂ e)	Carbon per m ² GIA (kgCO ₂ e/ m ²)
Upfront carbon (A1-A5)	1,026	377
Life-cycle embodied carbon (A-C exc B6&B7) no decarb	1,927	709
Life-cycle embodied carbon (A-C exc B6&B7) decarb FES 2021	1,492	549
Whole life-cycle embodied carbon (A-C) no decarb	6,056	2,228
Whole life-cycle embodied carbon (A-C) decarb FES 2021	2,714	998

Please refer to the 'Whole Life Cycle Assessment' produced by Hawkins Brown which describes the methodology, results, recommendations and next steps in more detail.

4.2.12 EV Charging

No new parking is proposed as part of the development; see the Transport and Connectivity section for details.

4.2.13 Nature based solutions to reducing Carbon

Nature based solutions are outside the scope of works for this project.

4.3 Water Management, Weather Resilience and Flood Risk

Policy Summary

Core Strategy: EN14 Flood Risk
Core Strategy: EN17 Water Quality
Places for Everyone: JP-S4: Flood Risk and the Water Environment

Flood Risk Assessment

A Flood Risk Assessment has been prepared by Buro Happold. The site lies within Flood Zone 1, meaning that the risk of flooding is considered to be low, with less than a 1 in 1000-year annual probability of flooding from fluvial or tidal sources.

Please refer to Buro Happold's Stage 3 Civil Engineering Report submitted with this planning application for further details.

Surface Water Strategy

The proposed drainage strategy includes:

- Adherence to the drainage hierarchy
- SuDS techniques currently under review. An initial screening exercise with regard to the suitability of each technique for use on the proposed development is underway. The ultimate selection of which SuDS techniques are implemented within the scheme will need to be determined via a multi-disciplinary approach together with client input.
- Design external pedestrian areas to shed water away from the building during exceedance events and direct overland flood flows through the site towards off-site areas following the natural topography

This strategy ensures sustainable surface water management and protecting water quality in alignment with Policies EN14, JP-S4 and EN17. Please refer to the Drainage Strategy Report for further details.

Construction Impact on Watercourses

The nearest watercourse, the River Medlock lies approximately 250m from the site. Due to urban constraints no direct discharge to the river is proposed. The drainage hierarchy was followed and discharge to the combined sewers was agreed as the most feasible option. This approach avoids adverse impacts on nearby watercourses.

Remediate Contaminated Land

Preliminary ground investigations undertaken identified Made Ground and Glacial Till, with groundwater strike between 1.2m and 2.9m below ground level. Although not directly contaminated, the site's drainage design includes pollution control measures such as proprietary treatment devices to mitigate risks from urban runoff. The ground investigation and results are discussed in the Ground Conditions Planning Documentation undertaken by Buro Happold. Please see section 4.6 of this report for a summary.

Water Consumption

The development will assess water consumption through the application of the SCT. The following Topics from the SCT are applicable for this issue:

ID	Topic	Target
W-03	Low Flow	Taps - Flow rate on taps used for hand washing is limited to 4 litres/minute up to a pressure of 5 bar +/- 0.2 bar WC - Have an effective flush volume of 4.5 litres or less Showers - Flow rate to showers is limited to 8 litres/minute up to a pressure of 5 bar (+/- 0.2 bar)
W-04	Water Monitoring	Mains water meter to the building to be fitted with AMR and registered with Demeter for remote monitoring and alert services.

References

- Buro Happold – Stage 3 Civil Engineering
- Buro Happold – Sustainable Construction Tracker

4.4 Air Quality

Policy Summary

Core Strategy: EN16 Air Quality
Places for Everyone: JP-S5: Air Quality

Construction Management Plan

The effect of pollution arising from traffic generated by the construction of the Proposed Development on surrounding human receptors will be negligible. Construction traffic is expected to be short term and temporary and not considered to have any significant impact on air quality.

Air Quality

The development will support Greater Manchester's Clean Air Plan through the following measures:

- The building will be powered by an all-electric strategy with no direct emissions on site
- Vehicles will be restricted from accessing the site, other than for deliveries, emergencies and for those with disabilities. This minimises the emissions generated on site as far as reasonable

The development will also address air quality through the application of the SCT. The following Topics from the SCT are applicable for this issue:

ID	Topic	Target
A-01	Ventilation Effectiveness	Design for adequate ventilation rates. Where the ventilation rate is determined by the number of occupants, refer to MMU Mechanical Design Standards (or BREEAM) for litres / s per person. Ventilate according to the CIBSE guide B, CIBSE AM10 and part F of the building regulations, any natural ventilation cooling requirements and all ventilation guidance relevant to the building type. Provide access to adequate natural ventilation and mixed mode ventilation where possible.
A-02	Mitigate Construction Pollution	If permanently installed ventilation system are operating during construction, filters must meet the following: - Media filters with a PM10 removal rating of at least 70% (e.g., MERV 8) are used to filter return air. - All filters are replaced prior to occupancy. The project implements the following moisture and dust management procedures: - Carpets, acoustical ceiling panels, fabric wall coverings, insulation, upholstery and furnishings and other absorptive materials are stored separately in a designated area protected from moisture damage. - All active areas of work are isolated from other spaces by sealed

		doorways or windows or through the use of temporary barriers. - Walk-off mats are used at entryways to reduce the transfer of dirt and pollutants. - Saws and similar tools use dust guards or collectors to capture generated dust.
A-03	Air Filtration and Purification	HVAC systems must incorporate suitable filtration to minimise external air pollution.

Sustainable Travel Modes

Not applicable for this project

References

- Buro Happold – Sustainable Construction Tracker

4.5 Waste and resource efficiency

Policy Summary

Core Strategy: EN19 Waste
Places for Everyone: JP-S6: Resource Efficiency

Operational Waste Strategy

The waste management strategies aim to ensure that the proposed development will be able to operate efficiently and sustainably. Good waste management will be essential to ensure safe operational practice throughout the proposed development. In addition, construction waste management strategies aim to ensure that waste from this stage is minimised, reused where possible, and handled in an environmentally sustainable manner to minimise the impact of the revised proposals.

The development will implement an operational waste strategy through the application of the SCT. The following Topics from the SCT are applicable for this issue:

ID	Topic	Target
Z-03	Operational Waste	An operational waste plan in line with campus Operational Controls, and the Waste and Recycling design guide. Specific waste containment relevant to the space utilised must be provided, including hazardous waste.
Z-04	Diversion of Waste from Landfill	Divert at least 85% of construction & demolition waste (by weight) from landfill as per the target in the MMU Waste and Recycling Design Guide.

Material Efficiency

The waste hierarchy has been followed in the design proposals to include:

- **Prevention** – durable strategies, regular design reviews, off-site pre-fabricated elements, designing for disassembly
- **Reuse** – reuse of materials to reduce the need for new materials, and minimising the demolition waste through reusing excavation waste
- **Recycling** – segregation of waste generated on site
- **Recovery** – non-recyclable materials to be sent to incineration plant with energy recovery dedicated to district heating
- **Disposal** – remaining materials sent to landfill only when all other options are exhausted.

The development will implement material efficiency measures through the application of the SCT. The following Topics from the SCT are applicable for this issue:

ID	Topic	Target
Z-01	Offsite Construction	Explore feasibility of offsite construction methods. Where offsite construction can be used and will reduce (or increase the recycling rate of) waste, the team should assess the impact on the design and incorporate the appropriate measures needed to implement it.
Z-02	Designing Out Waste	Produce a short matrix / report at the end of each stage detailing design considerations made to reduce waste
X-01	Reused / Reclaimed materials	Consider circular economy of materials. As a minimum, design team must identify recycled content of key materials. 55% GGBS or 35% PFA in concrete to be achieved. Contractor to use recycled aggregate where possible.
X-02	Recycled Materials	Monitor and report on the total value of the building's materials sourced from local suppliers and SME's. Report the percentage of the total value of the products sourced within Greater Manchester

References

- Buro Happold – Sustainable Construction Tracker

4.6 Sustainable development

Policy Summary

Core Strategy: DM1 Development Management
Places for Everyone: JP-Strat2: City Centre
Places for Everyone: JP-S1: Sustainable Development
Places for Everyone: JP-P1 Sustainable Places

Site Selection

These considerations are not applicable to the proposed development as the project involves the refurbishment of an existing building rather than new construction.

Passive Design

These considerations are not applicable to the proposed development as the project involves the refurbishment of an existing building rather than new construction.

Daylight, Sunlight, Overshadowing & Solar Glare

These considerations are not applicable to the proposed development as the project involves the refurbishment of an existing building rather than new construction. The building's orientation, massing, and external envelope remain unchanged, meaning there are no opportunities to alter the layout or positioning to improve daylight or sunlight access. Consequently:

- Daylight and Sunlight: Internal daylight levels will remain broadly consistent with the existing conditions, as the structural form and window openings are retained.
- Overshadowing: The refurbishment does not introduce additional height or bulk that could cause new overshadowing impacts on surrounding properties.
- Solar Glare: The external façade treatment and glazing strategy are unchanged, so there is no potential for increased solar glare.

Given these factors, a detailed assessment of daylight, sunlight, overshadowing, or solar glare is not required for this application.

Remediation

Manchester Metropolitan University has appointed Buro Happold to provide technical planning support for a new nine-storey All Saints Library on its central Manchester campus. The project involves partial demolition under a separate application (application ref. 143943/FO/2025), with additional applications planned for Spring 2026. Previous approved plans (Feb 2024) were not implemented, but existing reports from that application will be reused with council approval.

The Geoenvironmental Desk Study (1044B-BHE-XX-XX-RP-CG-000001, revision P04) is proposed to be submitted as part of the planning application for this project for the following reasons:

- The desk study was completed in October 2023. The document is considered to be valid and suitable for use within the timeframes of acceptability for submission in this planning application for Manchester City Council.
- There have been no major changes to the site or the immediate vicinity since the desk study was completed.:
 - The site history (Section 5.1) covers the extent area of the future development and remains the same.
 - The ground conditions (Section 4) have remained the same.
 - The preliminary conceptual model (Section 6) beneath the site remains the same.
 - The potential sources of contaminants (Section 6.3), receptors and pathways (Section 6.4) and risk assessment (Section 6.5) remain the same

Following the recommendations set out in the desk study (1044B-BHE-XX-XX-RP-CG-000001, revision P04. submitted as part of planning application 138424/FO/2023 approved on 16 February 2024), ground investigation was conducted in three phases to identify the site-specific ground conditions as well as contamination testing. As a result based on the contamination assessment, the report recommends no formal Remediation Strategy is required. Please refer to the Ground Conditions Planning Documentation submitted with this application.

Adaptable, Durable & Resilient

The project is designed to be resilient to material damage and a changing climate through material selection and protection against hotter and cooler climates.

Transport Accessibility & Vehicular Access

Not suitable for this application

Safety

The development will implement safety measures through the application of the SCT. The following Topics from the SCT are applicable for this issue:

ID	Topic	Target
C-05	Considerate Constructors	Achieve Considerate Constructors score of 40

Healthy Design

The development will implement healthy design measures through the application of the SCT. The following Topics from the SCT are applicable for this issue:

ID	Topic	Target
M-01	Nature Based Design (Biophilia)	Provide a biophilia plan to demonstrate how biophilic elements will be incorporated into occupied spaces. In line with WELL v2 M02
N-01	Drinking Water	Mains-fed drinking fountains or water bottle refilling stations should be provided throughout the building and in convenient locations.
V-01	Interior Fitness Circulation	Use design features to encourage movement through the building and promote stairs as the default vertical transportation mode. At least 2 of the following should be provided for all staircases and hallways: artwork; light levels of at least 215lux when in use; views out or daylight

		via windows or skylights; natural design elements (e.g. plants or images of nature; and gamification. Implement point-of-decision signage that encourages stair use at each of the following locations: lifts; base of stairs/stairwells and re-entry points at each floor; and junctions in corridors that lead to either a stairwell open to regular building occupants or lifts.
V-02		Entryway dirt/water gathering mechanism (such as mats) projecting 3m in the direction of travel. Doors designed to limit ingress of external air.
L-03	Enhanced Lighting Colour Rendering Quality	All spaces: All luminaires (except decorative fixtures, emergency lights and other special-purpose lighting) meet at least one of the following colour rendering requirements. If tuneable white lighting is used, the requirements are met at 1,000K intervals from the lower end (with a minimum of 2,700K) to the higher end (with a maximum of 4,000k): a. CRI ≥ 90. b. CRI ≥ 80 with R9 ≥ 50. c. IES Rf ≥ 78, IES Rg ≥ 100, $-1\% \leq \text{IES Rcs}, h1 \leq 15\%$.
L-04	Surface Design	The following light reflectance values are met: - Ceilings: 0.8 - Walls: 0.7 - Furniture: 0.5
S-01	Acoustic Design	Meet Ska issue D29 "Acoustic Design" as mandatory - An acoustician who is a corporate member (or higher) of the Institute of Acoustics or whose company holds membership of the Association of Noise Consultants is part of the design team and the criteria from the current BB93, or FIS Guide to Office Acoustics 2015, are used as design targets.
T-01	Thermal Comfort	The thermal comfort should be modelled and reported on using the CIBSE TM52 methodology. Where appropriate, the building systems should be zoned to allow different user groups to have control over their internal environment. Overheating and daylighting studies should be carried out in tandem to ensure an optimum balance between the size of glazing, natural light, natural ventilation and active cooling needs.

Operational Waste

Please refer to the 'Waste & Resource Efficiency' section of this report.

Biodiversity & Green Infrastructure

Not suitable for this application

Flood Risk & Drainage

Please refer to the 'Water & Flood Risk' section of this report.

BREEAM

The project will not target a BREEAM score. The most appropriate certification route for this project was deemed to be SKA.

SKA

The SKA Rating is a UK-based environmental assessment method developed by the Royal Institution of Chartered Surveyors (RICS), specifically for non-domestic fit-out projects. It evaluates sustainability performance across areas such as energy use, water efficiency, CO₂ emissions, materials, waste, and occupant wellbeing. Projects are awarded bronze, silver, or gold certification based on the percentage of applicable good practice measures achieved

Rider Levett Bucknall (RLB) has been appointed by Manchester Metropolitan University to act as the SKA Assessor for the project. RLB will lead the formal SKA assessment process, including scope definition, design and construction stage evaluations, and final certification.

For the MMU All Saints West project, the University is targeting a SKA Gold Rating under the Higher Education scheme. An initial scoping exercise has been completed based on outline design information to identify relevant Good Practice. In addition, the alignment of SKA criteria and SCT criteria is now completed.

Please refer to Buro Happold – Sustainable Construction Tracker

References

- Buro Happold – Stage 3 Civil Engineering
- Buro Happold – Sustainable Construction Tracker
- Buro Happold – Ground Conditions Planning Documentation - 1350B-BHE-XX-XX-RP-G-200001
- Ryder Levett Bucknall (RLB) – SKA Assessment

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