Weston Halls and Pendulum Hotel, Manchester

Environmental Statement Volume 3: Environmental Management Plan (EMP)

January 2026

Turley

This document provides a summary of all the mitigation committed to within **Volume 1: Technical Chapters 6 – 14**, to manage the environmental effects during the construction and operational stages of the Proposed Development and to establish a suitable mechanism to link to planning conditions, thereby delivering and securing mitigation. This will give Manchester City Council (MCC) confidence in the residual effects identified in this ES.

This Environmental Management Plan (EMP) has been produced as a separate Volume in the ES. However, this document should be read in conjunction with **Volume 1: Primary Report and Supporting Figures**, **Volume 2: Technical Appendices to the Primary Report** and **Volume 4: Non-Technical Summary**.

As set out within **Volume 1, Chapter 2: Approach to EIA**, the EIA has considered primary, secondary and tertiary mitigation in line with ISEP, Implementing the Mitigation Hierarchy from Concept to Construction – August 2024[1].

Each of the **Technical Chapters 6 – 14** of **Volume 1** have considered primary and tertiary mitigation prior to undertaking the assessment of likely significant effects. Following the conclusion of effects based on the Proposed Development, any further mitigation measures or monitoring arrangements (i.e. secondary mitigation or enhancement) have been detailed.

The mitigation relied upon to 'scope out' environmental topics as part of the EIA Scoping Report (**Appendix 2.1** of **Volume 2**) is also included within the EMP (**Table 1**) (albeit this mitigation has been developed further, where appropriate).

The three types of mitigation considered are defined as:

- **Primary** – modifications to the location or design of the Proposed Development made during the pre-application stage that are an inherent part of the project;
- **Secondary** – actions that will require further activity in order to achieve the anticipated outcome; and
- **Tertiary** – actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislation requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects.

All primary, secondary and tertiary mitigation referenced throughout the Environmental Statement (ES) has been collated and are summarised in the EMP (**Table 1**).

It should be noted that, given the definition of primary mitigation and the fact that the measures are inherent to the Proposed Development, all primary mitigation is to be secured through the Detailed Plans submitted for approval referred to in **Volume 1, Chapter 4: Development Specification** and any associated design strategies / principles referenced in **Volume 1, Chapter 4: Development Specification** that are submitted in support of the ES or the Application.

With respect to tertiary and secondary mitigation, it is assumed these measures will be secured through appropriately worded planning condition(s) and / or a Section 106 Agreement as determined by MCC, as the determining authority.

Mitigation measure	Description / details of measure
Primary Mitigation	
Massing arrangement	The buildings proposed have been located to reinforce the street frontages along Charles and Sackville Street and positioned to the north and east of the Site, creating a generous south-facing landscape space. The height and massing of the proposed built form have been designed to respond to the surrounding context.
Materiality	The proposed buildings will be constructed of the following materials, keeping a contrast between the taller and the lower elements: • The taller elements will be clad with a strong expressed sculptural grid. The grid will sit over a unitized curtain wall system to create a reflective glass façade created using three panel types. A window element, rapid vent consisting of an opening door element and decorative cover veil and an insulated spandrel panel with a decorative glass outer pain; and • The lower elements will also show a scalloped grid but formed from pre-cast concrete panels in a similar rhythm to the grid of the taller buildings. Relief will be created by setting the metal window/rapid vent units into the reveal of the concrete panels. The proposed buildings will be of the highest quality in architectural form, details and materials. The external elevation materials have been selected to reflect the local context, with a colour palette that complements Manchester's historic stock brick. Warm tones resonate with the materials and colours that are characteristic of the nearby Whitworth Street Conservation Area. Upper floors are clad in blast-precast concrete, lower floors use polished concrete for ease of maintenance, and decorative metal panels incorporate patterns inspired by historic cotton weaving designs. A scalloped decorative parapet encloses the rooftop plant on the towers, maintaining visual amenity and adding architectural interest to the skyline.
Parking	There will be no provision for car parking on-Site.
Landscape Strategy	The proposed landscaping will be organised into two distinct spaces, defined by the change in level at the Site and separated by a retaining wall. The northern section will be private in character, offering a network of both active and quiet areas. The area will be framed by planting and light-dappled trees offering both structure and a sense of enclosure. A canopy frame structure, along with

Mitigation measure	Description / details of measure
	other elements such as movable planters and furniture, will allow for different layouts of this space to meet the users' needs for additional seating, with further seating scattered across the courtyard. A tree house element has also been provided to the south, positioned slightly elevated above the lawn space, overlooking the woodland edge. A lower woodland edge is proposed approximately 3m beneath the main garden and will be accessible via both stepped and levelled pathways. The area will include wildflower planting and small woodland trees and will accommodate an informal looping route around the Site, creating opportunities for temporary uses and flexible activities. Overall, the landscape design offers a combination of native and climate resilient trees within the courtyard, with rain gardens and windflower planting also used to improve biodiversity value across the Site. In addition to the above spaces, accessible podium and green roof terraces spaces will also be created, particularly at the building links, providing additional amenity and recreational space for students within the buildings. Green roofs are also provided and split into two types: bio-solar, which integrate photovoltaic panels with vegetation, and wildflower roofs that support biodiversity and ecological value. The streetscape will also be enhanced at various points (particularly around the entrance to the Proposed Development) through tree and vegetation planting along Charles Street with seating opportunities for users provided.
Energy Strategy	The buildings will be designed and built to go beyond the requirements of Part L 2021. The buildings will be constructed in accordance with the 'energy hierarchy' (or 'fabric first' approach), delivering a high standard of fabric insulation and airtightness and utilising a range of renewable and low carbon energy technologies such as roof mounted solar PV and Air Source Heat Pumps. The Proposed Development will be all-electric, with no gas boilers, meaning that the carbon intensity of the buildings will reduce over time, ultimately reaching net zero in line with the decarbonisation of the grid.
Façade Specification and Ventilation	The Proposed Development will include an appropriate façade specification and ventilation strategy, to ensure internal air quality conditions are achieved. A suitable façade design specification has been formulated to ensure proposed receptors will be adequately protected, following the guideline noise levels within BS 8233[2], and agreed with MCC. This will include an appropriate glazing and ventilation specification, as required, and take account of the source with most influence on the façade of interest.
Operational Plant	Plant will be suitably designed to ensure existing and proposed receptors are suitably protected, following the guidance of BS 4142[3], and agreed with MCC.

Mitigation measure	Description / details of measure
Building Safety	The required emergency producers/practices (i.e. Fire Emergency Evacuation Plan (FEEP)) or apparatus/instruments (i.e. smoke detectors/sprinklers) required by law for the uses as part of the Proposed Development will be in place. In addition, the buildings will be designed, in line with Building Regulations Approved Document B: Fire Safety, with appropriate fire preventative measures (i.e. fire doors, extinguishers etc.) and all external façades and materials will meet the necessary fire resistance standards set out within Building Regulations and by law. The design of the Proposed Development will be informed by 'Secure by Design' principles and appropriate design. Site management measures (including appropriate lighting and digital entry systems at each building) will be implemented to ensure that the potential for crime and anti-social behaviour is minimised, and the Proposed Development will have on-site security staff present 24 hours a day.
Operational Lighting Strategy	All future lighting installations will be designed and installed in line with relevant standards and guidance, including CIE 150: 2017 – Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations, 2nd Edition; ILP GN01 - Guidance Notes for the Reduction of Obtrusive Light 2021[4]; BS EN 12464 – 2 2014 – Outdoor Work Spaces[5]; SLL Guide to Limiting Obtrusive Light 2012[6]; SLL Lighting Handbook 2009[7]; LG 6 (CIBSE) – The Exterior Environment 2016[8]; and ILP Guidance Note 08/18 Bats and Artificial Lighting in the UK[9]. Measures to mitigate effects from obtrusive light, as set out in the identified guidance, include the selection of the correct type of luminaire, the use of shields, hoods (as required), as well as the design and positioning of lights (e.g. power, orientation, and height of the luminaire.
Operational Waste Strategy	The Proposed Development will be designed in order to take account of appropriate provision for waste storage and handling facilities/areas, inclusive of areas for segregation of waste and recycling. It is assumed that waste collections will occur on a weekly collection by a private contractor. In addition, it is assumed that all waste storage/handling facilities will be designed in accordance with British Standard (BS) 5906:2005 Waste Management in Building – Code of Practice[10]. The Waste Management Strategy will set out the principles, strategy and targets for the management and storage of waste and maximise recycling, in accordance with MCC established policy.

Mitigation measure	Description / details of measure
Potable Water Strategy	Water saving measures will be built into the design of the Proposed Development, such as water saving fixtures and fittings. To reduce water consumption, the Proposed Development will target as a minimum the equivalent of two Wat01 Water Efficiency BREEAM Credits. A standard water connection will be undertaken following the New Roads & Street Works Act 1991.
Drainage Strategy	The proposed surface water drainage will not increase the runoff rate compared to the existing Site, will be designed in accordance with the National standards for sustainable drainage systemsa, and will include a 45% climate change allowance in accordance with the latest allowances defined by DEFRAb. Sustainable Drainage Systems (SuDS) will be incorporated into the surface water drainage network, in accordance with CIRIA 753 – The SuDS Manual where practical. Specifically, the following measures are proposed: • Blue roofs; • Green roofs; • Permeable paving; • Raingardens; and • Below Ground Geocellular Crates. Priority has been given for green infrastructure, with below ground tanks providing supplementary water quantity reduction. The proposed storage features will provide attenuation for rainfall events up to the design storm event and have been designed to ensuring treatment of runoff drained through the SuDS in line with CIRIA 753 Simple Index Approach. The drainage strategy for the Proposed Development will be designed so that any additional demand for foul water drainage associated with a new resident population at the Site will be adequately accommodated, and this will be undertaken in consultation with United Utilities.

[a] National standards for sustainable drainage systems (SuDS). https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds.
[b] For which the Irwell Management Catchment is a 45% allowance on the rainfall intensities.

Mitigation measure	Description / details of measure
Tertiary Mitigation	
Construction Environmental Management Plan (CEMP)	A CEMP will be prepared by the appointed contractor in advance of commencing construction works. The document will provide detailed measures / controls to avoid and manage potential adverse effects upon the environment during the construction stage. Measures will include: <u>General Measures</u> • The proposed construction works will be carried out by a competent contractor that will comply with current legislation[11]; • The site security arrangements for the Proposed Development during the construction stage will be in line with the requirements set out in the Construction (Design and Management) Regulations 2015[12] and appropriate levels of security (personnel / CCTV) will be provided; • Temporary fencing / hoarding will be erected around the perimeter of the Site at the outset of construction; • All construction activities will be in accordance with the Considerate Constructors Scheme (ensuring measures will be put in place so as to far as possible minimise health and environmental disturbances (e.g. noise and air quality impacts) and any other loss of amenity for local residents and businesses); and • Construction working hours[13] (noisy work) will be 07:30 to 18:00 Monday to Friday; 08:30 to 13:00 on Saturday; and no noisy work on Sundays and Bank Holidays. Operations outside of these hours will be agreed with MCC. <u>Traffic and Access</u> • The Construction Travel Plan, which will form part of the CEMP, will provide mitigation covering construction vehicle routing to avoid sensitive routes, safety training for drivers and banksmen, environmental mitigation measures including noise mitigation and dust suppression, street cleaning, and communication and consultation with the council and neighbouring properties. <u>Air Quality</u> • The CEMP will be informed by the Institute of Air Quality Management (IAQM) guidance. Measures will include:

Mitigation measure	Description / details of measure
	– Demolition specifics such as soft stripping the inside of buildings before demolition, using effective water suppression during demolition and avoiding explosive blasting by using appropriate manual or mechanical alternatives; – Communication and management through the development/implementation of a communication plan that involves community engagement before work begins, displaying the name and contact details of the person accountable for air quality and the regional head office on the Site boundary, and recording all dust and air quality complaints in a logbook, identify causes, take appropriate measures to reduce emissions, and make the log available to the local authority upon request; – Monitoring, by developing and implementing a dust management plan (DMP) approved by the Local Authority, daily on-site and off-site inspections with increased frequency during dry or windy conditions and where possible, commencing baseline monitoring (e.g., dust deposition) at least three months before work commences; – Planning the site layout to locate machinery and dust-causing activities as far away from receptors as possible, erecting barriers and enclosures, and avoiding bonfires and the burning of waste materials; – Construction and maintenance using stockpiles, ensuring an adequate water supply for dust suppression is available, using non-potable water where possible, keeping site fencing, barriers, and scaffolding clean using wet methods, and cleaning up dry spillages as soon as reasonably practicable using wet cleaning methods; and – Vehicle and travel management using measures such as wheel washing, imposing appropriate speed limits, ensuring all vehicles entering or leaving the site with loose product are sheeted and are switched off engines when stationary, and only utilising the recommended traffic routes as per the CEMP. <u>Noise and Vibration</u>

Mitigation measure	Description / details of measure
	• The CEMP will be informed by British Standard 5228 Part 1[14] and 2[15]. A full construction noise and vibration assessment in accordance with BS 5228 will be undertaken as part of the process of preparing the CEMP once a contractor has been appointed and construction details are further developed. Measures that may be implemented, if required following the assessment, are set out below: • Notification and communication with the local community throughout the construction stage; • The CEMP may make provision for an enhanced period of noise and vibration monitoring at the beginning of demolition works for Phase A of the Weston Halls building and vibratory sheet piling to determine methods of work that do not risk causing building damage to the parts of Weston Halls retained during Phase A and to the Ibis Hotel during Phase B construction. Monitoring results would be scrutinised more closely during this period, with investigations carried out and further mitigation applied, if required, should vibration levels approach the maximum permissible limits. This could also be used to determine construction and demolition methodologies; • Vibration monitoring could be undertaken to further lower the risk of damage to structures and building condition surveys could be carried out before and after the where major vibration effects on structures are currently predicted; • The contractor should contact The University of Manchester buildings (to the south and east of the Site) before the CEMP is finalised to determine whether vibration sensitive equipment is present that would necessitate lower construction vibration limits and/or enhanced communications during vibration generating work; • Other suitable mitigation measures to reduce noise impacts could include: positioning noise-generating equipment or activities as far away from sensitive receptors as practicable, using localised acoustic barriers around the most significant noise generating activities, using SMART or broadband noise reversing alarms, etc; • Suitable mitigation measures to reduce vibration impacts could include: halting piling at that position until any unexpected obstruction to piling is encountered can be dealt with, rather than attempting prolonged works, replacing plant and/or methods of work causing significant levels of vibration at sensitive premises with other less intrusive plant and/or methods of working (where reasonably practicable), etc; • Any work outside the stated hours will be subject to prior agreement of, and/or reasonable notice to, MCC, as appropriate;

Mitigation measure	Description / details of measure
	• Method statements regarding construction management, traffic management, and overall site management will be prepared in accordance with best practice and relevant British Standards to help minimise impacts of construction works, the key aim of this being to minimise disruption to local residents during the construction stage; and • The contractor responsible for the construction works could make an application to MCC for consent to work under Section 61 of the Control of Pollution Act (1974). A Section 61 consent to work application would allow MCC to review the contractor's proposals in advance and would also require that BPM are employed to control and minimise noise and vibration effects. <u>Lighting</u> • Potential adverse effects arising from temporary construction lighting will be controlled through a series of best practice measures, in line with lighting industry standards and guidance including the CIE publication 'Technical Report Document 129' and BS EN 12464-2:2014; and • The following measures are proposed in order to control Light Spill, Glare and Sky Glow effects and thus manage light pollution: – Where practicable, construction lighting in the Site would be designed to comply with Environmental Zone E4 in accordance with the ILP Guidance Note GN01[16]; – Illuminance levels arising from temporary lighting to be designed in accordance with BS EN 12464-2: 2014 and CIE 129; – Placement of temporary lighting required to ensure safe working conditions and to maintain security, to have due regard of sensitive receptors (i.e. occupied residential premises); – Lighting to be directed so as avoid unnecessary Light Spill outside of construction areas and to ensure that the light distribution is toward the task area; – Lighting to be switched off when not required for safe working conditions and Site security;

Mitigation measure	Description / details of measure
	– Use of light shields/baffles to control upward light to within the maximum 15% set out in the ILP Guidance Note GN01, where possible; – Lighting to be kept at 0° tilt to avoid Sky Glow, where practicable; and – Light dimming and automatic switch off would be used (where appropriate). <u>Waste</u> • The remedial solution may require removal of hazardous substances (relating to demolition materials from the demolition of the existing buildings on-Site and construction materials (including packaging) which will require specialist removal. All such works will be undertaken by an appointed contractor and disposed of by the contractor in line with relevant regulations and legislation requirements; • Any waste considered to be hazardous, arising from demolition or remedial activities, will be handled, processed and removed from Site by suitability qualified contractors, all being undertaken in line with The Hazardous Waste (England and Wales) Regulations 2005; • The CEMP will be informed by the waste provisions of the Environmental Protection Act 1990[17] and the Environmental Protection (Duty of Care) Regulations 1991[18] and will set out the principles and legal requirements relating to waste, including any hazardous waste that is encountered and required to be exported off-site for disposal; and • Descriptions of how materials will be managed efficiently and disposed of legally during construction will be included, which also outline the aims, objectives and on-going management responsibilities, including management practices, to be implemented during the construction stage, and will set targets for the reduction, diversion from landfill and reuse of waste. <u>Ground, Earthworks and Contamination</u> • Review of contamination and re-use of soils for environmental and compliance risk. <u>Drainage</u> • The CEMP will include measures for the provision of appropriate drainage and pollution prevention systems; and

Mitigation measure	Description / details of measure
	• A temporary surface water management would need to be put in place by the contractor during construction and define how surface water will be collected, treated and discharged including pollution prevention devices. Examples of temporary surface water management techniques to control water quality include: – Filter drains or bunds to the perimeter of the site to capture surface water run-off from leaving the Site; – COSHH requirements including bunds around material storage areas and spill kits; and – Some standing water may be tolerated on the site over more intense storm durations. <u>Biodiversity</u> • If nesting birds are found to be present during demolition and construction, a general licence issued by Natural England will be sought; and • Should a bat roost be identified during the development works, an ecologist will be notified and development works paused for further surveys and a licence obtained (if surveys confirm this is required).
Construction Health and Safety Plan	Measures to include: • Climate change adaptation and measures to reduce risks to human health from overheating such as provision of shaded refuges and potable water supplies during construction; • Good working practices to control risks under the Health and Safety at Work Act; and • Site workers to be made aware of the possibility of encountering contamination through toolbox talks and good standards of personal hygiene, including welfare facilities on-site and the use of appropriate levels of personal protective equipment (PPE).
Remediation Strategy	In the event that contamination is identified, a programme of mitigation or remediation work will be carried out as part of the enabling works in line with a Remediation Strategy approved by the regulators and MCC.
Foundation design	All earthworks and foundation design will be in accordance with relevant industry guidance, including but not limited to CIRIA Report C572: Treated ground engineering properties and performance[19], British Research Establishment document FB75: Building on Fill - Geotechnical Aspects[20] and British Standard 6031:2009: Code of Practice for Earthworks.

Mitigation measure	Description / details of measure
UXO Risk Assessment	In the event that a risk assessment by UXO specialists is required and conducted (following a geotechnical desk study prior to construction which will determine if a UXO risk assessment by specialists is required), the necessary tertiary mitigation measures for areas at medium risk of UXO (such as a UXO specialist on-site and Site-specific Unexploded Ordnance awareness briefings to all personnel conducting intrusive works) will be present within the risk assessment.
Utilities Strategy	Utilities may require upgrading and re-routing to facilitate the increase in massing of the Proposed Development. Any diversion or reinforcement of utilities will happen as part of the enabling works and any off-Site works will be the responsibility of the utility provider.
Flood Risk Activity Permit (FRAP)	A flood risk activity permit will need to be applied for through the Environment Agency (EA) for activities within 8m of a main river. The EA will expect to see measures in place for any requirements to surface water management during construction.
Overheating Strategy	The Proposed Development will utilise a dynamic thermal modelling method of compliance, following the TM59 methodology which is a standardised approach to predicting overheating risk for residential building designs using dynamic thermal analysis. The methodology will allow different designs to be compared based on reasonable assumptions, support design decisions that improve comfort without cooling and provide consistency across the industry for overheating risk prediction. The measures provided to reduce overheating risk will utilise passive measures initially such as glass to solid ratios, window u-values and glass g-values to limit the solar gain entering the internal spaces. This, combined with active measures such as increased ventilation rates and boosted mechanical ventilation and heat recovery operation will go towards achieving compliance in line with the process of the cooling hierarchy.
Demolition Audit	Prior to demolition, a demolition audit will be carried out to review opportunities for the reuse and recycling of materials from the existing buildings. It is anticipated that where possible materials will be reused or recycled which can help reduce greenhouse gas emissions.
Whole Life Carbon Assessment	A Whole Life Carbon Assessment (WLCA) of Phases A and B is being undertaken to assess and where possible reduce construction carbon through consideration of scheme design (e.g. slab thickness), construction materials, specifications and suppliers, and with a particular focus on typical carbon ‘hot spot’ materials such as concrete.

Mitigation measure	Description / details of measure
	The Proposed Development will achieve the upfront embodied carbon target of 800kgCO_2e/m^2 in line with the LETI residential figures and represent an improvement over LETI's current practice.
Student Move-In/Move-Out Strategy	A Student Move-In/Move-Out Strategy will be implemented prior to occupation, developed from a Framework Strategy into a detailed Implementation Plan submitted to MCC prior to occupation. This will be a managed system where drivers book arrival slots.
Travel Plan	A Framework Travel Plan has been prepared and will be developed into a detailed Travel Plan prior to occupation with a dedicated Travel Plan Co-ordinator responsible for implementation and monitoring. The Applicant will operate a cycle hire scheme providing 'Free to Hire' bikes available to students on an unlimited basis.
Secondary Mitigation	
No secondary mitigation has been identified.	

References

[1] ISEP (August 2024). Implementing the Mitigation Hierarchy from Concept to Construction. Available at: iema-mitigation-in-eia-guidance-final.pdf [Accessed: 04/11/2025].
[2] British Standard 8233:2014. Guidance on sound insulation and noise reduction for buildings.
[3] British Standard 4142:2014+A1:2019. Methods for rating and assessing industrial and commercial sound.
[4] Institute for Lighting Professionals (2021). Guidance Note 01/21 for the Reduction of Obtrusive Light.
[5] BS EN 12464-2:2014. Light and lighting. Lighting of work places. Outdoor work places.
[6] Cibse (2012). Guide to limiting obtrusive light. October 2012.
[7] CIBSE (2009). SLL Lighting Handbook. January 2009.
[8] CIBSE (2016). LG06 The exterior environment (2016). May 2016.
[9] ILP (2018). Bats and artificial lighting in the UK. Bats and the Built Environment series. Available at: https://cdn.bats.org.uk/uploads/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?v=1542109349.
[10] BSI (2005). BS 5906:2005. Waste management in buildings. Code of practice. 30 December 2005.
[11] This includes the Health and Safety at Work etc. Act 1974; the Control of Pollution Act 1974; and Construction (Design and Management) Regulations 2015.
[12] Secretary of State (2015). Construction (Design and Management) Regulations 2015.
[13] Manchester City Council. Tackle a noise problem – Noise from building sites. Available at: Noise from building sites | Tackle a noise problem | Manchester City Council [Accessed: 08/09/2025].
[14] British Standard 5228-1: 2009+A1:2014. Code of practice for noise and vibration control on construction and open sites - Noise
[15] British Standard 5228-2: 2009+A1:2014. Code of practice for noise and vibration control on construction and open sites - Vibration
[16] Institute of Lighting Professionals (ILP) (2021) Guidance Notes for the Reduction of Obtrusive Light (GN01).
[17] Environmental Protection Act 1990 No. 43 Available at: https://www.legislation.gov.uk/ukpga/1990/43/contents
[18] Environmental Protection (Duty of Care) Regulations 1991 No. 2839. Available at: https://www.legislation.gov.uk/uksi/1991/2839/made#:~:text=The%20duty%20requires%20such%20persons,person%20or%20to%20a%20person
[19] CIRIA (2002). Report C572: Treated ground engineering properties and performance.
[20] British Research Establishment (2015). FB75: Building on Fill - Geotechnical Aspects. 3rd Edition.