

Omega B, Hermitage Road
Haringey
London

Sustainability Statement

Document Reference: 627-11-(EG)-02



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Submitted and Prepared by: Consolux
Date: 18.10.22
Issue: Preliminary
Project No.: 627
Revision: 02

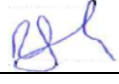
Document History

Author	Purpose	Revision	Date of Issue
P. Jeavons	Planning	Preliminary	29.04.22
E. Galbraith	Planning	Preliminary	18.10.22

Approvals

This document requires the following approvals:

Signed approval forms are filed in the Management section of the project files

Name	Signature	Title	Date of Issue
R Greenough		Director	29.04.22
R Greenough		Director	18.10.22

Distribution

Name	Organisation	Role

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1.5 Relevant Policies

Key policies are presented below:

Table 1: Relevant London and Local Planning Policies

Policy	Requirements
Policy D2 (Infrastructure requirements for sustainable densities) of the London Plan (2021)	Development proposals should be considerate of future planned levels of infrastructure and proportionate to the site's connectivity.
Policy D3 (Optimising site capacity through the design-led approach) of the London Plan (2021)	Lists a series of requirements including a requirement for development to aim for high sustainability standards and take into account the principles of the circular economy.
Policy G1 (Green Infrastructure) of the London Plan (2021)	Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network.
Policy G4 (Open Space) of the London Plan (2021)	Development proposals should not result in the loss of protected open space; and where possible create areas of publicly accessible open space.
Policy G5 (Urban Greening) of the London Plan (2021)	Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design.
Policy G6 (Biodiversity and access to nature) of the London Plan (2021)	Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain.
Policy SI 1 (Improving air quality) of the London Plan (2021)	Development proposals should not lead to further deterioration of existing poor air quality.
Policy SI 2 (Minimising greenhouse gas emissions) of the London Plan (2021)	Major development should be net zero-carbon and minimise emissions in accordance with the following energy hierarchy: be lean, be clean, be green, be seen. A minimum on site reduction of 35% beyond Building Regulations will be required for major development. Residential development should achieve 10 per cent, and non-residential development should achieve 15 per cent through energy efficiency measures. Any short fall with the zero-carbon target should be addressed through a carbon offset payment. Development referable to the GLA should also calculate whole life-cycle carbon emissions
Policy SI 3 (Energy infrastructure) of the London Plan (2021)	Major development proposals within Heat Network Priority Areas should have a communal low-temperature heating system.
Policy SI 4 (Managing heat risk) of the London Plan (2021)	Major development proposals should demonstrate through an energy strategy how they will reduce the potential for internal overheating and reliance on air conditioning systems.
Policy SI 5 (Water infrastructure) of the London Plan (2021)	Development proposals should be achieving mains water consumption of 105 litres or less per head per day; and achieve at least the BREEAM excellent standard for the 'Wat 01' water category. Smart metering, water saving, and recycling measures should also be incorporated.
Policy SI 7 (Reducing waste and supporting the circular economy) of the London Plan (2021)	Referable applications should promote circular economy outcomes and aim to be net zero-waste.
Policy SI 12 (Flood risk management) of the London Plan (2021)	Development proposals should ensure that flood risk is minimised and mitigated.
Policy SI 13 (Sustainable drainage) of the London Plan (2021)	Development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible.
Sustainable Design and Construction Supplementary Planning Guidance (2014)	This SPG aims to support developers, local planning authorities and neighbourhoods to achieve sustainable development. It provides guidance on to how to achieve the London Plan objectives effectively, supporting the mayor's aims for growth, including the delivery of housing and infrastructure. The guidance in this SPG is intended to:

	- provide detail on how to implement the sustainable design and construction and wider environmental sustainability policies in the London Plan. - provide guidance on how to develop more detailed local policies on sustainable design and construction. - provide best practice guidance on how to meet the sustainability targets set out in the London Plan; and provide examples of how to implement sustainability measures within developments.
Policy SP0 (Presumption in Favour of Sustainable Development) of Haringey's Local Plan, Strategic Policies (Updated 2017)	Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework (NPPF).
Policy SP4 (Working towards a Low Carbon Haringey) of Haringey's Local Plan, Strategic Policies (Updated 2017)	In line with the London Plan policy the Council will promote and require all new developments to take measures to reduce energy and carbon emissions: - All new residential and non-residential development shall be zero carbon - All new non-residential development shall be built to at least BREEAM "Very Good" and aim for "Excellent" - All developments to assess, identify and implement, where viable, site wide decentralised energy facilities - Prioritise connection to existing or planned networks where feasible - Exploring ways of implementing sub regional energy networks - All new developments where viable, a reduction in predicted carbon dioxide emissions of 20% from onsite renewable energy generation
SP5 (Water Management and Flooding) of Haringey's Local Plan, Strategic Policies (Updated 2017)	The Council will require all development in Haringey to be water efficient during construction and operation and to reduce all forms of flood risk.
SP6 (Waste and Recycling) of Haringey's Local Plan, Strategic Policies (Updated 2017)	The Council supports the objectives of sustainable waste management set out by the Government in PPS10 Planning for Sustainable Waste Management and the Mayor's London Plan. It requires integrated, well-designed recycling facilities to be incorporated into all new developments, as well as Site Waste Management Plans for all major applications.
SP11 (Design) of Haringey's Local Plan, Strategic Policies (Updated 2017)	All new development should ensure impacts on health, climate change, natural resources and biodiversity are minimised by adopting and improving sustainable design and construction techniques.
Policy DM4 (Provision and Design of Waste Management Facilities) of Haringey's Development Management DPD (July 2017)	Promotes new developments to consider how to sustainably manage waste arising from the development during the design, construction and occupation phases of new developments. All proposals will be required to make on-site provision for general waste, the separation of recyclable materials and organic material for composting.
Policy DM21 (Sustainable Design, Layout and Construction) of Haringey's Development Management DPD (July 2017)	Promotes new developments to consider and implement sustainable design, layout and construction techniques.
Policy DM23 (Environmental Protection) of Haringey's Development Management DPD (July 2017)	All development proposals should consider air quality, noise and vibration, light pollution, land contamination and hazardous substances, providing adequate mitigation where necessary.
Policy DM24 (Managing and Reducing Flood Risk) of Haringey's	The Council will ensure that all proposals for new development avoid and reduce the risk of flooding to future occupants and do not increase the risk of flooding.

Development Management DPD (July 2017)	
Policy DM25 (Sustainable Drainage System) of Haringey's Development Management DPD (July 2017)	Sustainable Drainage Systems (SuDS) will need to be sensitively incorporated into new development by way of site layout and design, meeting the run-off rates required by the Council.
Sustainable Design and Construction SPD (March 2013)	The SPD supports the Local Plan: Strategic Policies (adopted March 2013) and aims to help the Council meet the various obligations for sustainability, environmental quality and carbon reductions targets set at national, regional and local levels.
New Local Plan: First Steps Engagement (November 2020)	The Council is looking to develop a New Local Plan covering the period up to 2037 which will likely replace all existing Local Plan documents with a single document (New Local Plan). Once adopted, the New Local Plan will form part of Haringey's wider 'Development Plan' which is the starting point for determining applications for planning applications. It will also help to deliver the Council's wider aspirations in the Borough Plan and in other local strategies and policies.

Summary of Key Planning Policy Requirements

The following comprises a summary of the key policy requirements as applied through the Conditions:

- A minimum of BREEAM "Very Good" will be expected for the non-domestic spaces.
- Energy considerations are presented separately in the accompanying Energy Statement.

2.0 Site Context

In line with the "three pillars" of sustainability, the site context has been considered with regard to its economic, social and environmental context; acknowledging that interrelationships exist between many of these issues.

2.1 Socio Economic Context

Output Area Classifications

Area classifications for Great Britain have been produced after every census since 1971, and as of the 2001 Census, they have been extended to cover the UK as a whole.

Using socioeconomic and demographic data from each census, the classifications seek to identify areas of the country with similar characteristics. Therefore, the presented information should not be interpreted as an assessment specific to the Application Site and the surrounding area; but rather it is a reflection of the characteristics of areas with a similar socioeconomic and demographic pattern.

Data from the 2011 Census has been released identifying the site as having an Output Area Code of E00010311 and is classified as "Ethnicity Central" (Supergroup Code 3), "Ethnic Family Life" (Group Code 3a) and "Established Renting Families" (Subgroup Code 3a1).

Radial Plots are provided by the Office for National Statistics. Each data point on a radial plot displays the value for each one of the 60 standardised and transformed 2011 Census variables used.

The data indicates higher than average occupancy of flatted accommodation, higher levels of private renting and overcrowding, higher numbers of unemployed.

Indices of Multiple Deprivation

The English Indices of Deprivation use 38 separate indicators, organised across seven distinct domains of deprivation. The Indices of Multiple Deprivation data are then constructed by combining the seven transformed domain scores, using the following weights: income (22.5%); employment (22.5%); health and disability (13.5%); education, skills, and training (13.5%); barriers to housing and services (9.3%); crime (9.3%); and living environment (9.3%).

The IMD can be used to rank every Lower Layer Super Output Area in England according to their relative level of deprivation. The data is not a measure of affluence; therefore, the area ranked as the least deprived is not necessarily the most affluent.

The IMD data comprise a numeric value in a scale of 1 to 32,844 (1=most deprived) and are represented in a coloured scale of deciles (1=most deprived – dark red; 10=least deprived – dark blue) in the respective maps. Government data (illustrated below) indicates that the area ranks 12,189 out of 32,844; where 1 is the most deprived. The area is in the fourth decile and therefore considered to have a slightly above average level of deprivation overall.

The table below provides the data for the individual domains:

Table 2 – IMD Domain Scores

Domain	Score
Income Rank	9,006
Employment Rank	15,755
Education, Skills and Training Rank	14,746
Health Deprivation and Disability Rank	21,193
Crime Rank	11,225
Barriers to Housing and Services Rank	4,159
Living Environment Rank	11,021
Rank of IMD Score	12,189

2.2 Environmental Context

The following provides an overview of the pertinent environmental matters:

Land Use

The site constitutes brownfield land, meaning that its development will reduce the pressure to develop elsewhere and on greenfield.

Flood Risk

According to information presented on the GOV.UK Flood Risk for Planning on-line tool, the Site is located in Flood Zone 1 and is therefore considered to be of low risk of flooding.

Ecology

The site is almost entirely covered by hardstanding and existing structures. The current ecological value is therefore considered negligible.

Local Amenities & Public Transport

Many of the social and economic issues concern accessibility, which in its broadest sense is regarded as a combination of access to local shops, services, amenities, employment opportunities, as well as access to public and other transport facilities. Therefore, the accessibility of the proposed scheme to local amenities is a relevant consideration in determining whether the site represents a sustainable location.

Several supermarkets, cafes, bars, schools and parks are located within walking distance of the Site. Furthermore, the PTAL rating for the Site is split between 1b and 2, indicating a reasonable level of access to public transport. For example, Haringay Green Lanes train station is located half a mile away (~10-minute walk) and has overground connections to central London. Similarly, Haringay station is also just under a mile away.

3.0 Sustainability Design & Construction Proposals

This section presents an overview of the proposed sustainable design features for the scheme

3.1 Sustainability Standards

Development proposals include the demolition of existing buildings, and the redevelopment of the site to mixed used including commercial units and residential flats.

It is noted that Policy SP4 (Working Towards a Low Carbon Haringey) states that new non-residential developments must achieve at least a “Very Good” BREEAM rating and strive for an “Excellent” BREEAM rating overall.

The proposed development will comply with this requirement and achieve at least a “Very Good” rating.

3.2 Energy Strategy

Further detail on energy matters is presented in the Energy Statement accompanying the application.

Energy Efficiency

It is intended that the performance of the building fabric will incorporate relatively low U-Values to reduce the rate at which the buildings lose heat, preserving the heat within the space and reducing the requirement for mechanical heating.

To ensure energy efficiency, it is proposed that all plants within the building will have efficient outputs, in order to reduce energy wastage. This will be in the form of, but not limited to, the use of:

- LED light fittings throughout
- Selected plant with high efficiency
- Ventilation fans with lower SFP

Alongside this, control systems will be employed to ensure energy usage within the building will be adequately monitored and regulated.

Low Carbon and Renewable Technologies

Renewable and low carbon technologies have been considered as part of the design following the prioritisation of efficiency. The following is proposed:

- Air Source Heat Pumps (ASHPs) are proposed for the space heating and hot water for the residential elements
- Air Source Heat Pumps (ASHPs) to meet heating and cooling requirements of the commercial spaces
- An extent of PV at roof level.

3.3 Water Conservation

In line with the New London Plan Policy SI 5 (*Water Infrastructure*), water saving fittings and appliances shall be installed and it is proposed to target a maximum water consumption of 105 litres per person per day. In addition, a BREEAM ‘Excellent’ rating will be achieved for the ‘Wat 01 Water Consumption’ credit, corresponding to at least a 12.5% improvement over the defined baseline performance standard.

3.4 Pollution

Transport emissions shall be reduced, as the site offers reasonable connections to public transport services (PTAL rating of 1b / 2).

Measures relating to building design, fabric design and landscaping shall be implemented as appropriate so that internal ambient noise levels are acceptable for the intended use and do not compromise the health & well-being of occupants.

The external lighting strategy shall be designed to minimise light spillage and night-time light pollution in line with the ILP’s Guidance notes for the reduction of obtrusive light; low illuminance levels, fittings and controls shall be employed accordingly.

Good internal air quality will be achieved through the creation of a building envelope with a low air permeability; meaning that the building fabric will reduce the infiltration of pollution from the external environment.

The developer will also endeavour to avoid the use of materials with a high VOC (volatile organic compound) content, ensuring an improved air quality for the completed development.

3.5 Materials

Life Cycle Impacts

The materials strategy for the development shall consider lifecycle environmental impacts, with a view to optimising materials utilisation and safeguarding natural resources. It is intended that most major elements (walls, floors, roof) will have an “A” or “A+” rating according to the BRE’s Green Guide Specification.

Hard Landscaping & Boundary Protection

Similar to the major elements, hard landscaping and boundary protection will also be considered in the context of responsible sourcing and the Green Guide Specification. These materials will also target an “A” or “A+” rating.

Responsible Sourcing

Consideration will also be given to the supply chain, and it is proposed that the site will only use timber products that come from an accredited Forest Stewardship Council (FSC) source.

A priority will be given to the use of suppliers / products that operate Environmental Management Systems (e.g. ISO14001, EMS) and BES 6001 certification.

Designing for Robustness

Vulnerable parts of the building will be identified and protected to prevent damage, therefore minimising the frequency of replacement and maximising materials optimisation.

Measures are likely to include protection from the effects of high pedestrian traffic in main entrances, public areas and thoroughfares; protection against, or prevention from, any potential vehicular collusion where parking / manoeuvring occurs in close proximity to the building.

3.6 Waste Management

The operational waste strategy will seek to further promote recycling and reuse of materials. Dedicated spaces of adequate size and in convenient locations for storage of general refuse, recyclables and food waste will be incorporated and signage provided so that building users are suitably aware. Internal and external storage will be considerate of the Building Regulations and Council requirements.

4.0 Sustainable Construction Proposals

It is recognised that the construction industry has the potential to cause significant environmental impacts through resource use, waste generation and pollution. It is therefore proposed to manage the construction phase in a sustainable manner to ensure that these impacts are reduced.

4.1 Responsible Construction Practices

Environmental Management

It is expected that the principal contractor for the project shall also operate a third party certified Environmental Management System (EMS), demonstrating sound management and systematic control of environmental impacts.

4.2 Materials Optimisation and Waste

The Site Waste Management Plan (SWMP) will detail the design measures towards optimum use of materials, set specific targets for construction and demolition waste generation and appropriate mechanisms/protocols for segregating waste on-site and monitoring overall waste management.

4.3 Pollution Prevention

Pollution Prevention Guidelines

The Environment Agency’s (EA) Pollution Prevention Guidelines (PPG) shall be followed as appropriate to minimise pollution risks from construction activities; works will also be in line with the Environment Agency’s Building a better environment, A guide for developers (2006) guidance.

Air Pollution

Best practice methods for minimising the formation of dust and emissions from construction activities shall be implemented, as appropriate to the specific site and proposed activities. Control measures may include:

- Appropriate site layout
- Solid screens/barriers or other physical boundaries around dust/emission generating activities

- Good site maintenance and regular inspections for liquid spillages
- Sealed storage for cement, sand and fine aggregates.

In addition to the above, the contractor shall comply with the BRE Code of Practice to control dust from construction and demolition activities.

4.4 Water Pollution

Appropriate measures shall be implemented to minimise risks of watercourse and underground water pollution, in line with EA's PPG 5 Works in, near or liable to affect watercourses and the Guide for developers Building a better environment, as stated above. Specific measures shall be outlined in the contractor's CEMP.

5.0 Summary

This Sustainability Statement provides an overview as to how the proposed scheme contributes to sustainable development in the context of the strategic, design and construction considerations.

Sustainability is a broad concept and covers a range of environmental, social and economic considerations. A review of Haringey Council's planning policies has identified a number of requirements relating to sustainable development including Local Plan Policy SP4 (*Working Towards a Low Carbon Haringey*). Consideration has also been given to the National and London planning policy framework.

The proposed scheme includes redevelopment of the site to site to mixed uses including residential accommodation over commercial space benefiting the local economy and creating jobs and homes. Key considerations in the context of the economic and social pillars of sustainable development.

A range of sustainable design and construction features are proposed including:

- Highly thermally efficient building fabric
- Air Source Heat Pumps (ASHPs) to meet heating and cooling requirements of the residential and commercial spaces
- An extent of PV at roof level
- Highly efficient lighting
- Water saving sanitary fittings and appliances to deliver a water efficient development
- The use of materials with a low lifecycle environmental impact and embodied energy
- Efficient construction and operational waste management.

It is proposed to assess the scheme against BREEAM with a view to meeting at least "Very Good". Overall, the proposals for the scheme are in line with the overarching principles of sustainable development as well as the policy requirements of the planning authority.

6.0 Appendices

6.1 BREEAM Pre-Assessment

Issue ID	Issue ID/ Description/Aim	Credit Requirements	Available Credits	Predicted Credits	Contingency Credits	Available Score	Predicted Score	Contingency Credits	RIBA Stage - Critical	Responsibilities/Comments
Man01	Project brief and design Encouraging an integrated design process and considering BREEAM performance targets early to influence decision-making and optimise building performance, while avoiding unnecessary costs.	Project Delivery Planning (1 Credit) 1. Responsibilities Matrix 2. Project directory and project brief 3. Design and Access Statement 4. Key meeting minutes Stakeholder Consultation (interested parties) (1 Credit) 1. Copy of the consultation plan 2. Meeting Minutes/Consultation report summary 3. List of design changes as a result of consultation BREEAM AP (concept design) (1 Credit) 1. BREEAM pre-assessment + any additional sustainability targets and requirements 2. Meeting minutes BREEAM AP demonstrating regular attendance to DTM (monthly) BREEAM AP (developed design) (1 Credit) As above	4	4	0	3.20%	3.20%	0.00%	Early Action RIBA Stage 2	Responsibilities Client Project Manager Architect BREEAM AP Comments Early actions required Ensphere to provide letter template
Man02	Life cycle cost and service life planning Promoting the business case for sustainable buildings through the enhanced understanding of capital cost. Improving design, specification, maintenance and operation, by encouraging the use of life cycle costing.	Elemental Life Cycle Cost (LCC) (2 Credits) 1. A copy of Elemental Life Cycle Cost Report 2. List of design changes as a result of the LCC Component Level LLC Option Appraisal (1 Credit) 1. A copy of component Life Cycle Cost Report 2. List of design changes as a result of the LCC Capital Cost Reporting (1 Credit) 1. Predicted Capital Cost report	4	3	1	3.20%	2.40%	0.80%	Early Action RIBA Stage 2	Responsibilities Client Architect Comments Early actions required
Man03	Responsible Construction Practices Encouraging construction sites to be managed in an environmentally and socially considerate and responsible manner. Monitoring to encourage continuous improvements and utility consumption reduction.	Pre-requisite 1. All specification containing timber products to have the relevant timber requirements Environmental Management (1 Credit) 1. Copy of EMS certificates from Principal contractor and completed PPG6 BREEAM AP Site (1 Credit) 1. Appointment of AP for construction and a copy of agreed targets during construction Responsible Construction Management (Up to 2 credits) 1. A copy of Environmental Management Plan 2. Template of environment site inspection that will be used during construction Monitoring of Construction Site Impacts (1 Credit) 1. Commitment to monitor, record energy and water consumption Monitoring of Construction Site Impacts - Transport of construction materials & waste (1 Credit) 1. Target and commitment to monitor, record CO2e emissions associated with material and waste transport	6	6	0	4.80%	4.80%	0.00%		Responsibilities Contractor Comments Ensphere to provide letter templates
Man04	Commissioning and handover Encouraging a well-managed handover and commissioning process, which will ensure building services and fabric defects are identified and rectified. Ensuring that the building responds to the needs of the occupants.	Pre-Requisite 1. Commitment letter from client to produce two BUGs. Commissioning - Testing Schedule and Responsibilities (1 Credit) 1. Appointment letter for commissioning manager. Commissioning - Design and Preparation (1 Credit) 1. Appointment letter for commissioning manager at RIBA stage 2/3 2. Meeting minutes from commissioning manager showing input during design stage 3. Evidence the commissioning manager has the relevant qualification Testing and Inspecting Building Fabric (1 Credit) 1. Commitment letter from client to undertake thermographic survey and rectify any issues. Handover (1 Credit) Commitment letter from client to undertake two BUGs and corresponding trainings.	1	0	1	0.80%	0.00%	0.80%		Responsibilities Commissioning Manager M&E Client Comments Ensphere to provide letter templates

Man05	Aftercare Encouraging aftercare support during the first year of the building operation, to ensure the building operates in accordance with the design intent and in response to the building occupants' needs.	Aftercare Support (1 Credit) 1. Commitment letter from client to provide appropriate aftercare support Commissioning Implementation (1 Credit) 1. Commitment letter from client to provide the following seasonal commissioning activities Post Occupancy Evaluation (1 Credit) 1. Commitment letter from client/building occupier to undertake POE	0	0	0	0.00%	0.00%	0.00%		Responsibilities Client Building Occupier Comments Ensphere to provide letter templates
Hea01	Visual comfort Providing occupants with the conditions that facilitate good visual comfort by designing out the potential for glare, achieving good practice daylight factors and having an adequate view out. Designing internal and external lighting systems to provide appropriate illuminance (lux) levels, thereby giving a more comfortable environment for occupants. Internal lighting is zoned to allow for occupant control.	Daylighting (1 Credit) 1. Report from specialist confirming the targeted daylight ratio View Out (1 Credit) 1. Drawings confirming view out calculations. External Lighting and Zoning and Occupant Control (1 Credit) 1. Light fittings schedule 2. Product datasheet confirming luminance of light fittings install 1. Zoning and control strategy - drawing showing it	3	1	0	3.00%	1.00%	0.00%		Responsibilities Daylight Consultant Architect M&E Comments Ensphere to provide letter template
Hea02	Indoor air quality Facilitating good indoor air quality by considering indoor air pollution early in the design process so that a mitigation strategy can be put in place. Managing harmful emissions from construction products by specifying finishes and products that have been tested in accordance with the appropriate standards. Specifying an appropriate ventilation strategy that maintains good indoor air quality.	Pre-requisite - Indoor Air Quality (IAQ) plan 1. Indoor Air Quality Plan Ventilation (1 Credit) 1. Drawings confirming calculations Emissions from Construction Products (Up to 2 Credits) 1. Relevant specifications Post-construction Indoor Air Quality Measurement (1 Credit) 1. Commitment letter from client to undertake post-construction air quality test	0	0	0	0.00%	0.00%	0.00%	Early Action RIBA Stage 2	Responsibilities Air Quality Consultant M&E Architect Client Comments Ensphere to provide letter template
Hea03	Safe containment in laboratories This is no longer assessed as a separate issue within BREEAM UK New Construction 2018.	N/A	0	0	0	0.00%	0.00%	0.00%		
Hea04	Thermal comfort Thermal modelling informs the building design to provide a comfortable thermal environment that considers current climatic conditions, and projected climate change scenario conditions. Giving occupants control over their environment through appropriate temperature control strategies and thermal zoning.	Thermal Modelling (1 Credit) 1. Thermal Modelling and full dynamic thermal analysis Design for Future Thermal Comfort (1 Credit) 1. Thermal Modelling and full dynamic thermal analysis Thermal Zoning and Controls (1 Credit) 1. Thermal Modelling and full dynamic thermal analysis	0	0	0	0.00%	0.00%	0.00%		Responsibilities M&E Energy Consultant
Hea05	Acoustic performance Enabling occupants to experience best practice acoustic performance levels appropriate to the functional activities in occupied spaces.	Acoustic Performance (Up to 1 Credits) 1. Acoustic report	1	0	1	1.00%	0.00%	1.00%		Responsibilities Acoustician
Hea06	Security Designing the building to consider and take into account security needs to ensure occupants safety and wellbeing.	Security of Site and Building (1 Credit) 1. Meeting minutes with SQSS 2. Drawings, technical memos showing that the recommendations have been incorporated	1	1	0	1.00%	1.00%	0.00%	Early Action RIBA Stage 2	Responsibilities Security Specialist Architect Comments Early actions required
Hea07	Safe and healthy surroundings Providing external site areas that are safe for occupant use. Enhancing the wellbeing of building users by giving access to an outdoor space.	Safe Access (1 Credit) 1. Construction drawings showing cycle and pedestrian paths Outside Space (1 Credit) 1. Construction drawings showing external spaces and amenities	2	1	1	2.00%	1.00%	1.00%		Responsibilities Security Specialist Architect

Ene01	Reduction of energy use and carbon emissions Encouraging the design of energy efficient buildings with energy performance above national building regulations. Encouraging the accurate modelling of operational energy consumption.	Energy Performance (Up to 9 Credits) 1. RIBA stage 4 BRUKL 2. Energy statement Prediction of Operational Energy Consumption (4 Credits) 1. RIBA stage 4 BRUKL 2. Energy statement	9	2	2	6.58%	1.46%	1.46%	Early Action RIBA Stage 2	Responsibilities Energy Specialist Comments Early actions required
Ene02	Energy monitoring Helping to identify and reduce high energy demands where possible by accurate measurement of the energy consumption of the building by end use.	Sub-metering of End Use Categories (1 Credit) 1. Schematics showing metering of space heating, cooling, ventilation, lighting, small power etc. 2. Table Ene 02 filled out Sub-metering of High Energy Load and Tenancy Areas (1 Credit) 1. Schematics showing metering of space heating, cooling, ventilation, lighting, small power etc. 2. Table Ene 02 filled out	0	0	0	0.00%	0.00%	0.00%		Responsibilities M&E
Ene03	External lighting Reducing the building's energy consumption through the specification of energy efficient external lighting.	External Lighting (1 Credit) 1. Product datasheet confirming that the product specified achieves 70 luminaire lumens per circuit Watt 2. Specification confirming control (e.g. daylight, movement etc.) installed for external lighting	1	1	0	0.73%	0.73%	0.00%		Responsibilities M&E
Ene04	Low carbon design Reducing the building's energy consumption through the adoption of passive design solutions, free cooling and low or zero carbon (LZC) energy sources.	Passive Design Analysis (PDA) (1 Credit) 1. Passive design analysis (PDA) 2. Thermal modelling and BRUKL with passive design measures 3. Evidence that a suitably qualified energy specialist has quantified the CO2e reduction Free Cooling (1 Credit) 1. Passive design analysis with cooling analysis 2. Evidence for suitably qualified energy specialist 3. Dynamic simulation model demonstrating that the cooling demand can be met by free cooling Low and Zero Carbon Technologies (1 Credit) 1. LZC analysis and BRUKL Report 2. Evidence for suitably qualified energy specialist	3	1	2	2.19%	0.73%	1.46%	Early Action RIBA Stage 2	Responsibilities M&E Energy Consultant Comments Early actions required
Ene05	Energy efficient cold storage Reducing the building's operational greenhouse gas emissions (CO ₂ -eq) through the design, installation and commissioning of energy efficient refrigeration systems.	Refrigeration Energy Consumption (1 Credit) 1. Product data sheets for the refrigeration system 2. Written commitment that Commissioning of the refrigeration system will take place Indirect Greenhouse Gas Emissions (1 Credit) 1. Demonstration of savings in indirect greenhouse gas emissions	0	0	0	0.00%	0.00%	0.00%		Responsibilities M&E
Ene06	Energy efficient transportation systems Reducing the building's energy consumption by specifying the optimum number and size of energy efficient transportation systems.	Energy Consumption (1 Credit) 1. Lift analysis that meet BREEAM requirements Energy Efficient Features (1 Credit) 1. Lift specification with corresponding datasheet that confirm the requirements are met	0	0	0	0.00%	0.00%	0.00%		Responsibilities Lift Consultant
Ene07	Energy efficient laboratory systems Reducing the building's operational greenhouse gas emissions (CO ₂ -eq) by specifying best practice energy efficient laboratory equipment.	Design Specification (1 Credit) 1. Minutes of meetings to confirm consultation with relevant stakeholders 2. Project brief that includes laboratory performance criteria Best Practice Energy Efficient Features (Up to 4 Credits) 1. Energy Demand Assessment 2. Laboratory system specification and drawings	0	0	0	0.00%	0.00%	0.00%		Responsibilities M&E
Ene08	Energy efficient equipment Demonstrating a meaningful reduction in the total unregulated energy demand of the building by using energy efficient equipment.	Energy Efficient Equipment (2 Credits) 1. Fill in energy 08 table 2. Specification confirming targeted requirements.	0	0	0	0.00%	0.00%	0.00%		Responsibilities M&E
Tra01	Transport assessment and travel plan Recognising developments in proximity to good public transport networks, thereby helping to reduce transport-related pollution and congestion	Travel Plan (2 Credits) 1. Travel Plan 2. Drawings showing travel plan proposals	2	2	0	2.42%	2.42%	0.00%		Responsibilities Transport Consultant
Tra02	Sustainable transport measures Recognising developments in close proximity of, and accessible to, local amenities which are likely to be frequently required and used by building occupants.	Sustainable Transport Measures (Up to 10 Credits) 1. Evidence to demonstrate the measures targeted	10	5	2	12.08%	6.04%	2.42%		Responsibilities Transport Consultant

Wat01	Water consumption Reducing the demand for potable water through the provision of efficient sanitary fittings, rainwater collection and water recycling systems.	Water Consumption (Up to 5 Credits) 1. Water 01 Calculator 2. Specifications 3. Product data sheet confirming flow rates	0	0	0	0.00%	0.00%	0.00%		Responsibilities BREEAM Assessor M&E
Wat02	Water monitoring Specification of water meters to allow for management and monitoring of water use in the building. This encourages reductions in water use by identifying areas of high usage and investigating potential causes.	Pre-requisite 1. Drawing showing location of water meter Water Monitoring (1 Credit) 1. Schematics showing submetering 2. Specification and corresponding product datasheet of the product 3. Specification highlighting connection to BMS or ability to be connected	1	1	0	0.67%	0.67%	0.00%		Responsibilities M&E
Wat03	Water leak detection Reducing the unintended water consumption due to leaks by installing leak detection systems and flow control devices.	Leak Detection System (1 Credit) 1. Specification detailing leak detection system 2. Product datasheet for the leak detection system Flow Control Devices (1 Credit) 1. Mechanical Specification 2. Drawings to show the location of the flow systems	1	1	0	0.67%	0.67%	0.00%		Responsibilities M&E
Wat04	Water efficient equipment Reducing water consumption for non-domestic scale, non-sanitary water uses by specifying efficient systems and improving the design efficiency of any water-using processes.	Unregulated Water Demand (1 Credit) 1. Letter template	1	1	0	0.67%	0.67%	0.00%		Responsibilities Contractor Comments Ensphere to provide a letter template
Mat01	Environmental impacts from construction products - Building life cycle assessment (LCA) Reducing buildings' environmental life cycle impacts through conducting Life Cycle Assessment and integrating its outcomes in the design decision-making process.	Superstructure Options Appraisal during Concept Design (4 Credits) 1. Specifications 2. Allocation to undertake the material assessment Substructure and Hard Landscaping Options Appraisal during Concept Design (1 Credit) 1. Specifications 2. Allocation to undertake the material assessment Superstructure Options Appraisal during Technical Design (2 Credits) 1. Specifications 2. Allocation to undertake the material assessment	7	5	0	11.00%	7.86%	0.00%	Early Action RIBA Stage 2	Responsibilities Architect Structural Engineer LCA modeller Comments Early actions required
Mat02	Environmental impacts from construction products - Environmental Product Declarations (EPD) To encourage availability of robust and comparable data on the impacts of construction products by rewarding the specification of products with environmental products declarations.	Specification of Products with a Recognised Environmental Product Declaration (EPD) (1 Credit) 1. Specification 2. EPDs 3. Allocation to undertake the material assessment	1	0	1	1.57%	0.00%	1.57%		Responsibilities Architect Structural Engineer Building Services
Mat03	Responsible sourcing of construction products Recognising and encouraging responsible sourcing of construction products. This includes the source of products and the intermediary companies processing and transporting the product to site.	Pre-requisite 1. All relevant specification susceptible to contain timber products to have the relevant timber requirements. Sustainable Procurement Plan (1 Credit) 1. Procurement plan in place by RIBA stage 2 Measuring Responsible Sourcing (Up to 3 Credits) 2. Responsible Sourcing of materials	4	2	0	6.29%	3.14%	0.00%	Early Action RIBA Stage 2	Responsibilities Architect Structural Engineer M&E Client Contractor Comments Early actions required
Mat04	Insulation This is no longer assessed as a separate issue within BREEAM UK New Construction 2018.	N/A	0	0	0	0.00%	0.00%	0.00%		
Mat05	Designing for durability and resilience Increasing the lifespan of the building through designing for durability and protection from degradation and specifying appropriate construction products.	Protecting Vulnerable Parts of the Building from Damage (0.5 Credit) 1. Marked up drawings Protecting Exposed Parts of the Building from Material Degradation (0.5 Credit) 1. Completed Mat 05 spreadsheet and supporting drawings	1	1	0	1.57%	1.57%	0.00%		Responsibilities Architect

Mat 06	Material efficiency Encouraging the reduction of environmental impacts through optimising the use of materials during all stages of the project.	Material Efficiency (1 Credit) 1. Material efficiency technical memorandum (must include quantities of materials saved)	1	0	1	1.57%	0.00%	1.57%	Early Action RIBA Stage 1/2	Responsibilities Architect Structural Engineer M&E Comments Early actions required
Wst01	Construction waste management Improving resource efficiency through developing a pre-demolition audit and a Resource Management Plan, maximising the recovery of material during demolition and diverting non-hazardous waste from landfill.	Pre-demolition Audit (1 Credit) 1. Pre-demolition Audit Construction Resource Efficiency (Up to 3 Credits) 1. Site Waste Management Plan Diversion of Resources from Landfill (1 Credit) 1. Site Waste Management Plan	5	2	2	4.00%	1.60%	1.60%	Early Action RIBA Stage 2	Responsibilities Contractor Comments Early actions required
Wst02	Use of recycled and sustainably sourced aggregates Encouraging the use of recycled or secondary aggregate or aggregate types with lower environmental impact to reduce waste and optimise material efficiency.	Recycled Aggregate (1 Credit) 1. Recycled content calculator 2. Specification 3. Letter of commitment from Contractor	1	0	0	0.80%	0.00%	0.00%		Responsibilities Structural Engineer Contractor
Wst03	Operational Waste Encouraging the diversion of operational waste from landfill through the provision of space and facilities allowing the segregation and storage of recyclable waste.	Operational Waste (1 Credit) 1. Drawings/Specifications to demonstrate the location of the operational waste facility 2. Confirmation for the likely waste streams for the site.	1	1	0	0.80%	0.80%	0.00%		Responsibilities Architect Contractor
Wst04	Speculative finishes (Offices only) Specification of floor and ceiling finishes only where agreed with the occupant or, for tenanted areas where the future occupant is unknown, installation in a show area only, to reduce wastage.	N/A	0	0	0	0.00%	0.00%	0.00%		Responsibilities Architect
Wst05	Adaptation to climate change Encouraging consideration and implementation of measures to mitigate the impact of more extreme weather conditions arising from climate change over the lifespan of the building.	Resilience of Structure, Fabric, Building Services and Renewables Installation (1 Credit) 1. Climate Change Adaptation Strategy 2. Appraisal or Structural and fabric resilience 3. Systematic risk assessment	1	0	1	0.80%	0.00%	0.80%	Early Action RIBA Stage 2	Responsibilities Architect Structural Engineer M&E Comments Early actions required
Wst06	Design for disassembly and adaptability Encouraging consideration and implementation of measures design options related to adaptability and disassembly, which can accommodate future changes to the use of the building and its systems over its lifespan.	Design for Disassembly and Functional Adaptability - Recommendations (1 Credit) 1. Building-specific functional adaptation strategy study Disassembly and Functional Adaptability - Implementation (1 Credit) 1. Building-specific functional adaptation strategy study	2	0	2	1.60%	0.00%	1.60%	Early Action RIBA Stage 2	Responsibilities Architect Structural Engineer M&E Comments Early actions required
LE01	Site selection Recognising the reuse of previously developed and contaminated land where appropriate remediation has taken place.	Previously Occupied Land (1 Credit) 1. Photograph/Existing site plan of the site or Design and Access Statement describing the previous use Contaminated Land (1 Credit) 1. Contaminated site investigation and risk assessment/report 2. Commitment letter from the contractor that the remediation strategy will be implemented	2	1	1	2.92%	1.46%	1.46%		Responsibilities Client Contaminated land consultant

LE02	Identifying and understanding the risks and opportunities for the project Identifying and understanding the ecological risks and opportunities associated with the site to inform the determination of the strategic outcome for the site.	Pre-requisite - Ecological Value of Site 1. Risk evaluation checklist completed 2. Appointment of ecologist if going through Route 2 3. EMP detailing the processes in place during construction to monitor ecology Route 1 - Low Risk and Opportunities Defined in GN34 (1 Credit) Completed Assessment using GN35 OR Route 2 - Complex Ecological Systems (2 Credits) Ecologist's Survey and recommendation following hierarchy	2	2	0	2.92%	2.92%	0.00%	Early Action RIBA Stage 1	Responsibilities Ecologist Client Comments Early actions required
LE03	Managing negative impacts on ecology Recognition of steps taken to avoid impacts on existing site ecology as far as possible.	Identification and Understanding the Risks and Opportunities for the Site (1 Credit) 1. Ecologists report 2. Confirmation that the Ecologist is suitably Qualified Managing Negative Impacts of the Project (Up to 2 Credits) 1. Ecologists report 2. Confirmation that the features of value will be protected in line with the Ecologist's recommendations	3	2	1	4.38%	2.92%	1.46%	Early Action RIBA Stage 1	Responsibilities Ecologist Comments Early actions required
LE04	Change and enhancement of ecological value Recognition of steps taken to enhance site ecology.	Identification and Understanding the Risks and Opportunities for the Site 1. Ecology Report Change and Enhancement of Ecology - Route 1 ONLY (1 Credit) 1. Confirmation that the project team have implemented local ecological solutions and measures to enhance the site Change and Enhancement of Ecology - Route 2 ONLY (Up to 3 Credits) 1. Calculation of the Ecological value	4	2	1	5.85%	2.92%	1.46%		Responsibilities Ecologist
LE05	Long term ecology management and maintenance Encouraging the long term maintenance and management of ecology on site to ensure both new and existing ecological features continue to thrive.	Long Term Impact on Biodiversity 1. As above Planning Liaison, Data, Monitoring and Review Management and Maintenance (1 Credit) 1. Ecology report 2. Confirmation of additional measures 3. Confirm Ecology and Biodiversity section in Building User Guide Landscape and Ecology Plan (1 Credit) 1. Landscape and Ecology Plan	2	2	0	2.92%	2.92%	0.00%		Responsibilities Ecologist Client
Pol01	Impact of refrigerants Rewarding buildings that reduce the impact of refrigerant gas emissions.	Impact of Refrigerants (2 Credits) 1. Specification and/or manufacturer's literature to confirm the design/type of system to be installed 2. Drawings to show the positioning of the units Leak Detection (1 Credit) 1. Specification and/or manufacturer's literature to confirm the design/type of system to be installed 2. Drawings to show the positioning of the units	0	0	0	0.00%	0.00%	0.00%		Responsibilities M&E
Pol02	Local air quality Recognising buildings which limit their impact on local air quality, by consideration of the combustion plant and fuel used on site.	Local Air Quality (Up to 2 Credits) 1. Data sheets and/or manufacturer emails confirming NOx emissions for each piece of equipment 2. Boiler/CHP/Heat Emitter/Cooling/Heater schedules	0	0	0	0.00%	0.00%	0.00%		Responsibilities M&E
Pol03	Flood and surface water management Rewarding buildings and their sites that limit on-site and off-site local flooding and hence the damage this can cause.	Flood Resilience (Up to 2 Credits) 1. Site Specific Flood Risk Assessment Pre-requisite - Surface Water Run-off 1. Calculations and Drainage Plan Surface Water Run-off Rates (1 Credit) 1. Calculations and Drainage Plan Surface Water Run-off Volume (1 Credit) 1. Calculations and Drainage Plan Minimising Water Course Pollution (1 Credit) 1. Drainage Plan	5	2	1	5.00%	2.00%	1.00%		Responsibilities Flood Risk Consultant Drainage Engineer
Pol04	Reduction of night time light pollution Avoiding or reducing the impact of night time light pollution, through careful design and specification of light sources.	Night Time Light Pollution (1 Credit) 1. Completed letter template 2. Drawings to show the location of the external lighting, time switches and photo-cells	1	1	0	1.00%	1.00%	0.00%		Responsibilities M&E
Pol05	Reduction of noise pollution Avoiding or reducing the impact of external noise from the building.	Reduction of Noise Pollution (1 Credit) 1. Noise Impact Assessment	0	0	0	0.00%	0.00%	0.00%		Responsibilities Acoustician
Inn01	Innovation Test out new ideas which, if successful, could change the status quo of the industry. Allow the industry to explore new opportunities and evolve its processes.	Up to 10 Credits	10	0	0	10.00%	0.00%	0.00%		
Total							57.91%	21.47%		