

BREEAM NC V6 Action Register Fully Fitted, Residential institution (long term stay) - 44-46 Hampstead Lane

BREEAM Reg: TBC

Verte Ltd have been requested by Harrison Varma to carry out a BREEAM Feasibility assessment of the proposed construction at 44-46 Hampstead Lane N6 4LL.

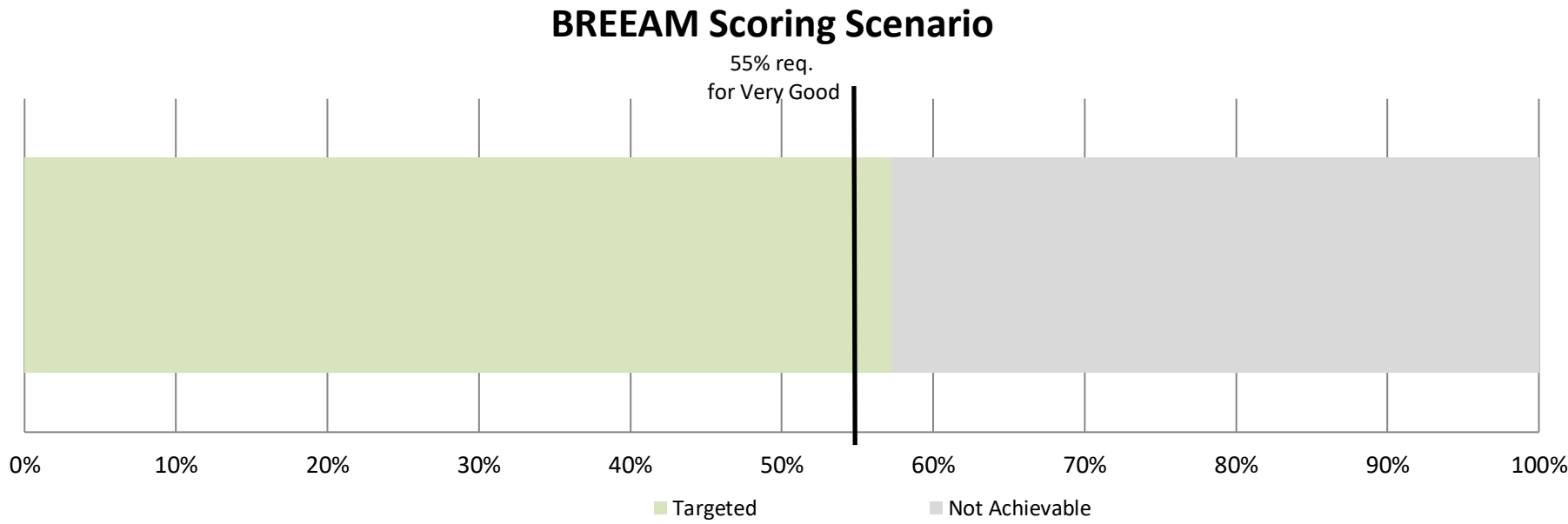
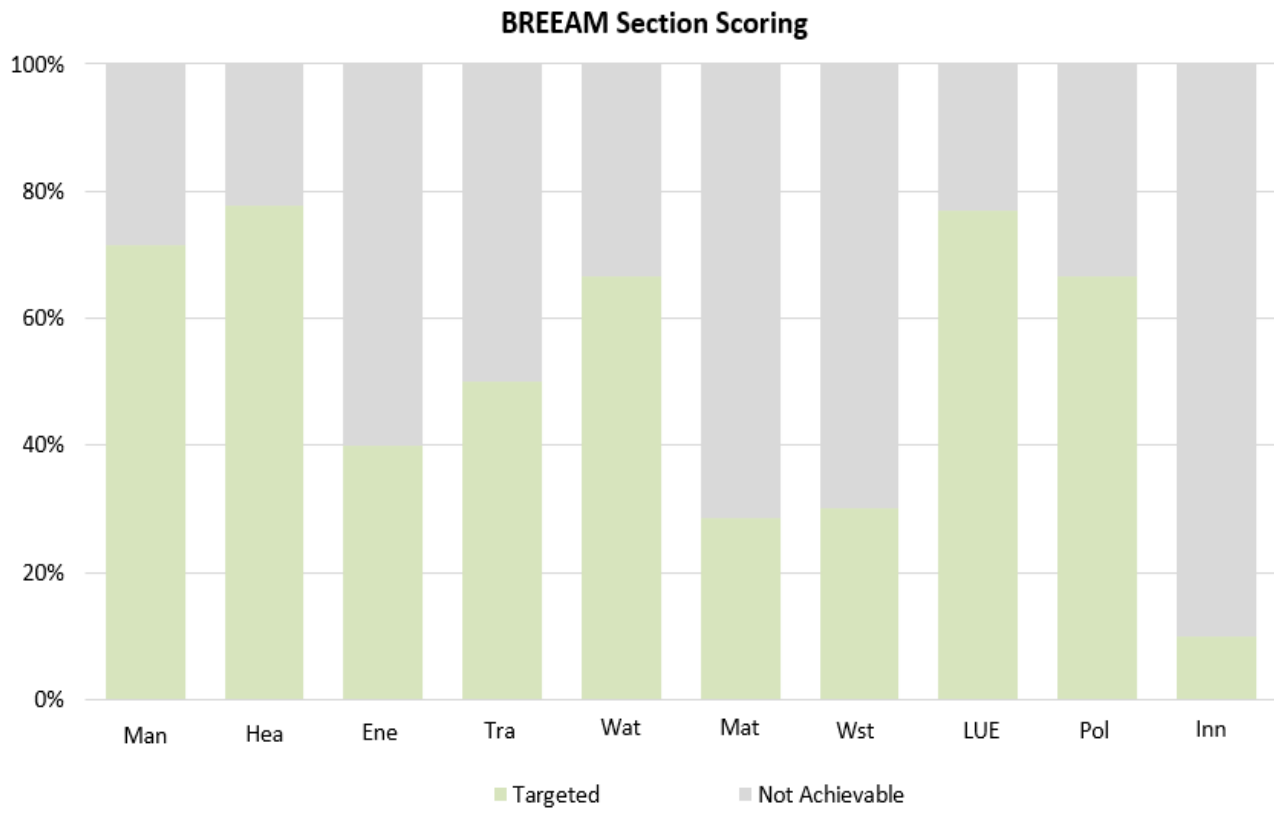
The proposed development is for the demolition of existing dwellings and redevelopment to provide a 66-bed care home (Use Class C2); associated basement; side / front lightwells with associated balustrades; subterranean and forecourt car parking; treatment room; detached substation; side access from Courtenay Avenue; removal 4 no. trees in rear; amended boundary treatment; and associated works.

This development is being assessed under the cover of a single BREEAM New Construction v6 Residential institution - long term stay (Care Home) fully fitted assessment, and is to be formally registered with BRE Global Ltd.

The following tracker details the proposed development’s current performance against the BREEAM NC V6 criteria, and progress towards meeting the minimum target rating of Very Good, and desire to push towards Excellent.



Author: JM
Approver RM
Date: 24/06/2024



Total Score

57.23%

Pre-Assessment Target:
57.23% VERY GOOD

Ref No.	Description	Sub-Title	Criteria	Very Good	Available	% Worth	Target	Information Required	Timeframe	Responsibility	Assessor Comments
Management											
Man 1.1	Project Brief and Design - Project Delivery Planning	Project delivery planning	One credit where: 1. Prior to completion of the Concept Design (RIBA Stage 2 or equivalent), the project delivery stakeholders have met to identify and define their roles, responsibilities and contributions for each of the key phases of project delivery. 2.In defining the roles and responsibilities for each key phase of the project, the following must be considered: a.End user requirements b.Aims of the design and design strategy c.Particular installation and construction requirements/limitations d.Occupiers' budget and technical expertise in maintaining any proposed systems e.Maintainability and adaptability of the proposals f. Operational energy j.Requirements for the production of project and end user documentation k.Requirements for commissioning, training and aftercare support. 3.The project team demonstrate how the project delivery stakeholder contributions and the outcomes of the consultation process have influenced or changed the Initial Project Brief, including if appropriate, the Project Execution Plan, Communication Strategy, and the Concept Design.		1	0.52%	0	1) Consultation plan/ project execution plan setting out the process and scope of the consultation. 2) Meeting minutes and agendas to demonstrate when collaborations began, what was discussed, the defining of roles and responsibilities for each stage, aims, requirements and the outcomes of this process. 3) Design Brief / Stage 2 reports to demonstrate items as listed in Man 01 cr. 2 a-h have been covered. 4) Letter- PM to sign commitment letter confirming the requirements of Man 01 criteria 1 to 3 are met. Verte will provide the template letter.	RIBA Stage 2	Project Manager	20/06/2024: Credit excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. Credit not targeted.
Man1.2	Project Brief and Design - Stakeholder Consultation (Interested Parties)	Stakeholder consultation (interested parties)	One credit where: 4. Prior to completion of the Concept Design stage, the design team consult with all interested parties on matters that cover the minimum consultation content. 5. The project must demonstrate how the stakeholder contributions and outcomes of the consultation exercise have influenced or changed the Initial Project Brief and Concept Design. 6. Prior to completion of the detailed design (RIBA Stage 4, Technical Design or equivalent), consultation feedback has been given to, and received by, all relevant parties.		1	0.52%	0	1) Consultation report(s) setting out the process, scope and outcomes of the consultation, as well as a list parties consulted, the topics covered, and a summary of the views expressed. 2) Documentation demonstrating how consultation influenced the design brief. 3) Documentation demonstrating that consultation feedback has been given to, and received by, all relevant third party stakeholders parties, prior to RIBA Stage 4.	RIBA Stage 2	Project Manager	20/06/2024: Credit excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. Credit not targeted.
Man1.3	Project Brief and Design - BREEAM AP (Concept Design)	BREEAM AP (Concept Design)	Prerequisite: 8. The project team, including the client, formally agree strategic performance targets early in the design process, (with the support of the BREEAM AP where appointed). One credit where: 9. Involve a BREEAM AP in the project at an appropriate time and level to: a. Work with the project team, including the client, to consider the links between BREEAM issues and assist them in maximising the project’s overall performance against BREEAM, from their appointment and throughout Concept Design. b. Monitor progress against the performance targets agreed under criterion 8 above throughout all stages after their appointment where decisions critically impact BREEAM performance. c. Proactively identify risks and opportunities related to the achievement of the targets agreed under criterion 8. d. Provide feedback to the project team as appropriate, to support them in taking corrective actions and achieving their agreed performance targets. e. Monitor and, where relevant, coordinate the generation of appropriate evidence by the project team.		1	0.52%	0	1) Letter confirming BREEAM AP appointment at RIBA Stage 1. 2) Contract / Planning requirements confirming the BREEAM Rating required, RIBA Stage 2. 3) Meeting minutes confirming the attendance of the BREEAM AP and that sustainability is included in all design team meeting agendas. 4) 'BREEAM Assessors Report confirming targets.	RIBA Stage 2	TBC	20/06/2024: Credit excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. Credit not targeted.

Man1.4	Project Brief and Design - BREEAM AP (Developed Design)	BREEAM AP (Developed Design)	One credit where: 10. The Sustainability Champion criteria 8 and 9 have been achieved. 11. Involve the BREEAM AP in the project at an appropriate time and level to: a. Work with the project team, including the client, to consider the links between BREEAM issues and to assist them in maximising the project’s overall performance against BREEAM throughout Developed Design. b. Monitor progress against the performance targets agreed under criterion 8 on the previous page throughout all stages where decisions critically impact the specification and tendering process and the BREEAM performance. c. Proactively identify risks and opportunities related to the achievement of the targets agreed under criterion 8 on the previous page. d. Provide feedback to the project team as appropriate, to support them in taking corrective actions and achieving their agreed performance targets. e. Monitor and, where relevant, coordinate the generation of appropriate evidence by the project team.		1	0.52%	0	1) Meeting minutes and/or invites confirming the Sustainability Champion / BREEAM AP attended or invited to key design team meetings throughout the concept design and the BREEAM requirements and targets discussed. 2) Copies of the Sustainability Champion / BREEAM AP's Status documenting including risks and opportunities.	RIBA Stage 4	TBC	20/06/2024: Credit excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. Credit not targeted.
Man 2.1	LCC and Service Life Planning - Elemental Life Cycle Cost (LCC)	Elemental life cycle cost (LCC)	Two credits where: 1.A competent person as detailed within the BREEAM manual will carry out an outline, entire asset LCC plan at Process Stage 2 (equivalent to Concept Design - RIBA Stage 2) together with any design option appraisals in line with 'Standardised method of life cycle costing for construction procurement' PD 156865:20081. 2. The elemental LCC plan: a. Provides an indication of future replacement costs over a period of analysis as required by the client (e.g. 20, 30, 50 or 60 years); b. Includes service life, maintenance and operation cost estimates. The study period should ideally be agreed by the client, in line with the design life expectancy of the building. However, where the life expectancy of the building is not yet formally agreed (due to being at very early design stages), the default design life of 60 years should be used for modelling purposes (in line with the UK default). 3. Demonstrate, using appropriate examples provided by the design team, how the elemental LCC plan has been used to influence building and systems design and specification to minimise life cycle costs and maximise critical value.		2	1.05%	0	1) A copy of a compliant Elemental LCC report produced at RIBA Stage 2 with supporting documentation demonstrating analysis of alternative options (e.g. an elemental appraisal) 2) Evidence demonstrating how the LCC report has influenced design.	RIBA Stage 2	Cost Consultant	20/06/2024: Credit currently not incorporated within scoring strategy for a Very Good rating due to late consideration and unlikely to have appropriate documentation, however the credit may be picked up at a later date if required as long BREEAM time constraints are not past. Would require appointing and actioning at concept design stage though. Two credits not targeted.
Man 2.2	LCC and Service Life Planning - Component level LCC Plan	Component level LCC plan	One credit where: 4. A competent person develops a component level LCC options appraisal by the end of Process Stage 4 (equivalent to Technical Design – RIBA Stage 4) in line with PD 156865: 2008. The component level LCC includes (where present): a. Envelope, e.g. cladding, windows, or roofing b. Services, e.g. heat source, cooling source, or controls c. Finishes, e.g. walls, floors or ceilings d. External spaces, e.g. alternative hard landscaping, boundary protection. The Component level LCC option appraisal should review all of the above component types (where present). However, you do not need to consider every single example cited under each component; only a selection of those most likely to draw valued comparisons. This is to ensure that a wide range of options are considered and help focus the analysis on components which would benefit the most from appraisal. 5. Demonstrate, using appropriate examples provided by the design team, how the component level LCC options appraisal has been used to influence building and systems design and specification to minimise life cycle costs and maximise critical value.		1	0.52%	1	1) A copy of a compliant Component Level LCC report produced by the end of RIBA Stage 4 with supporting documentation demonstrating analysis of alternative options (e.g. an elemental appraisal)	RIBA Stage 4	Cost Consultant	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, with appointment to be made to conduct LCC costing in RIBA Stage 4. One credit targeted.
Man2.3	LCC and Service Life Planning - Capital Cost Reporting	Capital cost reporting	One credit where: 6. Report the capital cost for the building in pounds per square metre (£k/m2), as part of the submission to the BRE.		1	0.52%	1	1) Statement containing the capital cost for the building in pounds per square metre	RIBA Stage 4	Client	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, with the client confirming details of capital cost can be provided in RIBA Stage 4. One credit targeted.
Man3.1	Responsible Construction Practices - Prerequisite	Prerequisite Site timber	Pre-requisite 1. All timber and timber based products used on the project is ' Legally harvested and traded timber'.		-	0.00%	Pre-requisite	1) A formal letter of commitment or contractual requirements document confirming the actions that will be undertaken as part of site works.	RIBA Stage 4	Main Contractor	20/06/2024: Pre-requisite included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. Pre-requisite targeted.
Man3.2	Responsible Construction Practices - Environmental Management	Environmental management	One credit where: 3. All parties who at any stage manage the construction site (e.g. the principal contractor, the demolition contractor) operate an EMS covering their main operations. The EMS must: a. Be third party certified, to ISO 14001: 2015(10), EMAS (EU Eco-Management and Audit Scheme) or equivalent standard; OR b. In compliance with BS 8555: 2016(11) have: b.i Appropriate structure b.ii Reached implementation stage phase four ‘implementation and operation of the environmental management system’ b.iii Completed defined phase audits one to four. 4 All parties who at any point manage the construction site (e.g. the principal contractor, the demolition contractor) implement best practice pollution prevention policies and procedures on site in accordance with Working at construction and demolition sites: PPG6, Pollution Prevention Guidelines.		1	0.52%	1	1) A formal letter of commitment or contractual requirements document confirming the actions that will be undertaken as part of site works.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.
Man3.3	Responsible Construction Practices - BREEAM AP (Site)	BREEAM AP (site)	Prerequisite for the BREEAM AP credit 5 The client and the contractor formally agree performance targets. 1 credit where: 6. Involve a BREEAM AP in the project at an appropriate time and level to: a. Work with the project team, including the client, to consider the links between BREEAM issues and assist them in achieving and if possible going beyond the design intent, to maximise the project’s performance against the agreed performance targets throughout the Construction, Handover and Close Out stages. b Monitor construction progress against the performance targets agreed under criterion 5 above throughout all stages where decisions critically impact BREEAM performance. c. Proactively identify risks and opportunities related to the procurement and construction process and the achievement of the targets agreed under criterion 5 on the previous page. d. Provide feedback to the constructors and the project team as appropriate, to support them in taking corrective actions and achieving their agreed performance targets. e. Monitor and, where relevant, coordinate the generation of appropriate evidence by the project team and the provision to the assessor.		1	0.52%	1	1) A formal letter of commitment or contractual requirements document confirming the actions that will be undertaken as part of site works. 2) Letter confirming appointment of BREEAM AP. 3) BREEAM AP / Sustainability Champion Reports	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.

Man3.4	Responsible Construction Practices - Responsible Construction Management	Responsible construction management	One credit where items highlighted for one credit within Table 4.1 of the BREEAM manual have been achieved. Two credits where an additional six items from Table 4.1 have been achieved. To achieve an exemplary level credit all items in Table 4.1 need to be achieved.		2	1.05%	2	1) A formal letter of commitment or contractual requirements document confirming the actions that will be undertaken as part of site works.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. Two credits targeted. The exemplary credit is also targeted, though to be discussed with the contractor if they consider this achievable after their appointment (see innovation section below).
Man3.5	Responsible Construction Practices - Monitoring of Construction Site Impacts	Monitoring of construction-site impacts Utility Consumption	Up to two credits 10. Assign responsibility to an individual for monitoring, recording and reporting energy use, water consumption and transportation data (where measured) resulting from all on-site construction processes (and dedicated off-site manufacturing) throughout the build programme. To ensure the robust collection of information, this individual must have the appropriate authority and responsibility to request and access the data required. Where appointed, the BREEAM AP could perform this role. First monitoring credit - Utility consumption Energy consumption 11. Achieve criterion 10. 12. Set targets for the site energy consumption in kWh (and where relevant, litres of fuel used) as a result of the use of construction plant, equipment (mobile and fixed) and site accommodation. 13. Monitor and record data for the energy consumption described in criterion 12. 14. Report the total carbon dioxide emissions (total kgCO₂/project value) from the construction process via BREEAM Projects (for the purposes of potential future BREEAM performance benchmarking). Water consumption 15. Achieve criterion 10. 16. Set targets for the potable water consumption (m³) arising from the use of construction plant, equipment (mobile and fixed) and site accommodation. 17. Monitor and record data for the potable water consumption described in criterion 16. 18. Use the collated data to report the total net water consumption (m³), i.e. consumption minus any recycled water use from the construction process via BREEAM Projects (for the purposes of potential future BREEAM performance benchmarking). Second monitoring credit - transportation of construction materials and waste 19. Achieve criterion 10. 20. Set targets for transportation movements and impacts resulting from delivery of the majority of construction materials to site and construction waste from site. As a minimum cover: a. transportation of materials from the point of supply to the building site, including any transport, intermediate storage and point of supply. Monitor as a minimum: a.i Materials used in major building elements (i.e. those defined in BREEAM issue Mat 01 Environmental impacts from construction products - Building life cycle assessment (LCA) on page 208). a.ii Ground works and landscaping materials. b. transportation of construction waste from the construction gate to waste disposal processing or recovery centre gate. This monitoring must cover the <u>construction waste groups outlined in the project's resource management plan.</u>		2	1.05%	2	1) A formal letter of commitment or contractual requirements document confirming the actions that will be undertaken as part of site works.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. Two credits targeted.
Man4.1	Commissioning and Handover - Commissioning - Testing Schedule and Responsibilities	Commissioning - testing schedule and responsibilities	One credit where 1. Prepare a schedule of commissioning and testing. The schedule identifies and includes a suitable timescale for commissioning and re-commissioning of all complex and non-complex building services and control systems and for testing and inspecting building fabric. 2. The schedule identifies the appropriate standards for all commissioning activities to be conducted, where applicable, in accordance with: a. Current Building Regulations b. BSRIA guidelines(16) c. CIBSE guidelines(17) d. Other appropriate standards (see Methodology on the next page). Exclude from the assessment any process or manufacture-related equipment specified as part of the project. However, include such equipment in cases where they form an integral part of the building HVAC services, such as some heat recovery systems. 3 Where a building management system (BMS) is specified: a. Carry out commissioning of air and water systems when all control devices are installed, wired and functional b Include physical measurements of room temperatures, off-coil temperatures and other key parameters, as appropriate, in commissioning results c The BMS or controls installation should be running in auto with satisfactory internal conditions prior to handover d All BMS schematics and graphics (if BMS is present) are fully installed and functional to user interface prior to handover e Fully train the occupier or facilities team in the operation of the system. 4 Appoint an appropriate project team member to monitor and programme pre-commissioning, commissioning and testing. Where necessary include re-commissioning activities on behalf of the client. 5 The principal contractor accounts for the commissioning and testing programme, responsibilities and criteria within their budget and the main programme of works. Allow the required time to complete all commissioning and testing activities prior to handover.	One Credit	1	0.52%	1	1) Appointment letter for the independent Specialist Commissioning Manager defining the scope of their role and responsibilities. 2) Specification or written confirmation confirming commissioning standards, responsibilities and schedule.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Could be incorporated into MEP specifications at Stage 4 to make sure they are aligned with the requirement as well as potentially including in a single contractor requirements document. One credit targeted.
Man4.2	Commissioning and Handover - Commissioning - Design and Preparation	Commissioning - design and preparation	One credit where 6.The commissioning and testing schedule and responsibilities credit is achieved. 7 During the design stage, the client or the principal contractor appoints an appropriate project team member (see criterion 4), provided they are not involved in the general installation works for the building services systems, with responsibility for: a Undertaking design reviews and giving advice on suitability for ease of commissioning. b Providing commissioning management input to construction programming and during installation stages. c Management of commissioning, performance testing and handover or post-handover stages. For buildings with complex building services and systems, this role needs to be carried out by a specialist commissioning manager.		1	0.52%	1	1) A formal letter of commitment or specification document confirming the actions that will be undertaken in the performance testing of the building fabric. 2) Project programme confirming inclusion of thermographic survey and air leakage testing.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.
Man4.3	Commissioning and Handover - Testing and Inspecting Building Fabric	Testing and inspecting building fabric	One credit where: 8. The commissioning and testing schedule and responsibilities credit is achieved. 9 Complete post-construction testing and inspection to quality-assure the integrity of the building fabric, including continuity of insulation, avoidance of thermal bridging and air leakage paths (this is through airtightness testing and a thermographic survey). A suitably qualified professional undertakes the survey and testing in accordance with the appropriate standard. 10 Rectify any defects identified during post-construction testing and inspection prior to building handover and close out. Any remedial work must meet the required performance characteristics for the building or element as defined at the design stage.		1	0.52%	1	1) A formal letter of commitment or specification document confirming the actions that will be undertaken in the performance testing of the building fabric. 2) Project programme confirming inclusion of thermographic survey and air leakage testing.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.

Man4.4	Commissioning and Handover - Handover	Handover	One credit where: 11 Prior to handover, develop two building user guides (see Methodology) for the following users: a A non-technical user guide for distribution to the building occupiers. b A technical user guide for the premises facilities managers. A draft copy is developed and discussed with users first (where the building occupants are known) to ensure the guide is most appropriate and useful to potential users. 12 Prepare two training schedules timed appropriately around handover and proposed occupation plans for the following users: a A non-technical training schedule for the building occupiers. b A technical training schedule for the premises facilities managers.	Criterion 11 (Building User Guide)	1	0.52%	1	1) Specification or written confirmation confirming that a BREEAM compliant building user guide and two training schedules (technical and non-technical) will be produced and handed over.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. Note, the BUG and Training Schedule are standalone documents separate from the O&Ms, and will need to be produced at construction handover. One credit targeted.
Man 5.1	Aftercare - Aftercare Support	Aftercare support	One Credit where: 1. Provide aftercare support to the building occupiers through having in place operational infrastructure and resources. This includes as a minimum: a A meeting between the aftercare support team or individual, and the building occupier or management team (prior to initial occupation, or as soon as possible thereafter) to: a.i Introduce the aftercare support available, including the content of the building user guide (where it exists) and training schedule. a.ii Present key information on the building including the design intent and how to use the building to ensure it operates as efficiently and effectively as possible. b On-site facilities management training including: b.i a walkabout of the building AND b.ii Introduction to and familiarisation with the building systems, their controls and how to operate them in accordance with the design intent and operational demands. c Provide initial aftercare support for at least the first month of building occupation, e.g. weekly attendance on-site, to support building users and management (the level of frequency will depend on the complexity of the building and building operations). d Provide longer term aftercare support for occupiers for at least the first 12 months from occupation, e.g. a helpline, nominated individual or other appropriate system to support building users and management. 2 Establish operational infrastructure and resources to coordinate the collection and monitoring of energy and water consumption data for a minimum of 12 months, once the building is substantially occupied. This facilitates analysis of discrepancies between actual and predicted performance, with a view to adjusting systems and user behaviours accordingly.		1	0.52%	1	1) A formal letter of commitment or contractual requirements document confirming the actions that will be undertaken. 2) Plans/ schematics showing systems in place to monitor energy and water consumption. 3) Confirmation of who will be responsible for monitoring energy and water consumption data.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.
Man5.2	Aftercare - Commissioning - Implementation	Commissioning - Implementation	One Credit where: 3 Complete the following commissioning activities over a minimum 12-month period, once the building becomes substantially occupied: a Complex systems: The specialist commissioning manager will: a.i Identify changes made by the owner or operator that might have caused impaired or improved performance. a.ii Test all building services under full load conditions, i.e. heating equipment in mid-winter, cooling and ventilation equipment in mid-summer and under part load conditions (spring and autumn). a.iii Where applicable, carry out testing during periods of extreme (high or low) occupancy. a.iv Interview building occupants (where they are affected by the complex services) to identify problems or concerns regarding the effectiveness of the systems. a.v Produce monthly reports comparing sub-metered energy performance to the predicted one (see Ene 01 Reduction of energy use and carbon emissions on page 120). a.vi Identify inefficiencies and areas in need of improvement. a.vii Re-commission systems (following any work needed to serve revised loads), and incorporate any revisions in operating procedures into the operations and maintenance (O&M) manuals. b Simple systems (naturally ventilated): The external consultant, aftercare team or facilities manager will: b.i Review thermal comfort, ventilation, and lighting, at three, six and nine month intervals after initial occupation, either by measurement or occupant feedback. b.ii Identify deficiencies and areas in need of improvement. b.iii Re-commission systems and incorporate any relevant revisions in operating procedures into the O&M manuals.		1	0.52%	1	1) A formal letter of commitment or contractual requirements document confirming the actions that will be undertaken.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.
Man5.3	Aftercare - Post Occupancy Evaluation	Post occupancy evaluation (POE)	One Credit where: 4 The client or building occupier commits to carry out a POE exercise one year after the building is substantially occupied. This gains comprehensive in-use performance feedback and identifies gaps between design intent and in-use performance. The aim is to highlight any improvements or interventions that need to be made and to inform operational processes. 5 An independent party carries out the POE covering: a A review of the design intent and construction process (review of design, procurement, construction and handover processes). b Feedback from a wide range of building users including facilities management on the design and environmental conditions of the building covering: b.i Internal environmental conditions (light, noise, temperature, air quality) b.ii Control, operation and maintenance b.iii Facilities and amenities b.iv Access and layout b.v Energy and water consumption (see criterion 2 and Methodology b.vi Other relevant issues, where appropriate 6 The independent party provides a report with lessons learned to the client and building occupiers. 7 The client or building occupier commits funds to pay for the POE in advance. This requires an independent party to be appointed to carry out the POE as described in criterion 5. Evidence of the appointment of the independent party and schedule of responsibilities which fulfils the BREEAM criteria are acceptable to demonstrate compliance.		1	0.52%	1	1) A formal letter of commitment or contractual requirements document confirming the actions that will be undertaken.	RIBA Stage 4	Client	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Verte can provide fee for a post-occupancy evaluation if requested. One credit targeted.
Health and Wellbeing											
Hea1.1	Visual Comfort - Control of Glare from Sunlight	Control of glare from sunlight	One credit where 1 Identify areas at risk of glare using a glare control assessment. The glare control assessment also justifies any areas deemed not at risk of glare. 2 A glare control strategy designs out potential glare in all relevant building areas where risk has been identified. This should be achieved through building form and layout or building design measures. 3 The glare control strategy does not increase energy consumption used for lighting. This is achieved by: a Maximising daylight levels in all weather, cloudy or sunny AND b Ensuring the use or location of shading does not conflict with the operation of lighting control systems.		1	0.78%	1	1) Specialist glare control assessment / modelling results demonstrating that glare has been designed out. 2) Supporting design plans / specifications to collaborate that the design designs out glare.	RIBA Stage 3	Architect	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Blinds are to be provided in relevant spaces. Will also just need confirmation if these are the only areas at risk of glare going forwards, along with confirmation that the openness factor of blinds is 1% or less, and the fabric light transmittance value is < 0.1 (10%). One credit targeted.

Hea1.2	Visual Comfort - Daylighting	Daylighting (building type dependent)	Up to two Credits: 4 Daylighting criteria have been met using either of the following options: a The relevant building areas meet good practice daylight factors and other criteria as outlined in Table 5.1 and Table 5.2 on the next page OR b The relevant building areas meet good practice average and minimum point daylight illuminance criteria as outlined in Table 5.3 on the next page. Additionally: EITHER (a) OR ((b) and (c)) below: a) A uniformity ratio of at least 0.3 or a minimum point daylight factor of at least 0.3 times the relevant average daylight factor value in Table 10 . Spaces with glazed roofs, such as atria, must achieve a uniformity ratio of at least 0.7 or a minimum point daylight factor of at least 0.7 times the relevant average daylight factor value in Table 10. b) At least 80% of the room has a view of sky from desk or table top height (0.85m in multi-residential buildings, 0.7m in other buildings). c) The room depth criterion $d/w + d/HW < 2/(1-RB)$ is satisfied. Where: d = room depth, w = room width, HW = window head height from floor level, RB = average reflectance of surfaces in the rear half of the room,		2	1.56%	1	1) Specialist daylight report / calculation / modelling results demonstrating that the daylight values can be achieved in all relevant areas. 2) GA drawings demonstrating the designs, arrangement and location of windows modelled for daylighting.	RIBA stage 3	TBC	20/06/2024: Based on the nature of the building, it is likely that this credit will be achievable (with both possible), as agreed within the pre-assessment meeting. Full daylighting analysis will be required to confirm credit achievement though. One credit targeted.
Hea1.3	Visual Comfort - View Out	View out	One credit where 5. 95% of the floor area in relevant building areas is within 7m of a wall which has a window or permanent opening that provides an adequate view out. 6. The window/opening must be $\geq 20\%$ of the surrounding wall area (Surrounding wall area refers to the area (in m2) of the internal wall on which the window/opening is located, including the area of the window/opening itself). Where the room depth is greater than 7m, compliance is only possible where the percentage of window/opening is the same as, or greater than, the values in table 1.0 of BS 8206.		1	0.78%	1	1) Drawings demonstrating that the relevant building areas are within the required distances to a compliant view out. 2) Drawings demonstrating that the windows/openings account for $\geq 20\%$ of the surrounding wall area.	RIBA Stage 3	Architect	20/06/2024: Based on the nature of the building, it is likely that this credit will be achievable, as agreed within the pre-assessment meeting. One credit targeted.
Hea1.4	Visual Comfort - Internal and External Lighting Levels, Zoning and Control	Internal and external lighting levels, zoning and control	One credit where: Internal lighting 8 Internal lighting in all relevant areas of the building is designed to provide illuminance (lux) levels and colouring rendering index in accordance with the SLL Code for Lighting 2012 (33) and any other relevant industry standard. Internal lighting should be appropriate to the tasks undertaken, accounting for building user concentration and comfort levels. 9 For areas where computer screens are regularly used, the lighting design complies with CIBSE Lighting Guide 7 (34) sections 2.4, 2.13 to 2.15, 2.20, and 6.10 to 6.20. This gives recommendations highlighting: a Limits to the luminance of the luminaires to avoid screen reflections. (Manufacturers' data for the luminaires should be sought to confirm this.) b Any area where a surface is used to reflect light in to a space, such as up lighting, the recommendations refer to the luminance of the lit ceiling rather than the luminaire; a design team calculation is usually required to demonstrate this. c Recommendations for direct lighting, ceiling illuminance, and average wall illuminance. External lighting 10 All external lighting located within the construction zone is specified in accordance with BS 5489-1:2013 Code for the practice for the design of road lighting. Lighting of roads and public amenity areas (35) and BS EN 12464-2:2014 (36) Light and lighting - Lighting of work places - Part 2: Outdoor work places. External lighting should provide illuminance levels that enable users to perform outdoor visual tasks efficiently and accurately, especially during the night. 11 Where no external light fittings are specified (either separate from or mounted on the external building façade or roof), the criteria relating to external lighting do not apply and the credit can be awarded on the basis of compliance with criteria 8 – 9.c above. Zoning and occupant control 12 Internal lighting is zoned to allow for occupant control. Zoning is in accordance with the criteria below for relevant areas present within the building: a In office areas, zones of no more than four workplaces b Workstations adjacent to windows or atria and other building areas separately zoned and controlled c Seminar and lecture rooms: zoned for presentation and audience areas d Library spaces: separate zoning of stacks, reading and counter areas e Teaching space or demonstration area f Whiteboard or display screen g Auditoria: zoning of seating areas, circulation space and lectern area h Dining, restaurant, café areas: separate zoning of servery and seating or dining areas i Retail: separate zoning of display and counter areas		1	0.78%	1	1) Specification confirming compliance with the relevant CIBSE, BS and zoning requirements. 2) Marked up drawings confirming the zoning and control of internal and external lighting.	RIBA Stage 3	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, with it anticipated that the MEP engineer can incorporate this as part of their appointment and will be included in design. One credit targeted.
Hea2.1	Indoor Air Quality - IAQP	Prerequisite - Indoor air quality (IAQ) plan	Prerequisite: A site-specific indoor air quality plan has been produced in accordance with Guidance Note 6 (GN06). The objective of the plan is to facilitate a process that leads to design, specification and installation decisions and actions that minimise indoor air pollution during occupation of the building. The indoor air quality plan must consider the following: 1.a: Removal of contaminant sources 1.b: Dilution and control of contaminant sources, including: 1.b.i Air quality requirements of specialist areas such as laboratories, where present 1.c: Procedures for pre-occupancy flush out and purge ventilation 1.d: Third party testing and analysis 1.e: Maintaining good indoor air quality in-use 1.f: Any relevant local authority plans or policies (for example, Air Quality Management Areas or Local Air Quality Action Plans)		-	0.00%	Pre-requisite	1) Copy of a BREEAM compliant indoor air quality plan BREEAM Guidance Note (GN06) to be provided upon request.	RIBA Stage 3	TBC	20/06/2024: An IAQP will need to be produced to allow any credits to be targeted in Hea02, so this is to be included in the baseline scoring, as agreed within the pre-assessment meeting. Pre-requisite targeted.
Hea2.2	Indoor Air Quality - Ventilation	Ventilation	One credit where: 2 The building has been designed to minimise the indoor concentration and recirculation of pollutants in the building as follows: 2.a: Provide fresh air into the building in accordance with the criteria of the relevant standard for ventilation 2.b: Ventilation pathways are designed to minimise the ingress and build-up of air pollutants inside the building (see Methodology) 2.c: Where present, HVAC systems must incorporate suitable filtration to minimise external air pollution, as defined in BS EN 16798-3:20171. The specified filters should achieve supply air classification of at least SUP 2. 2.d: Occupied spaces have carbon dioxide (CO₂) or air quality sensors specified in accordance with Building Regulations ADF22 and: 2.d.i In mechanically ventilated buildings or spaces, sensors are linked to the mechanical ventilation system and provide demand-controlled ventilation to the space. 2.d.ii In naturally ventilated buildings or spaces, sensors either have the ability to alert the building owner or manager when CO₂ levels exceed the recommended set point, or are linked to controls with the ability to adjust the quantity of fresh air, e.g. automatic opening windows or roof vents. 2.d.iii The total number of sensors, and the net internal area of relevant areas covered by the sensors, is reported via the BREEAM Scoring and Reporting Tool. 2.e: The ventilation strategy provides adequate ventilation rates throughout the year, including sufficient airflow rates in summer to prevent overheating and maintain required thermal comfort conditions, in accordance with: 2.e.i CIBSE AM103 (for naturally ventilated buildings) 2.e.ii CIBSE AM134 (for mixed-mode buildings)		1	0.78%	0	1) Specification confirming compliance with the relevant BS codes and ventilation requirements. 2) Marked up drawings and elevations showing the location of all intakes, extracts and sources of external pollution.	RIBA Stage 4	MEP	20/06/2024: Credit currently not incorporated within scoring strategy for a Very Good rating whilst positioning of ventilation intakes and extracts is being finalised, however the credit may be picked up at a later date if required as long BREEAM time constraints are not past. One credit not targeted.

Hea 2.3	Indoor Air Quality - Emissions from Construction Products	Emissions from construction products	Up to two credits One credit 3 Three out of the five product types meet the emission limits, testing requirements and any additional requirements listed in Table 5.11 . Where wood-based products are not one of three selected product types, all wood-based products used for internal fixtures and fittings must be tested and classified as formaldehyde E1 class as a minimum. Two Credits 4 All of the product types listed meet the emission limits, testing requirements and any additional requirements listed in Table 5.11 .		2	1.56%	1	1) Finishes schedule to be provided, confirming all products and manufacturers specified. 2) Manufacturers literature or formal letter from the manufacturer confirming VOC standards and that VOC emissions meet required levels for products listed in Design Guide.	RIBA Stage 4	Architect	20/06/2024: It is anticipated that one credit can be achieved for this criteria based on the specification of products with compliant VOC emissions and testing limits. One credit targeted.
Hea 2.4	Indoor Air Quality - Post-construction Indoor Air Quality Measurement	Post-construction indoor air quality measurement	One credit where: 5 The formaldehyde concentration in indoor air is measured post construction (but pre-occupancy) and does not exceed 100 µg/ m³ averaged over 30 minutes (World Health Organization guidelines for indoor air quality: Selected pollutants, 2010). 6 The formaldehyde sampling and analysis is performed in accordance with ISO 16000-2 and ISO 16000-3. 7 The total volatile organic compound (TVOC) concentration in indoor air is measured post construction (but pre-occupancy) and does not exceed 500 µg/ m³ over 8 hours. 8 The TVOC sampling and analysis is performed in accordance with ISO 16000-5 and ISO 16000-6 or ISO 16017-1. 9 Where levels are found to exceed these limits, the project team confirms the measures that have, or will be, undertaken in accordance with the IAQ plan, to reduce the TVOC and formaldehyde levels to within the above limits. 10 The measured concentration levels of formaldehyde (µg/ m³) and TVOC (µg/ m³) are reported, via the BREEAM Scoring and Reporting Tool.		1	0.78%	1	1) A formal letter of commitment or contractual requirements document confirming the actions that will be undertaken.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.
Hea 4.1	Thermal Comfort - Thermal modelling	Thermal modelling	One credit where: 1 Thermal modelling has been carried out using software in accordance with CIBSE AM11(78) Building Energy and Performance Modelling. 2 The software used to carry out the simulation at the detailed design stage provides full dynamic thermal analysis. For smaller and more basic building designs with less complex heating or cooling systems, an alternative less complex means of analysis may be appropriate (such methodologies must still be in accordance with CIBSE AM11). 3 The modelling demonstrates that: a For air-conditioned buildings, summer and winter operative temperature ranges in occupied spaces are in accordance with the criteria set out in CIBSE Guide A Environmental design(79), Table 1.5; or other appropriate industry standard (where this sets a higher or more appropriate requirement or level for the building type) b For naturally ventilated buildings: b.i Winter operative temperature ranges in occupied spaces are in accordance with the criteria set out in CIBSE Guide A Environmental design, Table 1.5. Or other appropriate industry standard (where this sets a higher or more appropriate requirement or level for the building type) b.ii The building is designed to limit the risk of overheating, in accordance with the adaptive comfort methodology outlined in either of the following standards as appropriate; CIBSE TMS2: The limits of thermal comfort: avoiding overheating in European buildings(80) or CIBSE TMS9: Design methodology for the assessment of overheating risk in homes. 4 For air-conditioned buildings, the PMV (predicted mean vote) and PPD (predicted percentage of dissatisfied) indices based on the above modelling are reported via the BREEAM assessment scoring and reporting tool.		1	0.78%	1	1) CIBSE AM 11 full dynamic thermal comfort study results confirming that the building complies with CIBSE Guide A Environmental design, Table 1.5 and CIBSE TMS2 2) Resultant PMV (predicted mean vote) and PPD (predicted percentage of dissatisfied) indices.	RIBA Stage 4	TBC	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. To be confirmed if MEP can deliver this, or if additional appointment will be necessary. One credit targeted.
Hea 4.2	Thermal Comfort - Design for Future Thermal Comfort	Design for future thermal comfort	One credit where: 5. Criteria 1 to 4 are achieved. 6. The thermal modelling demonstrates that the relevant requirements set out in criteria 3 are achieved for a projected climate change environment. 7. Where thermal comfort criteria are not met for the projected climate change environment, the project team demonstrates how the building has been adapted, or designed to be easily adapted in future using passive design solutions in order to subsequently meet the requirements under criterion 6. 8. For air conditioned buildings, the PMV and PPD indices based on the above modelling are reported via the BREEAM assessment scoring and reporting tool.		1	0.78%	1	1) CIBSE AM 11 full dynamic thermal comfort study results confirming that the building complies with the above credit but also can accommodate the expected effects of climate change. 2) Design memo demonstrating how the building can be easily adapted easily adapted in future using passive design solutions in order to subsequently meet the requirements.	RIBA Stage 4	TBC	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. To be confirmed if MEP can deliver this, or if additional appointment will be necessary. One credit targeted.
Hea 4.3	Thermal Comfort - Thermal Zoning and Controls	Thermal zoning and controls	One credit where: 9.Criteria 1 to 4 are achieved. 10.The thermal modelling analysis (undertaken for compliance with criteria 1 to 4) has informed the temperature control strategy for the building and its users. 11.The strategy for proposed heating/cooling system(s) demonstrates that it has addressed the following: a.Zones within the building and how the building services could efficiently and appropriately heat or cool these areas. For example consider the different requirements for the central core of a building compared with the external perimeter adjacent to the windows. b.Where specified, any new local cooling or heating services (or changes to existing services) are designed to ensure they do not conflict with core services (e.g. conflicts between two separate cooling systems, conflicts between core heating and locally provided cooling systems). c.The degree of occupant control required for these zones, based on discussions with the end user (or alternatively building type or use specific design guidance, case studies, feedback) considers: i.User knowledge of building services ii.Occupancy type, patterns and room functions (and therefore appropriate level of control required) iii.How the user is likely to operate or interact with the system(s), e.g. are they likely to open windows, access thermostatic radiator valves (TRV) on radiators, change air-conditioning settings etc. iv.The user expectations (this may differ in the summer and winter) and degree of individual control (i.e. obtaining the balance between occupant preferences, for example some occupants like fresh air and others dislike drafts). d.How the proposed systems will interact with each other (where there is more than one system) and how this may affect the thermal comfort of the building occupants. e.The need or otherwise for an accessible building user actuated manual override for any automatic systems.		1	0.78%	1	1) Plans/ schematics showing the provision and location of thermal controls within relevant areas. 2) MEP specification confirming criteria.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Requires Hea4.1 to be met in order to be achieved. One credit targeted.

Hea5	Acoustic Performance	Acoustic Performance	Up to three credits where: 1 The building meets the appropriate acoustic performance standards and testing requirements defined in the relevant table below. These tables define criteria for the acoustic principles of: a Sound insulation b Indoor ambient noise level c Room acoustics. OR 2 A suitably qualified acoustician (SQA) is appointed to define a bespoke set of performance requirements for all function areas in the building. The bespoke performance requirements use the three acoustic principles defined in criterion Hea 05 Acoustic performance - Criterion 1 above, setting out the performance requirements for each and the testing regime required.		4	3.11%	4	1) Acoustician's report confirming early design advice to meet the required performance standards, and the design is capable achieving the relevant acoustic performance criteria. 2) A formal letter of commitment or specification from the design team confirming the recommendations made by the Acoustician will be implemented to achieved the performance standards. 3) A copy of the Acoustician's CV to confirm they meet the BRE's definition of a Suitably Qualified Acoustician	RIBA Stage 4	Acoustician	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Acoustician to be appointed Four credits targeted.
Hea6	Security - Security of Site and Building	Security of site & building	One credit where: 1 A Suitably Qualified Security Specialist (SQSS) conducts an evidence-based Security Needs Assessment (SNA) during or prior to Concept Design (RIBA Stage 2 or equivalent). The purpose of the SNA will be to identify attributes of the proposal, site and surroundings which may influence the approach to security for the development . 2 The SQSS develops a set of security controls and recommendations for incorporation into the proposals. Those controls and recommendations shall directly relate to the threats and assets identified in the preceding SNA. 3 The controls and recommendations shall be incorporated into proposals and implemented in the as-built development. Any deviation from those controls and recommendations shall be justified and agreed with the SQSS.		1	0.78%	0	1) Security Needs Assessment, covering minimum content requirements as per BREEAM criteria 2) A copy of the Security Specialist's CV to confirm they meet the BRE's definition of a Suitably Qualified Security Specialist. 3) Design drawings/ specifications confirming implementation of the SQSS's recommendations.	RIBA Stage 2	Security Consultant	20/06/2024: Credit excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. Credit not targeted.
Hea7.1	Safe and Healthy Surroundings - Safe Access	Safe Access	One credit where: Where external site areas form part of the assessed development the following apply: 1. Dedicated and safe cycle paths are provided from the site entrance to any cycle storage, and connect to off-site cycle paths where applicable. 2. Dedicated and safe footpaths are provided on and around the site providing suitable links for the following: a: The site entrance to the building entrance, b: Car parks (where present) to the building entrance c: The building to outdoor space d: Connecting to off-site paths where applicable. 3. Pedestrian drop-off areas are designed off, or adjoining to, the access road and should provide direct access to other footpaths. Where vehicle delivery access and drop-off areas form part of the assessed development, the following apply: 4. Delivery areas are not accessed through general parking areas and do not cross or share the following: a: pedestrian and cyclist paths b: outside amenity areas accessible to building users and general public. 5. There is a dedicated parking or waiting area for goods vehicles with appropriate separation from the manoeuvring area and staff and visitor car parking. 6. Parking and turning areas are designed for simple manoeuvring according to the type of delivery vehicle likely to access the site, thus avoiding the need for repeated shunting.		1	0.78%	1	1) Design drawings demonstrating that the site meets the safe access requirements. 2) Specification / letter of commitment confirming that the lighting will be in accordance with the lighting standards detailed in Hea 01 and, where relevant, BS 5489-1:2013 Lighting of roads and public amenity areas. 3) Completed and signed NCN checklist for any cycle lanes to be included in the design. -	RIBA Stage 4	Architect	20/06/2024: Credit included in the baseline scoring with the provision of dedicated pathing, as agreed within the pre-assessment meeting. Vehicle delivery is expected to only be light goods vehicles. One credit targeted.
Hea7.2	Safe and Healthy Surroundings - Outside Space	Outside Space	One credit where: 7 There is an outside space providing building users with an amenity area. The space is of an appropriate size to provide enough amenity for the predicted number of building users during coffee or lunch breaks to gather, socialise, relax and connect with the natural environment. The space is predominantly intended for building staff, but can be used by other building users where relevant and beneficial to the building users. The outside space must: a be an outdoor landscaped area, for example a garden, balcony or terrace; the majority of the space should be open to the sky b have appropriate seating areas and be non-smoking, c be located to ensure it is accessible to all building users and avoids areas that will have disturbances from sources of noise (e.g. building services, car parks, busy roads, delivery areas etc.).		0	0.00%	0	1) Plans / design drawings confirming provision of suitably sized outside space for building users.	RIBA Stage 4	Architect	Credit not applicable.

Energy											
Ene 1.1	Reduction of Energy Use and CO2 Emissions	Energy performance	Up to 9 credits can be awarded for buildings designed to minimise operational energy demand, primary energy consumption and CO2 emission. Credit are awarded based on the Energy Performance Ratio for New Construction (EPRNC) using BREEAM Ene 01 calculator. The calculation is determined using performance data from the approved building energy calculation software.		9	5.76%	2	1) Final as-designed BRUKL Input (.inp) and Output (pdf) report. 2) Details of the Energy Assessor's Accreditations.	RIBA Stage 4	Verte	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. The Stage 2 BRUKL will help clarify the scoring scenario, but at least 2 credits should be achievable, with more possible depending on best practice measures implemented. Two credits targeted.
Ene1.2	Reduction of Energy Use and CO2 Emissions - Prediction of operational energy consumption	Prediction of operational energy consumption	Up to 4 credits 2 Achieve criterion 2 in Ene 04 Low carbon design. 3 Estimate the occupancy, energy use for unregulated energy loads and management practices. 4 Undertake detailed energy modelling to predict the building energy consumption. 5 Undertake sensitivity analysis to determine the factors that can significantly impact building energy consumption. 6 Based on the results of the sensitivity analysis, and in discussion with the project team, the client and the prospective occupier devise scenarios to explore how high impact factors might influence the building energy consumption. 7 Undertake scenario modelling and use these findings to inform improvements to design of the building and to operational, maintenance, and handover strategies. 8 Determine an energy target for the building based on the results of the scenario modelling. 9 At the post-construction stage, the scenario modelling should be repeated to reflect the post construction building specification and, if necessary, adjust the energy target.		4	2.56%	0	1) Meeting minutes / similar documentation to demonstrate when collaborations began, what was discussed for the workshop focusing on operational energy performance. 2) Report with predicted energy consumption values, design assumptions, input data and risk assessments reported as detailed in the BREEAM manual. 3) Details of the Energy Assessor's Accreditations	RIBA Stage 4	MEP	20/06/2024: Credit currently not incorporated within scoring strategy for a Very Good rating due to difficulty achieving Ene04, however the credit may be picked up at a later date if required as long BREEAM time constraints are not past. To be decided if a prediction of operational energy consumption piece is to be appointed. Four credits not targeted.
Ene 2.1	Energy Monitoring - Sub-metering of End Use Categories	Sub-metering of end-use categories	One credit where: 1 Install energy metering systems so that at least 90% of the estimated annual energy consumption of each fuel is assigned to the end-use categories (see Methodology below). 2 Meter the energy consumption in buildings according to the total useful floor area: a If the area is greater than 1,000 m², by end-use category with an appropriate energy monitoring and management system. b If the area is less than 1,000 m², use either: b.i an energy monitoring and management system or b.ii separate accessible energy sub-meters with pulsed or other open protocol communication outputs, for future connection to an energy monitoring and management system. 3 Building users can identify the energy consuming end uses, for example through labelling or data outputs.	One Credit	1	0.64%	1	1) Specification / metering schematic / drawings confirming metering of relevant systems. 2) Written confirmation of the systems that have been metered using a pulsed output meter, including: a) Space heating b) Domestic hot water heating c) Humidification* d) Cooling* e) Ventilation, i.e. fans (major)* f) Pumps g) Lighting h) Small power i) Renewable or low carbon systems (separately) j) Controls k) Other major energy consuming systems or plant. e.g. lifts	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, with MEP Engineer anticipating that requirements will be met as part of the design. To continue review of sub metering with MEP team as design develops. One credit targeted.
Ene2.2	Energy Monitoring - Sub-metering of High Energy Load and Tenancy Areas	Sub-metering of high energy load and tenancy areas	One credit where: 4 Monitor a significant majority of the energy supply with: a An accessible energy monitoring and management system for: a.i tenanted areas or a.ii relevant function areas or departments in single occupancy buildings. OR b Separate accessible energy sub-meters with pulsed or other open protocol communication outputs for future connection to an energy monitoring and management system for: b.i tenanted areas or b.ii relevant function areas or departments in single occupancy buildings. 5 Sub-meter per floor plate in large single occupancy or single-tenancy buildings with one homogeneous function, for example hotel bedrooms, offices.		1	0.64%	1	1) Specification / metering schematic / drawings confirming metering of relevant systems. 2) Written confirmation of the systems that have been metered using a pulsed output meter, including: a) Space heating b) Domestic hot water heating c) Humidification* d) Cooling* e) Ventilation, i.e. fans (major)* f) Pumps g) Lighting h) Small power i) Renewable or low carbon systems (separately) j) Controls k) Other major energy consuming systems or plant. e.g. lifts	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, with MEP Engineer anticipating that requirements will be met as part of the design. To continue review of sub metering with MEP team as design develops. One credit targeted.
Ene3	External Lighting	External Lighting	One credit where: 1. The building has been designed to operate without the need for external lighting (which includes on the building, signs and at entrances). OR alternatively, where the building does have external lighting, one credit can be awarded as follows: 2 External light fittings within the construction zone with: a Average initial luminous efficacy of not less than 70 luminaire lumens per circuit Watt b Automatic control to prevent operation during daylight hours c Presence detection in areas of intermittent pedestrian traffic.		1	0.64%	1	1) Specification confirming compliance with the relevant energy efficient lighting and lighting control criteria. 2) Drawings showing the extent of the external lighting and the type of fittings. 3) Manufacturers literature/datasheets for the specified external light fittings (if known at this stage).	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Assumed there will be external lighting, so will need to have average luminous efficacy of at least 70 luminaire lumens, along with presence and daylight detection. One credit targeted.
Ene4.1	Low Carbon Design - Passive Design	Passive design	One credit where: 1 Achieve the first credit Assessment scope - One credit - Thermal modelling to demonstrate that the building design delivers appropriate thermal comfort levels in occupied spaces. 2 The project team analyses the proposed building design and development during Concept Design to identify opportunities for the implementation of passive design measures. 3 Implement passive design measures to reduce the total heating, cooling, mechanical ventilation, lighting loads and energy consumption in line with the passive design analysis findings. 4 Quantify the reduced total energy demand and carbon dioxide (CO₂) emissions resulting from the passive design measures.		2	1.28%	0	1) A copy of the final Passive Design Analysis report 2) Drawings / specifications demonstrating the inclusion of any passive design measures resulting from the findings of the passive design analysis. 3) Calculations quantifying the reduction of the total heating, cooling, mechanical ventilation and lighting loads and energy consumption in line with the findings of the passive design analysis as a result of implementing passive design measures.	RIBA Stage 2	MEP	20/06/2024: Credit currently not incorporated within scoring strategy for a Very Good rating due to late consideration and unlikely to have appropriate documentation, however the credit may be picked up at a later date if required as long BREEAM time constraints are not past. Action: To confirm if appointment will be made, as needs to happen in RIBA Stage 2 to achieve credit. Will need Hea04 to be picked up at a later stage to complete credit requirements. One credit not targeted.
Ene4.2	Low Carbon Design - Free Cooling	Free cooling	One credit where: 5 Achieve the passive design analysis credit. 6 Include a free cooling analysis (see Free cooling analysis on the next page) in the passive design analysis carried out under criterion 2. 7 Identify opportunities for the implementation of free cooling solutions. 8 The building is naturally ventilated or uses any combination of the free cooling strategies listed in Free cooling analysis on the next page.		0	0.00%	0	1) Above credit achieved, with Report including free cooling analysis - as per design stage	RIBA Stage 4	MEP	Credit not applicable.

Ene4.3	Low Carbon Design - L2C Feasibility Study	Low and zero carbon technologies	One credit where: 9 An energy specialist completes a feasibility study by the end of Concept Design. 10 Establish the most appropriate recognised local (on-site or near-site) low or zero carbon (L2C) energy sources for the building or development (see Scope of L2C systems and how they are assessed on page 144), based on the feasibility study. 11 Specify local L2C technologies for the building or development in line with the feasibility study recommendations. 12 Quantify the reduced regulated carbon dioxide (CO2) emissions resulting from the feasibility study.		1	0.64%	1	1) Final BREEAM compliant L2C feasibility study. 2) BRUKL Output report for designed and standard case building and associated calculations to demonstrate the reduction in CO2 emissions. 3) Drawings / specifications demonstrating the inclusion of the recommended L2C technology.	RIBA Stage 2	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Energy analysis to be provided confirming the requirements are met. One credit targeted.
Ene5	Energy efficient cold storage		One credit where 1 Design, install and commission the refrigeration system: 1.a: In accordance with the Code of Conduct for carbon reduction in the refrigeration retail sector1 (see Additional information) and BS EN 378-2:20162. 1.b: Using robust and tested refrigeration systems or components included on the Enhanced Capital Allowance (ECA) Energy Technology Product List (ETPL)3 or an equivalent list (see Components on the ECA Energy Technology Product List for a list of components). 2 Commission the refrigeration plant in compliance with the commissioning criteria in BREEAM issue Man 04 Commissioning and handover. One credit where 4. Demonstrate a saving in indirect greenhouse gas emissions (CO2-eq) from the installed refrigeration system over the course of its operational life.		2	1.28%	0	1) Specification or written confirmation that the products will be procured in accordance with the requirements. 2) Manufacturer datasheet for the products to be procured (if known).	RIBA Stage 4	MEP	20/06/2024: Credit currently not incorporated within scoring strategy for a Very Good rating based on uncertainty around cold storage specifications at this stage, however the credit may be picked up at a later date if required as long BREEAM time constraints are not past. To be decided established as the design progresses whether the cold storage requirements can be met. One credit not targeted.
Ene6.1	Energy Efficient Transport Systems - Energy Consumption	Energy consumption	One credit where 1 For specified lifts, escalators or moving walks (transportation types): a Analyse the transportation demand and usage patterns for the building to determine the optimum number and size of lifts, escalators or moving walks b Calculate the energy consumption in accordance with BS EN ISO 25745 Part 2(127) or Part 3(128) for one of the following: b.i At least two types of system for each transportation type required OR b.ii An arrangement of systems, for example for lift systems, hydraulic, traction, machine room-less lift (MRL) OR b.iii A system strategy that is ‘fit for purpose’ c Consider the use of regenerative drives, subject to the requirements in Regenerative drives below d Specify the transportation system with the lowest energy consumption.		1	0.64%	1	1) The professional study of transportation analysis and energy consumption comparison of systems/ strategies. 2) Specification confirming implementation of lowest energy consuming lift system/strategy.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is confirmed when transport analysis will be conducted. One credit targeted.
Ene6.2	Energy Efficient Transport Systems - Energy Efficient Features	Energy efficient features	Second credit where 2 Achieve criterion 1 . One credit - Lifts 3 Specify the following three energy efficient features for each lift: a A standby condition for off-peak periods b The lift car lighting and display lighting provides an average luminous efficacy across all fittings in the car of > 70 luminaire lumens per circuit Watt c Use of a drive controller capable of variable speed, variable-voltage, and variable-frequency (VVVF) control of the drive motor. 4 Specify regenerative drives where their use is demonstrated to save energy. One credit - Escalators or moving walks 5 Specify at least one of the following for each escalator or moving walk: a A load-sensing device that synchronises motor output to passenger demand through a variable speed drive OR b A passenger-sensing device for automated operation (auto walk), so the escalator operates in auto start mode when there is no passenger demand.		1	0.64%	1	1) Specification confirming at least three energy efficient features of the specified lift. 2) Manufacturer datasheet for the specified lift demonstrating the energy efficient features.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. It is assumed only lifts will be specified, but requires Ene6.1 to be achieved to be targeted. One credit targeted.
Ene8	Energy Efficient Equipment		Two credits 1 Identify the building's unregulated energy consuming loads. Estimate their contribution to the total annual unregulated energy consumption of the building, assuming a typical or standard specification. 2 Identify the systems or processes that use a significant proportion of the total annual unregulated energy consumption of the building. 3 Demonstrate a meaningful reduction in the total annual unregulated energy consumption of the building. Table 6.5 below lists some examples of significant contributors to unregulated energy consumption, and the associated criteria. If additional significant contributors, not listed in the table, will be specified, the design team should justify how a meaningful reduction will be achieved for these contributors.		2	1.28%	2	1) Specification or written confirmation that the products will be procured in accordance with the requirements. 2) Manufacturer datasheet for the products to be procured (if known).	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, as likely will only be a small amount of unregulated energy consumption that will require covering. This will be likely be laundry, domestic appliances, and potentially kitchen and catering facilities as well. Two credits targeted.

Transport											
Tra1.1	Transport Assessment and Travel Plan	Transport assessment and Travel Plan	Up to two credits where 1 During the feasibility and design stages, develop a travel plan based on a site-specific travel assessment or statement. 2 The site-specific travel assessment or statement covers as a minimum: a Existing travel patterns and opinions of existing building or site users towards cycling and walking, identifying constraints and opportunities, if relevant b Travel patterns and transport impact of future building users c Current local environment for walkers and cyclists (accounting for visitors who may be accompanied by young children) d Reporting of the number and type of existing accessible amenities, see Table 7.1 below, within 500m of the site e Disabled access (accounting for varying levels of disability and visual impairment) f Calculation of the existing public transport Accessibility Index (AI), see Methodology on the next page g Current facilities for cyclists 3 The travel plan includes proposals to increase or improve sustainable modes of transport and movement of people and goods during the building's operation and use, see Methodology on the next page. 4 If the occupier is known, involve them in the development of the travel plan. 5 Demonstrate that the travel plan will be implemented post construction and be supported by the building's management in operation.		2	1.67%	2	1) A copy of a BREEAM compliant Travel Assessment and Plan for the building. 2) Written confirmation and/or drawings demonstrating the measures outlined in the plan will be implemented.	RIBA Stage 2	Transport Consultant	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Caneparo updating existing transport assessment and travel plan. Two credits targeted.
Tra 2.1	Sustainable Transport Measures		Up to ten credits where: 1 Achieve the Tra 01 Transport assessment and travel plan credits. 2 Identify the sustainable transport measures applicable to the site: * The site achieves and AI >8. * The site achieves an overall increase in AI through negotiation with local public transport companies. * Provision of a public transport information system. * Provision of electric car charging points. * Development of a car share scheme. * Consultation with the Local Authority with improvements made to the local cycle/ pedestrian network. * Installation of compliant cycle storage spaces. * Provision of compliant cyclist facilities. * At least 3 existing amenities are available to Building Users. * The development will provide additional amenities to the area. 3 Award credits according to the Accessible Index (AI) of the project, and the total number of points achieved for the options implemented, see Table 7.3 within the BREEAM manual.		10	8.33%	4	1) Specification / drawings / written confirmation demonstrating the sustainable transport measures outlined in the plan will be implemented. Letter from client or addendum added to travel plan. 2) Communication records/ Meeting minutes confirming consultation with the LA or public transport companies (public transport measures and active travel measures).	RIBA Stage 1	Transport Consultant	20/06/2024: Credits included in the baseline scoring, as agreed within the pre-assessment meeting. Caneparo have advised points can be achieved for public transport information system, cycle parking and facilities, and EV parking. Four credits targeted.
Water											
Wat 1	Water Consumption	Water Consumption	Up to five credits where: 1 Use the BREEAM Wat 01 calculator to assess the efficiency of the domestic water-consuming components. 2 Use the standard Wat 01 method (see Methodology on the facing page) to compare the water consumption (litres/person/day) for the assessed building against a baseline performance. Award BREEAM credits based upon Table 8.1 below. Where it is not possible to use the standard method, complete the assessment using the alternative Wat 01 method (see Methodology on the facing page).	One Credit	5	3.89%	3	1) Specification / sanitary schedule confirming number of fittings and water efficiency figures for the following: a) WCs b) Urinals c) Taps (wash-hand basins and, where specified, kitchen taps and waste disposal unit) d) Showers e) Baths f) Domestic dishwasher g) Domestic washing machines 2) Manufacturer datasheet confirming the water efficiency figures in the specification can be delivered. 3) Documentation/Specification confirming the details of rainwater harvesting system (if specified).	RIBA Stage 4	Architect	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Credits scoring to be reviewed as sanitary fittings are specified, but the below flow rates would achieve the baseline scoring scenario. Sanitary ware schedule confirming the installed fittings / controls: WC: effective WC flush volume 3.7.5L/flush WHB: 5L/min at 3bar Shower: 6L/min Taps (kitchenette): 6L/min Dishwasher: 12L/use Washing machines: 40litres/use Three credits targeted.
Wat 2	Water Monitoring	Water monitoring	One credit where: 1 Specify a water meter on the mains water supply to each building. This includes instances where water is supplied via a borehole or other private source. 2 For water-consuming plant or building areas consuming 10% or more of the building's total water demand: a Fit easily accessible sub-meters OR b Install water monitoring equipment integral to the plant or area. 3 For each meter (main and sub): a Install a pulsed or other open protocol communication output AND b Connect it to an appropriate utility monitoring and management system, e.g. a building management system (BMS), for the monitoring of water consumption. If there is no BMS system in operation at Post- Construction stage, award credits provided that the system used enables connection when the BMS becomes operational. 4 In buildings with swimming pools, or large water tanks and aquariums, fit separate sub-meters on the water supply of the above and any associated changing facilities (toilets, showers etc.) irrespective of their water consumption levels. 5 In buildings containing laboratories, fit a separate water meter on the water supply to any process or cooling loop for 'plumbed-in' laboratory process equipment, irrespective of their water consumption levels.	Criterion 1	1	0.78%	1	1) Specification confirming the provision of a water meter and its connection to BMS. 2) Design plan confirming location of water meter and BMS display. 3) Written confirmation whether water consuming plant or areas consume 10% or more of the building's water use.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, with MEP being able to incorporate the requirements into their design. One credit targeted.

Wat 3.1	Water Leak Detection Leak Detection System	Leak detection system	One credit where: 1 Install a leak detection system capable of detecting a major water leak: a On the utilities water supply within the buildings, to detect any major leaks within the buildings AND b Between the buildings and the utilities water supply, to detect any major leaks between the utilities supply and the buildings under assessment. 2 The leak detection system is: a A permanent automated water leak detection system that alerts the building occupants to the leak OR an inbuilt automated diagnostic procedure for detecting leaks b Activated when the flow of water passing through the water meter or data logger is at a flow rate above a pre-set maximum for a pre-set period of time. This usually involves installing a system which detects higher than normal flow rates at meters or sub-meters. It does not necessarily require a system that directly detects water leakage along part or the whole length of the water supply system c Able to identify different flow and therefore leakage rates, e.g. continuous, high or low level, over set time periods. Although high and low level leakage rates are not specified, the leak detection equipment installed must have the flexibility to distinguish between different flow rates to enable it to be programmed to suit the building type and owner's or occupier's usage patterns. d Programmable to suit the owner's or occupier's water consumption criteria e Where applicable, designed to avoid false alarms caused by normal operation of large water consuming plant such as chillers. Where there is physically no space for a leak detection system between the utilities water meter and the building, alternative solutions can be used, provided that a major leak can still be detected.		1	0.78%	1	1) Plans/ schematics confirming the provision of a major water leak detection system. 2) MEP specification confirming criteria.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, with MEP being able to incorporate the requirements into their design. One credit targeted.
Wat 3.2	Water Leak Detection Flow Control Devices	Flow control device	One credit where: 3 Install flow control devices that regulate the water supply to each WC area or sanitary facility according to demand, in order to minimise undetected wastage and leaks from sanitary fittings and supply pipework.		1	0.78%	0	1) Drawings/ tech subs confirming the provision of solenoid valves 2) MEP specification confirming criteria.	RIBA Stage 4	MEP	20/06/2024: Credit currently not incorporated within scoring strategy for a Very Good rating due to constraints in providing flower control devices to every room, however the credit may be picked up at a later date if required as long BREEAM time constraints are not past. One credit not targeted.
Wat4.1	Water Efficient Equipment	Water efficient equipment	One credit where: 1 Identify all water demands from uses other than those listed under Assessment scope - Table 8.1 on page 189 that could be realistically mitigated or reduced. Where there is no water demand from uses other than domestic-scale, sanitary use components in the building, this issue is not applicable. 2 Identify systems or processes to reduce the relevant water demand (criterion 1 on the previous page), and establish, through either good practice design or specification, a demonstrable reduction in the total water demand of the building.		1	0.78%	1	1) Specification confirming the irrigation system is water efficient, OR 2) Written confirmation all planting will rely solely on precipitation and no irrigation systems are specified.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, with there likely to be some unregulated water demand through irrigation. One credit targeted.
Materials											
Mat1	Environmental Impacts from Construction - Building Life Cycle Assessment	Superstructure	Up to six credits – Superstructure Comparison with the BREEAM benchmark during Concept Design (offices, industrial and retail buildings only) Superstructure (offices, industrial and retail buildings). 1 During the Concept Design, demonstrate the environmental performance of the building as follows: a Carry out a building LCA on of the superstructure design using either the BREEAM Simplified Building LCA tool or an IMPACT Compliant LCA tool according to the methodology (see Methodology on page 211). b Submit the Mat 01/02 Results Submission Tool to BRE at the end of Concept Design, and before planning permission is applied for (that includes external material or product specifications). Comparison with the BREEAM benchmark during Technical Design (offices, industrial and retail buildings only) 2 During Technical Design, demonstrate the environmental performance of the building as follows: a As criterion 1.a b Submit the Mat 01/02 Results Submission Tool to BRE at the end of Technical Design. Where a project has not achieved criterion 1, criterion 2 may still be achieved. Option appraisal during Concept Design (all building types) 3 For offices, industrial and retail building types, achieve criterion 1 (except where Notes 1.0, 1.1 and 1.2 above apply). 4 During Concept Design, identify opportunities for reducing environmental impacts as follows: a Carry out building LCA options appraisal of 2 to 4 significantly different superstructure design options (applicable to the Concept Design stage, see Methodology on page 211). b Use a building LCA tool that is recognised by BREEAM (as suitable for assessing superstructure during Concept Design) according to the methodology (see Methodology on page 211). c For each design option, fulfil the same functional requirements specified by the client and all statutory requirements (to ensure functional equivalency). d Integrate the LCA options appraisal activity within the wider design decision-making process. Record this in an options appraisal summary document. e Record the following in the Mat 01/02 Results Submission Tool: The differences between the design options; the design option selected by the client to be progressed beyond Concept Design; the reasons for selecting it and the reasons for not selecting the other design options. f Submit the Mat 01/02 Results Submission Tool to BRE at the end of Concept Design, and before planning permission is applied for (that includes external material or product specifications). If the building LCA tool recognised by BREEAM and used for criteria 3 to 5 (and 6 to 9, if pursued) is not an IMPACT Compliant LCA tool and criteria 1 to 2 are applicable, then the BREEAM Simplified Building LCA tool (or an IMPACT Compliant LCA tool) shall be used for criteria 1 to 2. Options appraisal during Technical Design (all building types) 5 During Technical Design identify opportunities for reducing environmental impacts as follows:		7	7.50%	2	1) A copy of the options appraisal summary document. 2) Meeting minutes and/ or letter of acknowledgement that the LCA options appraisal summary document has been received by the design team and client. 3) Meeting minutes/ documented design development of how the LCA design options have informed the design decision-making process.	RIBA Stage 2	Verte	20/06/2024: Majority of credits excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. However, may be able to still pick up 2 credits by conducting options appraisal during technical design. Two credits targeted.
Mat2.1	Environmental Impacts from Construction - Environmental Product Declarations	Specification of products with a recognised environmental product declaration (EPD)	One credit where: 1 Specify construction products with EPD that achieve a total EPD points score of at least 20, according to the Methodology below. 2 Enter the details of each EPD into the Mat 01/02 Results Submission Tool, including the material category classification. The Mat 01/02 Results Submission Tool will verify the EPD points score and credit award.		1	1.07%	0	1) Drawings/specification confirming material build-up of elements. 2) Evidence for the Mat 01/02 Results Submission. 3) Copies of EPD certificates.	RIBA Stage 4	Architect	20/06/2024: Credit not targeted as no ability to incorporate EPDs into specifications at this stage, with specific products only likely to be chosen during RIBA Stage 4. Credit not targeted.
Mat3.1	Responsible Sourcing of Construction Products - Prerequisite	Pre-requisite Site timber	Pre-requisite 1. All timber and timber based products used on the project is ' Legally harvested and traded timber'	Criterion 1	-	0.00%	Pre-requisite	1) Specification/ Written commitments confirming that all timber will be sourced in accordance with the UK Government's Timber Procurement Policy.	RIBA Stage 4	Main Contractor	20/06/2024: Pre-requisite highlighted for inclusion within baseline scoring. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. Pre-requisite targeted.

Mat 3.2	Responsible Sourcing of Construction Products - Enabling Sustainable Procurement	Enabling sustainable procurement	One credit - Sustainable procurement plan 2 A sustainable procurement plan must be used by the design team to guide specification towards sustainable construction products. The plan must: a Be in place before Concept Design. b Include sustainability aims, objectives and strategic targets to guide procurement activities. Note: targets do not need to be achieved for the credit to be awarded but justification must be provided for targets that are not achieved. c Include a requirement for assessing the potential to procure construction products locally. There must be a policy to procure construction products locally where possible. d Include details of procedures in place to check and verify the effective implementation of the sustainable procurement plan. In addition, if the plan is applied to several sites or adopted at an organisational level it must: e Identify the risks and opportunities of procurement against a broad range of social, environmental and economic issues following the process set out in BS ISO 20400:2017		1	1.07%	0	1) A copy of a BREEAM compliant Sustainability Procurement Plan. 2) Commitment to implement Sustainable Procurement Plan	RIBA Stage 2	TBC	20/06/2024: Credit currently not incorporated within scoring strategy for a Very Good rating due to late consideration and unlikely to have appropriate documentation, however the credit may be picked up at a later date if required as long BREEAM time constraints are not past. Action: To confirm if appointment will be made, as needs to happen in RIBA Stage 2 to achieve credits. Verte can provide a fee for this service if requested. Credit not targeted.
Mat 3.3	Responsible Sourcing of Construction Products - Measuring Responsible Sourcing	Measuring responsible sourcing	Up to three credits - Responsible sourcing of materials (RSM) are responsibly sourced in accordance with the BREEAM methodology. 10% RSM points achieved - 1 credit, 20% RSM points achieved - 2 credits, 30% RSM points achieved - 3 credits. Location use categories: 1.Ceiling (including ceiling finishes), 2.Door/window, 3.Floor (including floor finishes), 4.Insulation 5.Internal partition/internal walls (including finishes), 6.Roof (including roof finishes), 7.Structure, primary and secondary, 8.External wall (e.g. cladding, lining, render, including finishes) 9.Building service, 10.Hard landscaping, 11.Other PLEASE VIEW GN Mat 03.2 PLEASE VIEW/COMPLETE Mat 03 Table		3	3.21%	1	1) Completed Mat03 Schedule confirming material build up of elements. 2) Copies of drawings, specification, product data sheets demonstrating type of proposed materials 3) Mat 03 Calculator	RIBA Stage 4	Architect	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Design team and contractor to ensure as much materials as possible as procured from responsible resourcing. This is to be implemented into the design, where applicable. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.
Mat5.1	Designing for Durability and Resilience	Designing for durability and resilience	One credit where: Protecting vulnerable parts of the building from damage. 1 Protection measures are incorporated into the building's design and construction to reduce damage to the building's fabric or materials in case of accidental or malicious damage occurring. These measures must provide protection against: a Negative impacts of high user numbers in relevant areas of the building (e.g. corridors, lifts, stairs, doors etc.). b Damage from any vehicle or trolley movements within 1m of the internal building fabric in storage, delivery, corridor and kitchen areas. c External building fabric damage by a vehicle. Protection where parking or manoeuvring areas are within 1 metre of the building façade and where delivery areas or routes are within 2 metres of the façade, i.e. specifying bollards or protection rails. d Potential malicious damage to building materials and finishes, in public and common areas where appropriate. Protecting exposed parts of the building from material degradation 2 Key exposed building elements have been designed and specified to limit long and short term degradation due to environmental factors. This can be demonstrated through one of the following: a The element or product achieving an appropriate quality or durability standard or design guide, see Table 9.14 on the next page. If none are available, use BS 7543:2015(168) as the default appropriate standard OR b A detailed assessment of the element's resilience when exposed to the applicable material degradation and environmental factors. 3 Include convenient access to the roof and façade for cost-effective cleaning, replacement and repair in the building's design. 4 Design the roof and façade to prevent water damage, ingress and detrimental ponding.		1	1.07%	1	1) Design plan marked-up to confirm internally and externally: a. areas of vulnerability b. protection from the effects of high pedestrian traffic c. protection against any internal vehicular/ trolley movement d. protection against or prevention from any potential vehicular collision where vehicular parking and manoeuvring occurs. e. protection against environmental degradation 2) Design memo / plan confirming the types of environmental degradation the building may be susceptible to, the areas most vulnerable to this degradation and the measures taken to protect those areas.	RIBA Stage 4	Architect	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. One credit targeted.
Mat6.1	Material Efficiency	Material efficiency	One credit where: 1 At the Preparation and Brief and Concept Design stages, set targets and report on opportunities and methods to optimise the use of materials. These must be done for each of the following stages. See Table 9.15 below: a Preparation and Brief b Concept Design c Developed Design d Technical Design e Construction 2 Develop and record the implementation of material efficiency, see Table 9.15 below, during: a Developed Design b Technical Design c Construction 3 Report the targets and actual material efficiencies achieved. PLEASE VIEW GN Mat 06		1	1.07%	0	1) Material efficiency design notes / report revisions for each key RIBA stage reached to date, identifying opportunities for and appropriate measures taken to optimise the use of materials in building design, procurement, construction, maintenance and end of life. 2) Specifications / drawings of implementing measures for optimising the use of materials.	RIBA Stage 1	Architect	20/06/2024: Credit likely already missed due to late involvement. Credit not targeted.

Waste											
Wst 1.1	Construction Waste Management - Pre-demolition Audit	Pre-demolition audit	1. Complete a pre-demolition audit of any existing buildings, structures or hard surfaces being considered for demolition. The audit must: a. Be carried out at Concept Design stage (RIBA Stage 2) by a competent person prior to strip-out or demolition works. b. Guide the design, consider materials for reuse and set targets for waste management c. Engage all contractors in the process of maximising high grade reuse and recycling opportunities 2. Make reference to the audit in the resource management plan (RMP). 3. Compare actual waste arisings and waste management routes used with those forecast and investigate significant deviations from planned targets.		1	0.60%	0	1) Where the development involves demolition, provide a copy of pre-demolition audit including: a. Identification and quantification of the key materials present b. Potential applications and issues for the reuse and recycling of the key materials c. Opportunities for reuse and recycling d. Identification of local reproprocessors or recyclers e. Identification of overall recycling targets f. Identification of reuse targets g. Identification of overall landfill diversion rate for key materials.	RIBA Stage 2	TBC	20/06/2024: Credit excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. Credit not targeted.
Wst 1.1	Construction Waste Management - Construction Resource Efficiency	Construction resource efficiency	Up to three credits - Construction resource efficiency 4. Prepare a compliant Resource Management Plan (RMP) covering: a Non-hazardous waste materials (from on-site construction and dedicated off-site manufacture or fabrication), including demolition and excavation waste b Accurate data records on waste arisings and waste management routes. 5. The amount of non-hazardous construction (excluding demolition and excavation) waste (m³/100m² or tonnes 100m²) generated on site by the development is the same as or better than good or best practice levels. This should be shown in a BREEAM compliant Site Waste Management Plan. One credit for <13.3 m³ per 100m² (gross internal floor area) Two credits for <7.5m³ per 100m² Three credits for < 3.4m³ per 100m²		3	1.80%	1	1) Copy of the prelims including the requirements. 2) Written commitment to produce a BREEAM compliant Resource Management Plan / Site Waste Management Plan containing: - the target benchmark for resource efficiency as per the figures noted - procedures and commitments for minimising non-hazardous waste in line with the benchmark - procedures for minimising hazardous waste - procedures for monitoring, measuring and report hazardous and non-hazardous site waste - Monthly reporting of all construction waste data throughout the project checked against what would be expected based on the stage of the project, invoices - procedures for sorting, reusing and recycling construction waste into defined waste groups either on site or through a licensed external contractor - the individual responsible for implementing this policy.	RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, as it is anticipated the amount of non-hazardous construction waste can be at least <13.3 m³ per 100m² (gross internal floor area). It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.
Wst 1.2	Construction Waste Management - Construction Resource Efficiency	Diversion of resources from landfill	Diversion of resources from landfill One credit where: 6. Meet, where applicable, the diversion from landfill benchmarks in Table 10.2 for non-hazardous construction waste and demolition and excavation waste generated. For one credit, 80% by volume or 90% by tonnage non-hazardous construction and demolition waste generated by the development will be diverted from landfill and reused or recycled. 7. Sort waste materials into separate key waste groups as per Table 10.3 on page 247, either on-site or through a licensed contractor for recovery.		1	0.60%	1		RIBA Stage 4	Main Contractor	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, as it is anticipated that 80% by volume or 90% by tonnage non-hazardous construction and demolition waste generated by the development will be diverted from landfill and reused or recycled. It is recommended that these requirements are incorporated into a BREEAM Contractors Prelims specification for inclusion in tender documentation to ensure compliance. One credit targeted.
Wst2.1	Use of Recycled and Sustainable Sourced Aggregates	Project Sustainable Aggregate Points	Prerequisite 1 If demolition occurs on site, to encourage the reuse of site-won material on site, complete a pre-demolition audit of any existing buildings, structures or hard surfaces in accordance with Assessment scope - Criterion 1. One credit - Project Sustainable Aggregate Points 2 Identify all aggregate uses and types on the project Table 10.5 and Table 10.6 on the next page 3 Determine the quantity in tonnes for each identified use and aggregate type. 4 Identify the region in which the aggregate source is located. 5 Calculate the distance in kilometres travelled by all aggregates by transport type. 6 Enter the information into the BREEAM Wst 02 calculator to calculate the Project Sustainable Aggregate points. The corresponding number of BREEAM credits will be awarded as shown in Table 10.4		1	0.60%	0	1) Evidence to complete copy of the Wst 02 calculator . 2) Specifications/drawings of implementing of sustainable aggregate. 3) Manufacturers details and/or datasheets confirming the type and source of the aggregate.	RIBA Stage 4	Structural	20/06/2024: Credit was agreed not to be targeted due to likely lack of sufficient recyclable aggregates. One credit not targeted.
Wst 3	Operational Waste	Operational Waste	One credit where: 1 Provide a dedicated space for the segregation and storage of operational recyclable waste generated. The space is: a Clearly labelled, to assist with segregation, storage and collection of the recyclable waste streams b Accessible to building occupants or facilities operators for the deposit of materials and collections by waste management contractors c Of a capacity appropriate to the building type, size, number of units (if relevant) and predicted volumes of waste that will arise from daily or weekly operational activities and occupancy rates. 2 For consistent and large amounts of operational waste generated, provide: a Static waste compactors or balers; situated in a service area or dedicated waste management space b Vessels for composting suitable organic waste OR adequate spaces for storing segregated food waste and compostable organic material for collection and delivery to an alternative composting facility c A water outlet provided adjacent to or within the facility for cleaning and hygiene purposes where organic waste is to be stored or composted on site.		1	0.60%	1	1) Design plans confirming location and area/ volume of storage space/ storage bins. 2) Written confirmation that the central bin store is adequately sized for the anticipated volume of waste and waste collection arrangement, is clearly labelled for recycling, is accessible to residents/ facilities management and in a location with good vehicular access. 3) Written confirmation that internal recyclable waste bins of appropriate capacity will be provided in a compliant communal space (additional to general waste bins) 4) Written confirmation that food waste caddies and information leaflets will be provided in kitchen area or compliant communal space.	RIBA Stage 4	Architect	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Will need ~15m2 of recyclable waste storage to comply based on the size of the project. One credit targeted.
Wst 5	Adaptation to Climate Change	Structural and fabric resilience	One credit where: 1 Conduct a climate change adaptation strategy appraisal using: a A systematic risk assessment to identify the impact of expected extreme weather conditions arising from climate change on the building over its projected life cycle. The assessment covers the installation of building services and renewable systems, as well as structural and fabric resilience aspects and includes (see Methodology below): a.i Hazard identification a.ii Hazard assessment a.iii Risk estimation a.iv Risk evaluation a.v Risk management. 2 Develop recommendations or solutions based on the climate change adaptation strategy appraisal, before or during Concept Design, that aim to mitigate the identified impact. 3 Provide an update during Technical Design demonstrating how the recommendations or solutions proposed at Concept Design have been implemented where practical and cost effective. Omissions have been justified in writing by the assessor. PLEASE VIEW GN Wst 05		1	0.60%	0	1) A copy of the Climate change adaptation strategy appraisal report to identify and evaluate the impact on the building over its projected life cycle from expected extreme weather conditions arising from climate change and, where feasible, mitigate against these impacts. 2) Evidence to demonstrate how the findings of the Climate Change Adaptation Strategy Appraisal has influenced the design and measures that have been taken to mitigate the impact of the expected effects (e.g. specification documents)	RIBA Stage 2	Architect	20/06/2024: Credit excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. Credit not targeted.

Wst6.1	Design for Disassembly and Adaptability - Recommendations	Recommendations	One credit where: 1 Conduct a study to explore the ease of disassembly and the functional adaptation potential of different design scenarios (see Methodology below) by the end of Concept Design. 2 Develop recommendations or solutions (see Methodology below) based on the study (criterion 1 above), during or prior to Concept Design, that aim to enable and facilitate disassembly and functional adaptation.		1	0.60%	0	1) A copy of the ease of disassembly and the Functional adaptation strategy appraisal report to identify and make recommendations for measures to be incorporated to facilitate future adaptation.	RIBA Stage 2	Architect & MEP	20/06/2024: Credit excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. Credit not targeted.
Wst6.2	Design for Disassembly and Adaptability - Implementation	Implementation	One credit where: 3 Achieve criteria 1 and 2 4 Provide an update, during Technical Design, on: a How the recommendations or solutions proposed by Concept Design have been implemented where practical and cost effective. Omissions have been justified in writing to the assessor. b Changes to the recommendations and solutions during the development of the Technical Design. 5 Produce a building adaptability and disassembly guide to communicate the characteristics allowing functional adaptability and disassembly to prospective tenants.		1	0.60%	0	2) Implementation report/ drawings/ specification that demonstrate how the findings of the Ease of Disassembly and Functional adaptation strategy appraisal report have influenced the design and particular measures have been implemented.	RIBA Stage 4	Architect & MEP	20/06/2024: Credit excluded from scoring strategies due to late consideration and unlikely to have appropriate documentation, as agreed within the pre-assessment meeting. Credit not targeted.
Land Use and Ecology											
Lue1.1	Site Selection - Previously Occupied Land	Re-use of Land	One credit where: 1. At least 75% of the proposed development's footprint is on an area of land which has previously been occupied by industrial, commercial or domestic buildings or fixed surface infrastructure.		1	1.00%	1	1) Drawings which shows the site and its land use prior to development overlaid with a site boundary for the new works. This should confirm the footprint areas associate with both states.	RIBA Stage 4	Architect	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting., with more than 75% of the development footprint is on previously occupied land. One credit targeted.
Lue1.2	Site Selection - Contaminated Land	Contaminated Land	One credit where: 2 A contaminated land professional's site investigation, risk assessment and appraisal has deemed land within the site to be affected by contamination. The site investigation, risk assessment and appraisal have identified: a The degree of contamination b The contaminant sources or types c The options for remediating sources of contamination which present an unacceptable risk. 3 The client or principal contractor confirms that remediation of the site will be carried out in accordance with the remediation strategy and its implementation plan as recommended by the contaminated land professional.		1	1.00%	0	1) Land contamination report and land remediation strategy with confirmation that it has been implemented.	RIBA Stage 4	Project Manager	20/06/2024: No presence of contaminated land. Credit not achievable.
Lue2.1	Identifying and Understanding the Risks and Opportunities for the Project - Survey and Evaluation	Survey and evaluation	One credit where: Prerequisite - Assessment route selection 1 An assessment route for the project has been determined using BREEAM Guidance Note GN34 BREEAM Ecological Risk Evaluation Checklist. 2 The client or contractor confirms compliance is monitored against all relevant UK and EU or international legislation relating to the ecology of the site. Survey and evaluation Route 1 3 Completion of the BREEAM Ecological Risk Evaluation Checklist indicates Assessment route 1 can be used as the assessment. Route 2 4 An appropriate individual is appointed at a project stage that ensures early involvement in site configuration and, where necessary, can influence strategic planning decisions. 5 Prior to the completion of the preparation and brief, an appropriate level of survey and evaluation (see Assessment route 2: For sites where complex ecological systems are likely to be present) has been carried out to determine the ecological baseline of the site, taking account of the zone of influence to establish: 5.a Current and potential ecological value and condition of the site, and related areas within the zone of influence. 5.b Direct and indirect risks to current ecological value 5.c Capacity and feasibility for enhancement of the ecological value of the site and, where relevant, areas within the zone of influence. 6 Data are collated and shared with project team to inform the site preparation, design or construction works.		1	1.00%	1	1) Copy of Guidance Note GN34 BREEAM Ecological Risk Evaluation Checklist . 2)A formal letter of commitment or contractual requirements document confirming compliance against all relevant UK and EU legislation .	RIBA Stage 2	Ecologist	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Eight acting as ecologist, and have produced EIA which covers avoidance, mitigation, and compensation measures for vegetation, tress, and roosting opportunities, with ecological enhancement opportunities and biodiversity net gain also referenced. Based on this the credit should be achievable, but will likely require Eight to produce an updated report which confirms the scoring scenario. One credit targeted.
Lue2.2	Identifying and Understanding the Risks and Opportunities for the Project - Determining Ecological Outcomes	Determining the ecological outcomes for the site	Once credit where: Determining the ecological outcomes for the site (Routes 1 and 2) 7 Survey and evaluation criteria (criteria 3–6 above) relevant to the chosen route have been achieved. 8 During Concept Design, the project team liaise and collaborate with representative stakeholders to identify and consider ecological outcome for the sites (appropriate to the scale and type of development) for the project. 9 When determining the ecological outcome for the site, this must involve the identification, appraisal and selection of specific solutions and measures sufficiently early to influence key project planning decisions. This must be done in accordance with the following hierarchy of action: 9.a avoidance 9.b protection 9.c reduction or limitation of negative impacts 9.d on site compensation and, 9.e enhancement, considering the capacity and feasibility within the site, or where viable, off-site. 10 Following this the optimal ecological outcome for the site is selected after liaising with representative stakeholders and the project team.		1	1.00%	1	1) Appointment letter for the Suitably Qualified Ecologist. 2)A copy of the ecologist's CV to confirm they meet the BRE's definition of a Suitably Qualified Ecologist. 3) Suitably Qualified Ecologist's BREEAM report highlighting information required in accordance with the BREEAM manual.	RIBA Stage 1	Ecologist	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Eight acting as ecologist, and have produced EIA which covers avoidance, mitigation, and compensation measures for vegetation, tress, and roosting opportunities, with ecological enhancement opportunities and biodiversity net gain also referenced. Based on this the credit should be achievable, but will likely require Eight to produce an updated report which confirms the scoring scenario. One credit targeted.

Lue3.1	Managing Negative Impacts on Ecology - Planning, Liaison, Implementation and Data	Planning, liaison, implementation and data	Prerequisite – Identification and understanding the risks and opportunities for the site 1 LE 02 has been achieved. 2 The client or contractor has confirmed that compliance is monitored against all relevant UK, and EU or International legislation relating to the ecology of the site One credit – Planning, liaison, implementation and data 3 Roles and responsibilities have been clearly defined, allocated and implemented to support successful delivery of project outcomes at an early enough stage to influence the concept design or design brief. 4 Site preparation and construction works have been planned for and are implemented at an early project stage to optimise benefits and outputs. 5 The project team liaising and collaborating with representative stakeholders, taking into consideration data collated and shared, have implemented solutions, and measures have been selected (see Assessment scope on page 277), during site preparation and construction works.		1	1.00%	1	1) Meeting minutes / similar documentation to demonstrate when collaborations began, what was discussed for the workshop to identify and consider the ecological outcomes for the site. 2) A formal letter of commitment or contractual requirements document confirming compliance against all relevant UK and EU legislation .	RIBA Stage 2	Ecologist	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Eight acting as ecologist, and have produced EIA which covers avoidance, mitigation, and compensation measures for vegetation, tress, and roosting opportunities, with ecological enhancement opportunities and biodiversity net gain also referenced. Based on this the credit should be achievable, but will likely require Eight to produce an updated report which confirms the scoring scenario. One credit targeted.
Lue3.2	Managing Negative Impacts on Ecology - Managing Negative Impact of the Project	Managing negative impacts of the project	Up to two credits where: Route 1 (one credit) 6 Negative impacts from site preparation and construction works have been managed according to the hierarchy (see Methodology) and no net impact has resulted. Route 2 (up to two credits) 7 Negative impacts from site preparation and construction works have been managed according to the hierarchy (see Assessment route 2: For sites where complex ecological systems are likely to be present) and either: 7.a No overall loss of ecological value has occurred (2 credits) OR 7.b The loss of ecological value has been limited as far as possible (1 credit)		2	2.00%	1	1) Appointment letter for the Suitably Qualified Ecologist. 2) A copy of the ecologist's CV to confirm they meet the BRE's definition of a Suitably Qualified Ecologist. 3) Suitably Qualified Ecologist's BREEAM report highlighting information required in accordance with the BREEAM manual.	RIBA Stage 1	Ecologist	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Eight acting as ecologist, and have produced EIA which covers avoidance, mitigation, and compensation measures for vegetation, tress, and roosting opportunities, with ecological enhancement opportunities and biodiversity net gain also referenced. Based on this the credit should be achievable, but will likely require Eight to produce an updated report which confirms the scoring scenario. One credit targeted.
Lue4.1	Change and Enhancement of Ecological Value - Ecological enhancement	Route 2 Liaison, implementation and data collation	One credit where: Prerequisite - Identifying and understanding the risks and opportunities for the project 1 LE 03 has been achieved. Including the following, specific to the aims of this issue: 1.a Roles and responsibilities have been clearly defined, allocated and implemented to support successful delivery of project outcomes 1.b Site preparation and construction works have been planned for and implemented at a stage that is sufficiently early in the project to optimise benefits and outputs. 2 The client or contractor confirms compliance is monitored against all relevant UK, EU or international legislation relating to the ecology of the site. One credit - Enhancement of ecology Route 1 3 The project team liaising and collaborating with representative stakeholders, taking into consideration data collated and shared, have implemented solutions and measures based on recommendations from recognised 'local' ecological expertise, specialist input and guidance to inform the adoption of locally relevant ecological solutions and measures which enhance the site. 4 Data collated is provided to the local environmental records centres nearest to, or relevant for, the site.		1	1.00%	1	1) Meeting minutes / similar documentation to demonstrate when collaborations began, what was discussed for the workshop to identify and consider the ecological outcomes for the site. 2) A formal letter of commitment or contractual requirements document confirming compliance against all relevant UK and EU legislation .	RIBA Stage 3	Ecologist	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Eight acting as ecologist, and have produced EIA which covers avoidance, mitigation, and compensation measures for vegetation, tress, and roosting opportunities, with ecological enhancement opportunities and biodiversity net gain also referenced. Based on this the credit should be achievable, but will likely require Eight to produce an updated report which confirms the scoring scenario. One credit targeted.
Lue4.2	Change and Enhancement of Ecological Value - Change and enhancement of ecology	Route 2 Enhancement of ecology	Up to three credits where: One credit - Liaison, implementation and data collation Route 2 5 The project team liaising and collaborating with representative stakeholders, taking into consideration data collated and shared, have implemented the solutions and measures selected in a way that enhances ecological value in the following order: 5.a On site, and where this is not feasible, 5.b Off site within the zone of influence. Up to three credit - Enhancement of ecology Route 2 6 Credits are awarded on a scale of 1 to 3, based on the calculation of the change in ecological value occurring as a result of the project. This must be calculated in accordance with the process set out in either GN 35 - BREEAM, CEEQUAL, HQM Ecology Assessment Issues – Route 1 or GN 36 - BREEAM, CEEQUAL, HQM Ecology Assessment Issues – Route 2 (whichever is applicable to the project). Credits are awarded as follows: a: Minimising loss of ecological value (one credit - percentage score of 75-94) b: No net loss of ecological value (two credits - percentage score of 95-104) c: Net gain of ecological value (three credits - percentage score of 105-109)		3	3.00%	2	1) Appointment letter for the Suitably Qualified Ecologist. 2) A copy of the ecologist's CV to confirm they meet the BRE's definition of a Suitably Qualified Ecologist. 3) Suitably Qualified Ecologist's BREEAM report highlighting information required in accordance with the BREEAM manual.	RIBA Stage 4	Ecologist	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Eight acting as ecologist, and have produced EIA which covers avoidance, mitigation, and compensation measures for vegetation, tress, and roosting opportunities, with ecological enhancement opportunities and biodiversity net gain also referenced. Based on this the credit should be achievable, but will likely require Eight to produce an updated report which confirms the scoring scenario. Two credits targeted.
Lue5.1	Long Term Ecology Management and Maintenance - Management and maintenance throughout the project	Planning, liaison, data, monitoring and review management and maintenance	One credit where: Prerequisite - Roles and responsibilities, implementation, statutory obligations 1 The client or contractor has confirmed that compliance is being monitored against all relevant UK, EU and international standards relating to the ecology of the site. 2 Where pursued, LE 04 has been achieved, including the following specific aims of this issue: 2.a Roles and responsibilities have been clearly defined, allocated and implemented to support successful delivery of project outcomes. 2.b Site preparation and construction works have been planned for and implemented at a stage that is sufficiently early in the project to optimise benefits and outputs. One credit - Planning, liaison, data, monitoring and review management and maintenance 3 The project team liaise and collaborate with representative stakeholders, taking into consideration data collated and shared, on solutions and measures implemented to: 3.a monitor and review implementation and the effectiveness 3.b develop and review management and maintenance solutions, actions or measures. 4 In support of the above and to help ensure their continued relevance over the period of the project the following should be considered: 4.a Monitoring and reporting of on the ecological outcomes for site implemented at the design and construction stage 4.b Monitoring and reporting of outcomes and successes from the project 4.c Arrangements for the ongoing management of landscape and habitat connected to the project (on and, where relevant, off site) 4.d Maintaining the ecological value of the site and its relationship or connection to its zone of influence 4.e Maintaining the site in line with the any sustainability linked activities, e.g. ecosystems benefits (LE 02). 4.f Remedial or other management actions are carried out which relate to those identified in LE 02, LE 03 and LE 04. 5 As part of the tenant or building owner information supplied, include a section on Ecology and Biodiversity to inform the owner or occupant of local ecological features, value and biodiversity on or near the site.		1	1.00%	1	1) Meeting minutes / similar documentation to demonstrate when collaborations began, what was discussed for the workshop to identify and consider the ecological outcomes for the site. 2) A formal letter of commitment or contractual requirements document confirming compliance against all relevant UK and EU legislation .	RIBA Stage 3	Ecologist	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Eight acting as ecologist, and have produced EIA which covers avoidance, mitigation, and compensation measures for vegetation, tress, and roosting opportunities, with ecological enhancement opportunities and biodiversity net gain also referenced. Based on this the credit should be achievable, but will likely require Eight to produce an updated report which confirms the scoring scenario. One credit targeted.

Lue5.2	Long Term Ecology Management and Maintenance - Landscape and ecology management plan	Landscape and ecology management plan	One credit - Landscape and ecology management plan (or similar) development 6 Landscape and ecology management plan, or similar, is developed in accordance with BS 42020:2013(206) covering as a minimum the first five years after project completion and includes: 6.a Actions and responsibilities, prior to handover, to give to relevant individuals 6.b The ecological value and condition of the site over the development life. 6.c Identification of opportunities for ongoing alignment with activities external to the development project and which supports the aims of BREEAM's Strategic Ecology Framework 6.d Identification and guidance s to trigger appropriate remedial actions to address previously unforeseen impacts 6.e Clearly defined and allocated roles and responsibilities.		1	1.00%	1	1) Copy of landscape and ecology management plan that is in accordance with BS 42020:2013. 2) A formal letter of commitment or contractual requirements document confirming implementation of landscape and ecology management plan.	RIBA Stage 4	Ecologist	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. To confirm who will produce the landscape and ecology management plan. One credit targeted.
Pollution											
Pol1.1	Impact of Refrigerants	Impact of Refrigerant	Up to three credits where: Three credits - No refrigerant use 1 No refrigerant use within the installed plant or systems. OR alternatively, where the building does use refrigerants, the three credits can be awarded as follows:		3	2.00%	1	1) Specification confirming lack of or type of refrigerants and systems to be provided. 2) Written confirmation and manufacturer datasheet of any system with Electrical Compressors confirming compliance with BS EN 378:2016 (parts 2 and 3) and where refrigeration systems containing ammonia are installed, the Institute of Refrigeration Ammonia Refrigeration Systems Code of Practice. 3) Written confirmation and manufacturer datasheet confirming system type(s) and system information and refrigerant GWP 4) Completion of Pol 01 calculator.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, for having a system with refrigerants that have a DELC of ≤ 1000 kgCO₂-eq/kW cooling and heating capacity. If the system has electric compressors or contains ammonia will also need to meet pre-requisites in crit 2. One credit targeted.
Pol2	Local Air Quality	NOx Emissions NO_x > 15 µg/ m³ avg a year PM10 > 10µg/ m³ avg a year	Up to two credits where: 1 All heating and hot water is supplied by non-combustion systems. For example, only powered by electricity. OR alternatively; 2 Emissions from all installed combustion plant that provide space heating and domestic hot water do not exceed the levels set in Table 12.4 and Table 12.5 on the facing page. The measurements must be provided by 2 2 2 Not applicable manufacturers, following the labelling requirements of the European directive 2009/125/EC. No credits can be awarded for Pol 02 if any of the combustion appliances are not covered in Table 12.4 below and Table 12.5 below . 3 Emissions from all installed combustion plant that provide space heating and domestic hot water do not exceed the levels set in Table 1.21 and Table 1.22.		2	1.33%	2	1) Specification confirming lack of or type of refrigerants and systems to be provided. 2) As Built plans confirming systems installed. 3) Manufacturers literature.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting, with all heating and hot water likely supplied by non-combustion systems. Two credits targeted.
Pol3.1	Flood and Surface Water Management - Flood Resilience	Flood resilience	Two credits - Low flood risk Prerequisite 1 An appropriate consultant is appointed to carry out and demonstrate the development's compliance with all criteria. Two credits - Low flood risk 2 A site-specific flood risk assessment (FRA) confirms the development is in a flood zone that is defined as having a low annual probability of flooding. The FRA takes all current and future sources of flooding into consideration. One credit - Medium or high flood risk 3 A site-specific FRA confirms the development is in a flood zone that is defined as having a medium or high annual probability of flooding and is not in a functional floodplain. The FRA must take all current and future sources of flooding into consideration (see Sources of flooding on page 312). 4 To increase the resilience and resistance of the development to flooding, one of the following must be achieved: 4.a The ground level of the building and access to both the building and the site, are designed (or zoned) so they are at least 600 mm above the design flood level of the site's flood zone (see 600 mm threshold on page 312). 4.b The final design of the building and the wider site reflects the recommendations made by an appropriate consultant in accordance with the hierarchy approach outlined in section 5 of BS 8533:2017 (214) .		2	1.33%	2	1) A site specific FRA confirming flood risk from all current and future sources of flooding. 2) A statement from the Flood Risk Specialists confirming whether the design is in accordance with the hierarchy approach outlined in section 5 of BS 8533:2011.	RIBA Stage 4	FRA Consultant	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. Site appears to be low flood risk based on flood mapping, but this will require formal confirmation to confirm this. Two credits targeted.

Pol3.2	Flood and Surface Water Management - Surface Water Run-off - Rate and Volume	Surface water run off (Rate)	Two credits - Surface water run-off Prerequisite for surface water run-off credits 5 Surface water run-off design solutions must be bespoke, i.e. they must take account of the specific site requirements and natural or man-made environment of and surrounding the site. The priority levels detailed in the Methodology must be followed, with justification given by the appropriate consultant where water is allowed to leave the site. One credit - Surface Water Run-Off - Rate 6 Drainage measures are specified so that the peak rate of run-off from the site to the watercourses (natural or municipal) shows a 30% improvement for the developed site compared with the pre-developed site. This should comply at the 1-year and 100-year return period events. 7 Relevant maintenance agreements for the ownership, long term operation and maintenance of all specified Sustainable Drainage Systems (SuDS) are in place. 8 Calculations include an allowance for climate change. This should be made in accordance with current best practice planning guidance. One credit - Surface Water Run-Off - Volume 9 Flooding of property will not occur in the event of local drainage system failure (caused either by extreme rainfall or a lack of maintenance); AND EITHER 10 Drainage design measures are specified so that the post-development run-off volume, over the development lifetime, is no greater than it would have been prior to the assessed site's development. This must be for the 100-year 6-hour event, including an allowance for climate change (see criterion 14). 11 Any additional predicted volume of run-off for this event is prevented from leaving the site by using infiltration or other SuDS techniques. OR (only where criteria 10 and 11 cannot be achieved): 12 Justification from the appropriate consultant indicating why the above criteria cannot be achieved, i.e. where infiltration or other SuDS techniques are not technically viable options. 13 Drainage design measures are specified so that the post-development peak rate of run-off is reduced to the limiting discharge. The limiting discharge is defined as the highest flow rate from the following options: 13.a The pre-development one-year peak flow rate 13.b The mean annual flow rate (Qbar) 13.c 2l/s/ha.		2	1.33%	1	1) Drainage consultant's report/ calculations/ specification confirming BREEAM requirements. 2) Client commitment to ensure management and maintenance agreements are put in place for SuDS	RIBA Stage 4	FRA Consultant	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. SuDS conversations are ongoing. A GN can be issued to help demonstrate compliance. One credit targeted.
Pol3.3	Flood and Surface Water Management - Minimising Water Course Pollution	Minimising water course pollution	One credit - Minimising watercourse pollution 16 There is no discharge from the developed site for rainfall up to 5 mm (confirmed by the appropriate consultant). 17 Areas with a low risk source of watercourse pollution, an appropriate level of pollution prevention treatment is provided, using appropriate SuDS techniques. 18 Areas with a high risk of contamination or spillage of substances, such as petrol and oil, have separators (or an equivalent system) are installed in surface water drainage systems. 19 Chemical or liquid gas storage areas have a means of containment fitted to the site drainage system (i.e. shutoff valves). This is to prevent the escape of chemicals to natural watercourses in the event of a spillage or bunding failure. 20 All water pollution prevention systems have been designed and installed in accordance with the recommendations of documents such as the SuDS manual(215) and other relevant industry best practice. They must be bespoke solutions taking account of the specific site requirements and natural or man-made environment of and surrounding the site. 21 A comprehensive and up to date drainage plan of the site will be made available for the building or site occupiers. 22 Relevant maintenance agreements for the ownership, long term operation and maintenance of all specified SuDS must be in place. 23 All external storage and delivery areas are designed and detailed in accordance with the current best practice planning guidance..		1	0.67%	0	1) Specification/ strategy detailing systems installed to ensure flooding will not occur with discharge of rainfall up to 5mm	RIBA Stage 4	FRA Consultant	20/06/2024: Credit was agreed not to be targeted due to difficulty prohibiting discharge from the developed site for rainfall up to 5 mm One credit not targeted.
Pol 4	Reduction of Night Time Light Pollution	Reduction of Night Time Light Pollution	One credit where: 1 External lighting pollution has been eliminated through effective design that removes the need for external lighting. This does not adversely affect the safety and security of the site and its users. OR alternatively, where the building does have external lighting, one credit can be awarded as follows: 2 All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00. 3 If safety or security lighting is provided and will be used between 23:00 and 07:00, this part of the lighting system complies with the lower levels of lighting recommended during these hours in Table 2 of the ILP guidance notes. 4 Illuminated advertisements are designed in compliance with ILP PLG05 The Brightness of Illuminated Advertisements.(221).		1	0.67%	1	1) Specification confirming compliance with the ILP Guidance notes for the reduction of obtrusive light, 2011 and inclusion of controls to automatically switch off lighting between 23:00 and 07:00 hours.	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. One credit targeted.
Pol5	Reduction of Noise Pollution	Noise Attenuation	One credit where: 1 There are no noise-sensitive areas within the assessed building or within 800 m radius of the assessed site. OR 2 Where there are noise-sensitive areas within the assessed building or noise-sensitive areas within 800 m radius of the assessed site, a noise impact assessment compliant with BS 4142:2014(222) is commissioned. Noise levels must be measured or determined for: 2.a Existing background noise levels: 2.a.i at the nearest or most exposed noise-sensitive development to the proposed assessed site 2.a.ii including existing plant on a building, where the assessed development is an extension to the building 2.b Noise rating level from the assessed building. 3 The noise impact assessment must be carried out by a suitably qualified acoustic consultant. 4 The noise level from the assessed building, as measured in the locality of the nearest or most exposed noise sensitive development, must be at least 5dB lower than the background noise throughout the day and night. 5 If the noise sources from the assessed building are greater than the levels described in criterion 4, measures have been installed to attenuate the noise at its source to a level where it will comply with the criterion.		1	0.67%	1	1) Acoustician's report confirming all required items 2) Written confirmation that any recommendations made by the Acoustician will be implemented into the design to ensure the final building is compliant with the relevant standards 3) A copy of the Acoustician's CV to confirm they meet the BRE's definition of a Suitably Qualified Acoustician	RIBA Stage 4	MEP	20/06/2024: Credit included in the baseline scoring, as agreed within the pre-assessment meeting. One credit targeted.
Innovation											
Man 03	Responsible Construction Management	Responsible Construction Management	Achieve all items a-s in the Table as noted in the criteria in Man 03		1	1.00%	1	As above	RIBA Stage 4	As above	It is anticipated that this is to be included as part of the employer's requirements for the contractor to deliver. 1 exemplary credit targeted.
	Daylighting	Daylighting	15. Relevant building areas meet exemplary daylight factors and the relevant criteria in Table 5.8 (see manual)		1	1.00%	0	As above	RIBA Stage 4	As above	Credit not targeted.

Hea 01	Internal and external lighting levels, zoning and control	Internal and external lighting levels, zoning and control	16. Lighting in each zone can be manually dimmed by occupants down to 20% of the maximum light output using dimmer switches positioned in accessible locations. Dimming and control gear should avoid flicker and noise.		1	1.00%	0	As above	RIBA Stage 4	As above	Credit not targeted.
Hea 02	Indoor Air Quality	Indoor Air Quality	11. Three of the product types meet the stricter emission limits and comply with the testing standards required. Where wood-based products are not one of three selected product types, all wood-based products used for internal fixtures and fittings must be tested and classified as formaldehyde E1 class as a minimum. - Interior paints and coatings - Wood-based products(including flooring) - Flooring materials - Ceiling, wall, and acoustic and thermal insulation materials - Interior adhesives and sealants		1	1.00%	0	As above	RIBA Stage 4	As above	Credit not targeted.
Hea 06	Security	Security	4. A compliant risk based security rating scheme has been used. The performance against the scheme has been confirmed by independent assessment and verification.		1	1.00%	0	As above	RIBA Stage 2	As above	Credit not targeted.
Ene 01	Reduction of energy use and carbon emissions	Reduction of energy use and carbon emissions	Achieve exemplary level Ene01 performance via: - Carbon Neutral (up to 2 credit) OR - Carbon Negative (up to 3 credits) AND - Reporting of post-occupancy energy consumption (2 credits)		5	5.00%	0	As above	RIBA Stage 4	As above	Credit not targeted.
Wat 01	Water Consumption	Water Consumption	Where the development achieves an improvement of 65% over baseline building water consumption.		1	1.00%	0	As above	RIBA Stage 4	As above	Credit not targeted.
Mat 01	Materials Specification	Materials Specification	Achieve exemplary level Mat01 criteria via: Core building services options appraisal (1 credit) LCA and LCC alignment (1 credit) Third Party Verification (1 credit)		3	3.00%	0	As above	RIBA Stage 2	As above	Credit not targeted.
Mat 03	Responsible Sourcing of Materials	Responsible Sourcing of Materials	1 exemplary credit is achieved where > 50% RSM points are achieved (addressing superstructure and internal finishes, superstructure and hard landscaping AND core building services)		1	1.00%	0	As above	RIBA Stage 4	As above	Credit not targeted.
Wst 01	Construction Site Waste Management	Construction Site Waste Management	7. Non-hazardous construction waste generated, excluding demolition and excavation waste, is <1.6m3 or <1.9 tonnes per 100m2 GIFA. 8. The percentage of non-hazardous construction waste diverted from landfill meets or exceeds the exemplary level percentage benchmarks: Demolition waste >85% volume or >95% tonnage Excavation waste >95 volume or >85% tonnage 9. All key waste groups for diversion from landfill are covered in the RMP. 10. Waste data obtained from licensed external waste contractors is reliable and verifiable, by using data from EA/SEPA/EA Wales/NIEA Waste Return Forms or from a PAS 402:2013 compliant company.		1	1.00%	0	As above	RIBA Stage 4	As above	Credit not targeted.
Wst 02	Recycled aggregates	Recycled aggregates	Exemplary level recycled aggregate applications have been achieved.		1	1.00%	0	As above	RIBA Stage 4	As above	Credit not targeted.
Wst 05	Adaptation to climate change	Adaptation to climate change	Hea 04 Thermal comfort: Criterion 6 - Prevent increasing risks of overheating. Ene 01 Reduction of energy use and carbon emissions: A minimum of six credits Ene 04 Low carbon design: The passive design analysis credit - Maximise opportunities to avoid unnecessary carbon emissions. Wat 01 Water consumption: A minimum of three credits - Minimise water demand in periods of drought. Mat 05 Designing for durability and resilience: Criteria 2–4 - Avoid increased risks of deterioration and higher maintenance demands. Pol 03 Flood and surface water management: Flood resilience: a minimum of one credit Pol 03 Flood and surface water management: Surface water run-off: two credits -		1	1.00%	0	As above	RIBA Stage 2	As above	Credit not targeted.
Le 02	Identifying and understanding the risks and opportunities for the project	Identifying and understanding the risks and opportunities for the project	Determine the ecological outcomes for the site (sustainability-related activities) 11. Achieve criteria 8 to 10. 12. When determining the optimal ecological outcome for the site consider, in addition to those outlined in criteria 8 to 10, the wider site sustainability-related activities and the potential for ecosystem service related benefits. 13. Achieve the credits of the assessment issues outlined below: a: Hea 07 Safe and healthy surroundings - Both credits b: Pol 03 Flood and surface water management - Achieve credits for 'Surface water run-off' and 'Minimising watercourse pollution' c: Pol 05 Reduction of noise pollution		1	1.00%	0	As above	RIBA Stage 2	As above	Credit not targeted.
Le 04	Ecological change and enhancement	Ecological change and enhancement	The change in ecological value calculated under criterion 6 above confirms significant net gain has been achieved as set out in GN36 - BREEAM, CEEQUAL and HQM Ecology Calculation Methodology – Route 2.		1	1.00%	0	As above	RIBA Stage 4	As above	Credit not targeted.