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BREEAM UK New Construction 2018 Pre-Assessment Estimator Report Rev0

7 Blagrove Street,
Reading,
RG1 1PJ

31 January 2023

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1. Introduction

This BREEAM UK New Construction (NC) 2018 Pre-Assessment Estimator (PAE) report has been prepared in support of the planning application for the proposed redevelopment of 7 Blagrove Street.

Proposals are for the demolition of the existing two storey building and the construction of a 5 storey building with a café and bed and breakfast with ancillary spaces. The café will be located on the ground floor, the B&B lobby with the main staff area will be located towards the rear of the building and the B&B rooms will be located on the upper floors with an indicative total of 20 rooms ranging between 2 person and 4 person rooms.

The front façade will be retained and incorporated into the proposals.

2. BREEAM UK New Construction 2018 - Overview

BREEAM is a performance based assessment method and certification scheme for new non residential buildings. The main aim of BREEAM is to mitigate the life cycle impacts of new buildings on the environment in a robust and cost-effective manner.

The BREEAM UK NC scheme can be used to assess the environmental life cycle impacts of new non-domestic buildings at the design and construction stages.

Under BREEAM NC there are nine categories of sustainable design, within which are a number of sub-categories. Credits are awarded where evidence can be provided to demonstrate compliance with the criteria in the sub-categories. There are also additional credits available for innovation where, the building goes beyond best practice in terms of a particular aspect of sustainability.

The credits are then converted into a percentage 'points' total and this determines the BREEAM rating achieved.

In this instance, and as part of the Pre-Application Enquiry Response (reference 220117), Reading Council has confirmed that the proposals are for minor development and therefore a BREEAM 'Very Good' rating should be targeted. A minimum score of 55% is required for BREEAM 'Very Good'.

Minimum Standards

There are certain sub-categories within the BREEAM UK NC where minimum standards must be met. These are dependent upon the rating of BREEAM to be achieved, and include:

- Reduction of Energy Use
- Energy Monitoring
- Responsible Sourcing of Materials
- Water Consumption
- Water Monitoring

Optional Elements

There are certain optional elements of the assessment where the required evidence includes supporting reports and calculations. It is worth bearing in mind that if the credits in these categories are needed to increase the overall point's total, additional consultant fees may be required.

RIBA Stages

It is important to note that within certain categories, BREEAM stipulates the RIBA stage by which the criteria should be addressed. This needs to be reflected in the evidence. For reference, a copy of the BREEAM and RIBA timeline is provided in **Appendix A**.

Scope of BREEAM UK New Construction 2018

Assessment Types

Under BREEAM UK NC 2018, the assessment can be carried out as follows:

- Shell only
- Shell and core
- Fully fitted

In general, if a building is assessed under BREEAM UK NC as 'shell' or 'shell and core', the BREEAM certificate will reflect this.

To bring the building to 'fully fitted' standard (and to subsequently achieve 'full' BREEAM certification), a BREEAM Refurbishment and Fit-Out assessment is needed.

In this instance the PAE is based on a 'fully fitted' assessment.

3. BREEAM Pre-Assessment Report

A BREEAM Pre-Assessment Report is provided in **Appendix B**.

By carrying out a PAE at an early stage, BREEAM can be given the earliest possible consideration by the Design Team. As such, many of the 'early RIBA Stage' credits can be given priority, as well as giving the Design Team the time to factor in the credits which will provide real benefits to the building and building users.

Currently, based on the proposals, and on our experience of what credits may be feasibly achieved for a site and proposals of this nature, the score is shown as 56.23%.

This Pre-Assessment Tracker is an early guide in the BREEAM assessment process and is based on a number of assumptions. A more detailed PAE (or Initial Feasibility Assessment) should be prepared as early on the Design Process as possible in order to take into account comments from the team and to refine the BREEAM strategy.

BREEAM Rating							
	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score	Target score
Man	21.0	14.0	14.0	66.67%	11.00%	7.33%	7.33%
Hea	17.0	12.0	12.0	70.59%	14.00%	9.88%	9.88%
Ene	25.0	12.0	12.0	48.00%	16.00%	7.68%	7.68%
Tra	12.0	8.0	8.0	66.67%	10.00%	6.66%	6.66%
Wat	8.0	7.0	7.0	87.50%	7.00%	6.12%	6.12%
Mat	14.0	4.0	4.0	28.57%	15.00%	4.28%	4.28%
Wst	10.0	6.0	6.0	60.00%	6.00%	3.59%	3.59%
LE	13.0	6.0	6.0	46.15%	13.00%	6.00%	6.00%
Pol	12.0	7.0	7.0	58.33%	8.00%	4.66%	4.66%
Inn	10.0	0.0	0.0	0.00%	10.00%	0.00%	0.00%
Total	142.0	76.0	76.0	53.52%	-	56.23%	56.23%
Rating	-	-	-	-	-	★★★★☆ Very Good	Very Good

Figure 1 – Potential BREEAM Rating

Appendices

Appendix A RIBA and BREEAM Timeline

BREEAM UK New Construction 2018 scheme assessment timeline

The assessment timeline tables included in the summary page of each category in the UK New Construction 2018 scheme manual have been reproduced in this Guidance Note. The timeline has been produced to assist with optimising project sustainability performance. It outlines at which stage credits should be addressed and ideally when these should be considered by the design team, planner, contractors, owners, occupiers and other members of the project team to achieve the highest possible BREEAM rating at the minimum cost. It demonstrates that where BREEAM advice is taken on too late within the design and construction phases a number of BREEAM credits may not be achieved or only at additional cost or disruption.

			Plan of Work						
Sub credits			Strategic Definition	Preparation and Brief	Concept Design	Developed Design	Technical Design	Construction	Handover and Close Out
Management									
Man 01	Project brief and design	Project delivery planning							
		Stakeholder consultation							
		BREEAM Advisory Professional			Maximise project performance	Maximise project performance			
Man 02	Life cycle cost and service life planning	Life cycle cost			Elemental LCC		Component level LCC options appraisal		
		Capital cost reporting							
Man 03	Responsible construction practices	Environmental management							
		BREEAM Advisory Professional							
		Responsible construction management							
		Monitoring of construction site impacts							

	Design/management influence
	Design/client decision
	Design/management changes at a high cost
	No further changes can be made
	RIBA stage stipulated within BREEAM criteria

Man 04	Commissioning and handover	Commissioning - testing schedule and responsibilities							
		Handover						Building user guides and training schedules prepared	Building user guides and training schedules prepared
Man 05	Aftercare								
Health and Wellbeing									
Hea 01	Visual comfort								
Hea 02	Indoor air quality				Indoor air quality plan				
Hea 04	Thermal comfort								
Hea 05	Acoustic performance				Acoustician appointment				
Hea 06	Security								
Hea 07	Safe and healthy surroundings								
Energy									
Ene 01	Reduction of energy use and carbon emissions								
Ene 02	Energy monitoring								
Ene 03	External lighting								
Ene 04	Low carbon design	Passive design			Passive design analysis				
		Low and zero carbon technologies			Feasibility study				
Ene 05	Energy efficient cold storage	Refrigeration energy consumption			Strategy for design and installation				
Ene 06	Energy efficient transportation systems								

	Design/management influence
	Design/client decision
	Design/management changes at a high cost
	No further changes can be made
	RIBA stage stipulated within BREEAM criteria

Ene 07	Energy efficient laboratory systems	Design specification			Client engagement				
Ene 08	Energy efficient equipment								
Transport									
Tra 01	Transport assessment and travel plan			Travel plan					
Tra 02	Sustainable transport measures			Consultation with local authority (option 6 only)					
Water									
Wat 01	Water consumption								
Wat 02	Water monitoring								
Wat 03	Water leak detection								
Wat 04	Water efficient equipment								
Materials									
Mat 01	Environmental impacts from construction products - Building life cycle assessment				Building LCA submission		Building LCA submission		
Mat 02	Environmental impacts from construction products							Installation of certified products	
Mat 03	Responsible sourcing of materials	Sustainable procurement plan		Sustainable procurement plan	Review sustainable procurement plan	Review sustainable procurement plan			
Mat 05	Designing for durability and resilience								
Mat 06	Material efficiency			Stage actions	Stage actions	Stage actions	Stage actions	Stage actions	

	Design/management influence
	Design/client decision
	Design/management changes at a high cost
	No further changes can be made
	RIBA stage stipulated within BREEAM criteria

Waste									
Wst 01	Construction waste management				Pre-demolition audit				
Wst 02	Use of recycled and sustainably sourced aggregates								
Wst 03	Operational waste								
Wst 04	Speculative finishes								
Wst 05	Adaptation to climate change				Climate adaptation strategy appraisal		Update on climate adaptation strategy appraisal		
Wst 06	Design for disassembly and adaptability	Design for disassembly and functional adaptability			Disassembly and functional adaptation study				
		Disassembly and functional adaptability – implementation							
Land Use and Ecology									
LE 01	Site selection	Previously occupied land							
		Contaminated land							
LE 02	Identifying and understanding the risks and opportunities for the site	Survey and evaluation							
		Determining the site wide outcomes							
LE 03	Managing negative impacts on ecology								
LE 04	Enhancing site ecology								
LE 05	Long term ecology management and maintenance								

	Design/management influence
	Design/client decision
	Design/management changes at a high cost
	No further changes can be made
	RIBA stage stipulated within BREEAM criteria

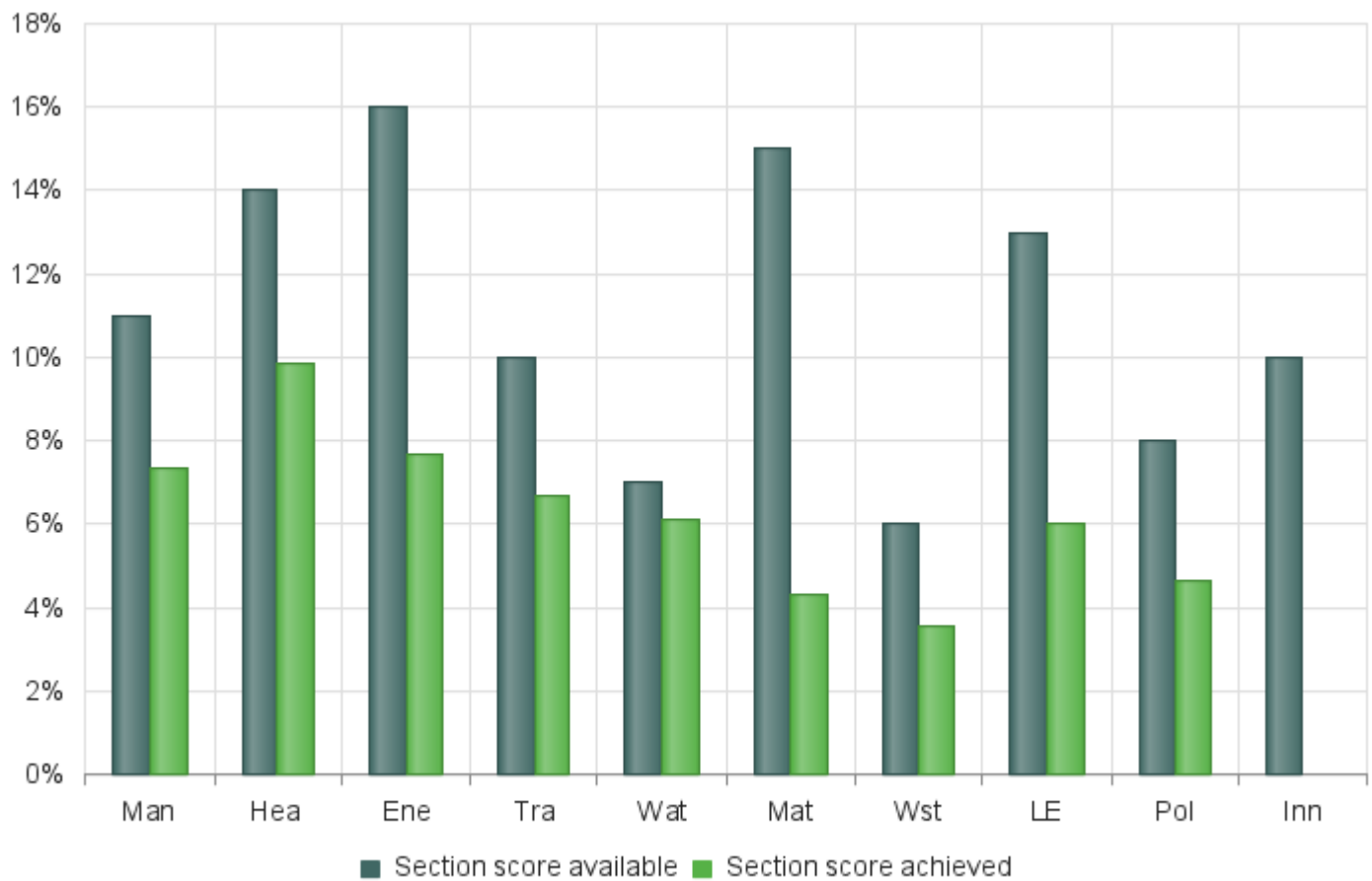
Pollution									
Pol 01	Impact of refrigerants								
Pol 02	Local air quality								
Pol 03	Flood and surface water management								
Pol 04	Reduction of night time light pollution								
Pol 05	Reduction of noise pollution								

	Design/management influence
	Design/client decision
	Design/management changes at a high cost
	No further changes can be made
	RIBA stage stipulated within BREEAM criteria

BREEAM Rating

	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score	Target score
Man	21.0	14.0	14.0	66.67%	11.00%	7.33%	7.33%
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Tra	12.0	8.0	8.0	66.67%	10.00%	6.66%	6.66%
Wat	8.0	7.0	7.0	87.50%	7.00%	6.12%	6.12%
Mat	14.0	4.0	4.0	28.57%	15.00%	4.28%	4.28%
Wst	10.0	6.0	6.0	60.00%	6.00%	3.59%	3.59%
LE	13.0	6.0	6.0	46.15%	13.00%	6.00%	6.00%
Pol	12.0	7.0	7.0	58.33%	8.00%	4.66%	4.66%
Inn	10.0	0.0	0.0	0.00%	10.00%	0.00%	0.00%
Total	142.0	76.0	76.0	53.52%	-	56.23%	56.23%
Rating	-	-	-	-	-	 Very Good	Very Good

Performance by environmental category



Indicator scores



Circularity



Wellbeing



Whole Life Carbon

More information (<https://www.breeam.com/news/new-breeam-indicators-to-be-added-to-breeam/>) about the BREEAM indicator scores

Category assessment

Management (Man)

Man 01 Project Brief and design

To optimise final building design through recognising and encouraging an integrated design process and robust stakeholder engagement.

Assessment criteria

Stakeholder consultation (interested parties) : Yes

Project delivery planning : Yes

Prerequisite: Have the client and the contractor formally agreed performance targets? :

Credits awarded : 2

Man 02 Life cycle cost and service life planning

To promote the business case for sustainable buildings and to deliver whole life value by encouraging the use of life cycle costing to improve design, specification, through-life maintenance and operation.

Assessment criteria

Elemental LCC :

Component level LCC options appraisal :

Capital cost reporting : Yes

Capital cost of the project : 123 Â£k/m²

Credits awarded : 1

Man 03 Responsible construction practices

To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner.

Assessment criteria

Prerequisite: Are all timber and timber-based products used during the construction process of the project 'legally harvested and traded timber'? : Yes

Environmental management : Yes

Prerequisite: Have the client and the contractor formally agreed performance targets? :	No
Responsible construction management :	2
Monitoring of construction site impacts :	Yes
Utility consumption :	Yes
Transport of construction materials and waste :	Yes
Exemplary level criteria - Responsible construction management :	

Key Performance Indicators: Construction site energy use

Energy consumption (total) - site processes :

Energy consumption (intensity) - site processes :

Key Performance Indicators: Construction site greenhouse gas emissions

Process greenhouse gas emissions (total) - site processes :

Carbon dioxide emissions (intensity) - site processes :

Credits awarded : 4

Man 04 Commissioning and handover

To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.

Assessment criteria

Commissioning testing schedule and responsibilities :	Yes
Commissioning - design and preparation :	Yes
Testing and inspecting building fabric :	Yes
Handover - have a technical and a non-technical building user guide been developed prior to handover? :	Yes
Handover - have a technical and a non-technical training schedule been prepared around handover? :	Yes

Credits awarded : 4

Man 05 Aftercare

To ensure the building operates in accordance with the design intent and operational demands, through providing aftercare to the building owner and occupants during the first year of occupation.

Assessment criteria

Is this a speculative development? :	No
Aftercare support :	Yes
Commissioning - implementation :	Yes
Post occupancy evaluation :	Yes
The client or building occupier commits funds to pay for the POE in advance. :	Yes

Credits awarded : 3

Health and Wellbeing (Hea)

Hea 01 Visual comfort

To encourage best practice in visual performance and comfort by ensuring daylighting, artificial lighting and occupant controls are considered.

Assessment criteria

Control of glare from sunlight :	Yes
Daylighting (building type dependent) :	1
View Out :	No
Internal and external lighting levels, zoning and controls :	Yes
Exemplary level criteria - Daylighting :	No

Exemplary level criteria- Internal and external lighting levels, zoning and control :

Credits awarded : 3

Hea 02 Indoor air quality

To encourage and support healthy internal environments with good indoor air quality.

Assessment criteria

Pre requisite: Indoor air quality (IAQ) plan :

Ventilation :

Emissions from building products : 0

Post-construction indoor air quality measurement :

Exemplary level criteria- Emissions from building products :

Key Performance Indicators

Formaldehyde concentration :

Total volatile organic compound (TVOC) concentration :

Credits awarded : 0

Hea 04 Thermal comfort

To ensure the building is capable of providing an appropriate level of thermal comfort.

Assessment criteria

Thermal modelling :	Yes
Design for future thermal comfort :	Yes
Thermal zoning and controls :	Yes

Key Performance Indicators

PMV and PPD Indices :

Credits awarded : 3

Hea 05 Acoustic performance

To ensure the building is capable of providing an appropriate acoustic environment to provide comfort for building users.

Assessment criteria

Sound insulation :	2
Indoor ambient noise level :	Yes
Room acoustics :	Yes

Credits awarded : 4

Hea 06 Security

To encourage the planning and implementation of effective measures that provide an appropriate level of security to the building and site.

Assessment criteria

Security of site and building :	Yes
Exemplary level criteria :	

Credits awarded : 1

Hea 07 Safe and Healthy Surroundings

To encourage the provision of safe access around the site and outdoor space that enhances the wellbeing of building users. .

Assessment criteria

Safe Access : Yes

Credits awarded : 1

Energy (Ene)

Ene 01 Reduction of energy use and carbon emissions

To minimise operational energy demand, primary energy consumption and CO₂ emissions.

Energy performance

Country : England

Can a .inp file be uploaded? : No

Without the .inp file being uploaded only the standard methodology can be used. This may impact the number of credits that can be awarded. :

Energy Production by Technology :

Energy & CO₂ Emissions Summary :

Actual building energy demand : 396.64 MJ/m² yr

Notional building energy demand : 513.11 MJ/m² yr

Actual building primary energy consumption : 397.88 kWh/m² yr

Notional building primary energy consumption : 459.94 kWh/m² yr

Actual building CO₂-eq emissions (BER) : 67.3 KgCO₂-eq/m² yr

Notional building CO₂-eq emissions (TER) : 77.8 KgCO₂-eq/m² yr

Towards carbon negative (exemplary credits)

Zero net CO₂-eq emissions :

Energy performance - Building score

Heating and cooling demand energy performance ratio (EPRdem) : 0.167

Primary consumption energy performance ratio (EPRpc) : 0.094

Total BREEAM credits achieved : 3.0

CO₂-eq energy performance ratio (EPRco2-eq) : 0.101

Overall building energy performance ratio (EPRnc) : 0.361

% improvement BER/TER : 13.5 %

Prediction of operational energy consumption

Has a design workshop focusing on operational energy performance been carried out? :

Has the operational energy performance of the building been substantially improved? :

Post-occupancy stage (exemplary credits)

Maximum credits achieved in Ene 02 Energy monitoring? : Yes

The client or building occupier commits funds to pay for the post-occupancy stage? :

The energy model is submitted to BRE and retained by the building owner? :

Credits awarded : 3

Ene 02 Energy monitoring

To encourage the installation of energy sub-metering that facilitates the monitoring of operational energy consumption. To enable managers and consultants post-handover to compare actual performance with targets in order to inform ongoing management and help in reducing the performance gap.

Assessment criteria

Sub-metering of end use categories : Yes

Sub-metering of high energy load and tenancy areas : Yes

Credits awarded : 2

Ene 03 External lighting

To reduce energy consumption through the specification of energy efficient light fittings for external areas of the development.

Assessment criteria

External lighting has been designed out? : No

Is external lighting specified in accordance with the relevant criteria? : Yes

Credits awarded : 1

Ene 04 Low carbon design

To encourage the adoption of design measures, which reduce building energy consumption and associated carbon emissions and minimise reliance on active building services systems.

Assessment criteria

Has the first credit within Hea 04 been achieved? : Yes

Passive design analysis :

Free cooling :

Low and zero carbon technologies :

KPI

Total on-site and/or near-site LZC energy generation :

Expected energy consumption and CO₂-eq emissions reduction resulting from passive design measures :

Expected energy consumption and CO₂-eq emissions reduction resulting from passive design measures as a percentage :

Expected reduction in CO₂-eq emissions resulting from the LZC technologies :

Expected reduction in CO₂-eq emissions resulting from the LZC technologies as a percentage :

: 0

Credits awarded

Ene 05 Energy efficient cold storage

To encourage the installation of energy efficient refrigeration systems, in order to reduce operational greenhouse gas emissions resulting from the system's energy use.

Assessment criteria

Refrigeration energy consumption : Yes

Indirect greenhouse gas emissions : Yes

Credits awarded : 2

Ene 06 Energy efficient transportation systems

To encourage the specification of energy efficient transport systems within buildings.

Assessment criteria

Energy consumption :	Yes
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Energy efficient features - Lifts :	Yes
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Credits awarded : 2

Ene 07 Energy efficient laboratory systems

To encourage laboratory areas that are designed to minimise their operational energy consumption and associated CO2 emission

Assessment criteria - N/A

Ene 08 Energy efficient equipment

To encourage installation of energy efficient equipment to ensure optimum performance and energy savings in operation

Assessment criteria

Swimming pool present? :

Laundry facilities with commercial-sized appliances present? :

Data centre present? :

IT-intensive operating areas present? :

Domestic scale appliances (individual and communal facilities) present? :

Healthcare equipment present? :

Kitchen and catering facilities present? :	Yes
--	-----

Major impact? :

Other contributors :

Significant majority contributors BREEAM compliant :	Yes
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Credits awarded : 2

Transport (Tra)

Tra 01 Transport assessment and travel plan

To reward awareness of existing local transport and identify improvements to make it more sustainable.

Assessment criteria

Travel plan : Yes

Credits awarded : 2

Tra 02 Sustainable transport measures

To maximise the potential for local public, private and active transport through provision of sustainable transport measures appropriate to the site.

Assessment criteria

Prerequisite : Yes

Location type (based on existing AI) : 25 ≤ AI < 40
(urban centres)

Number of points achieved overall : 4

Credits awarded : 6

Water (Wat)

Wat 01 Water consumption

To reduce the consumption of potable water for sanitary use in new buildings through the use of water efficient components and water recycling systems.

Assessment criteria

Please select the calculation procedure used :

Credits awarded : 4

Exemplary performance :

Key Performance Indicators

Credits awarded : 4

Wat 02 Water monitoring

To reduce the consumption of potable water in new buildings through the effective management and monitoring of water consumption.

Assessment criteria

Water meter on the mains water supply to each building : Yes

Sub-metering/monitoring equipment on supply to plant/building areas : Yes

Pulsed output or other open protocol communication output and BMS connection : Yes

The water monitoring strategy used enables the identification of all water consumption for sanitary uses as assessed under Wat 01 (L/person/day) : Yes

Credits awarded : 1

Wat 03 Water leak detection

To reduce the consumption of potable water in new buildings through minimising wastage due to water leaks.

Assessment criteria

Leak detection system : Yes

Flow control devices : Yes

Credits awarded : 2

Wat 04 Water efficient equipment

To reduce water consumption for uses not assessed under Wat 01 by encouraging specification of water efficient equipment.

Assessment criteria - N/A

Materials (Mat)

Mat 01 Life cycle impacts

To reduce the burden on the environment from construction products by recognising and encouraging measures to optimise construction product consumption efficiency and the selection of products with a low environmental impact (including embodied carbon), over the life cycle of the building.

Assessment criteria

Total Mat 01 credits achieved - taken from the Mat 01/02 Results 0

Submission Tool :

Total Exemplary credits achieved - taken from the Mat 01/02 Results 0

Submission Tool :

Credits awarded : 0

Mat 02 Environmental impacts from construction products

To encourage availability of robust and comparable data on the impacts of construction products through the provision of EPD.

Assessment criteria

Mat 02 credit achieved - Taken from the Mat 01/02 Results Submission 0

Tool. :

Credits awarded : 0

Mat 03 Responsible sourcing

To facilitate the selection of products that involve lower levels of negative environmental, economic and social impact across their supply chain including extraction, processing and manufacture.

Assessment criteria

Prerequisite: All timber and timber based products are 'Legally harvested and traded timber' : Yes

Has the enabling sustainable procurement credit been achieved? : Yes

Mat 03 minimum scope level : plus Core building services

Percentage of available for percentage of RSM points achieved : 17 %

Credits awarded : 2

Mat 05 Designing for durability and resilience

To reduce the need to repair and replace materials resulting from damage to exposed elements of the building and landscape.

Assessment criteria

Protecting vulnerable parts of the building from damage and exposed parts of the building from material degradation : Yes

Credits awarded : 1

Mat 06 Material efficiency

To avoid unnecessary materials use arising from over specification without compromising structural stability, durability or the service life of the building.

Assessment criteria

Material optimisation measures investigated and implemented at all relevant stages : Yes

Credits awarded : 1

Waste (Wst)

Wst 01 Construction waste management

To reduce construction waste by encouraging reuse, recovery and best practice waste management practices to minimise waste going to landfill.

Assessment criteria

Is demolition occurring under the developer's ownership for the purpose of enabling the assessed development? : Yes

Pre-demolition audit : Yes

Compliant Resource Management Plan : Yes

Have waste materials been sorted into separate key waste groups? : Yes

Exemplary level criteria :

KPI

Measure/units for the data being reported : m³

Non-hazardous construction waste (excluding demolition/excavation) - fill in to award 'Construction resource efficiency' credits :

Total non-hazardous construction waste generated :

Non-hazardous non-demolition construction waste diverted from landfill - fill in to award diversion from landfill credit :

Total non-hazardous non-demolition construction waste diverted from landfill :

Non-hazardous demolition waste diverted from landfill - fill in to award diversion from landfill credit :

Total non-hazardous demolition waste generated :

Total non-hazardous demolition waste to disposal :

Non-hazardous excavation waste diverted from landfill - fill in to award credit :

Material for reuse :

Material for recycling :

Material for energy recovery :

Hazardous waste to disposal :

Credits awarded : 4

Wst 02 Use of recycled and sustainably sourced aggregates

To encourage the use of more sustainably sourced aggregates, encourage reuse where appropriate and avoid waste and pollution arising from disposal of demolition and other forms of waste.

Assessment criteria

Is demolition occurring under the developer's ownership for the purpose of enabling the assessed development? : Yes

Pre-requisite: pre-demolition audit :

Credits awarded : 0

Wst 03 Operational waste

To encourage the recycling of operational waste through the provision of dedicated storage facilities and space.

Assessment criteria

Compliant recycling and non-recyclable waste storage allocated : Yes

Static waste compactor(s) or baler(s) : N/A

Vessel(s) for composting suitable organic waste and water outlet : N/A

Credits awarded : 1

Wst 04 Speculative finishes (Offices only)

To minimise the wastage associated with the installation of floor and ceiling finishes in lettable areas in speculative buildings where tenants have not been involved in their selection.

Assessment criteria - N/A

Wst 05 Adaptation to climate change

To minimise the future need of carrying out works to adapt the building to take account of more extreme weather changes resulting from climate change and changing weather patterns.

Assessment criteria

Resilience of structure, fabric, building services and renewables installation

:

Credits awarded : 0

Wst 06 Design for disassembly and adaptability

To avoid unnecessary materials use, cost and disruption arising from the need for future adaptation works as a result of changing functional demands and to maximise the ability to reclaim and reuse materials at final demolition in line with the principles of a circular economy.

Assessment criteria

Design for disassembly and functional adaptability - recommendations : Yes

Disassembly and functional adaptability - implementation :

Credits awarded : 1

Land use and ecology (LE)

LE 01 Site selection

To encourage the use of previously occupied or contaminated land and avoid land which has not been previously disturbed.

Assessment criteria

Percentage of proposed development's footprint on previously occupied land: : 100 %
Contaminated land :

Credits awarded : 1

LE 02 Ecological risks and opportunities

To determine the existing ecological value associated with the site and surrounding areas, and the risks and opportunities for ecological protection and enhancement.

Assessment criteria

Assessment route selection : Foundation
Prerequisite - Statutory obligations : Yes
Survey and Evaluation : Yes
Determining ecological outcomes : Yes
Exemplary level - Wider site sustainability :

Credits awarded : 1

LE 03 Managing impacts on ecology

To avoid, or limit as far as possible, negative ecological impacts associated with the site and surrounding areas resulting from the project.

Assessment criteria

Assessment route : Foundation
Prerequisite - Ecological risks and opportunities : Yes
Planning and measures on-site : Yes

Managing negative impacts :	Yes
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Credits awarded : 2

LE 04 Ecological change and enhancement

To enhance ecological value of the area associated with the site in support of local, regional and national priorities.

Assessment criteria

Assessment route :	Foundation
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Prerequisite - Managing negative impacts on ecology :	Yes
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Change and enhancement of ecology (Foundation route only) :	Yes
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Credits awarded : 1

LE 05 Long term ecology management and maintenance

To secure ongoing monitoring, management and maintenance of the site and its habitats and ecological features, to ensure intended outcomes are realised for the long term.

Assessment criteria

Assessment route :	Foundation
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At least one credit achieved in LE 04 :	Yes
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Prerequisite - Statutory obligations, planning and site implementation :	Yes
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Management and maintenance throughout the project :	Yes
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Landscape and ecology management plan :	Yes
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Credits awarded : 1

Pollution (Pol)

Pol 01 Impact of refrigerants

To reduce the level of greenhouse gas emissions arising from the leakage of refrigerants from building systems.

Assessment criteria

Refrigerant containing systems installed in the assessed building? :

Credits awarded : 0

Pol 02 Local air quality

To contribute to a reduction in local air pollution through the use of low emission combustion appliances in the building.

Assessment criteria

Is the project required to connect to a District Heating system, and it supplies all heating and hot water demands to the building? :

How many credits have been achieved? : 0

Credits awarded : 0

Pol 03 Flood risk management and reducing surface water run-off

To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, thereby minimising the risk and impact of localised flooding on and off-site, watercourse pollution and other environmental damage.

Assessment criteria

Prerequisite: Has an appropriate consultant demonstrated and confirmed the development's compliance with all sought credits? : Yes

Has a site-specific flood risk assessment been conducted? : Yes

Annual probability of flooding : Low

Has the pre-requisite for the Surface Water Run-Off credits been achieved? : Yes

Has the Surface Water Run-Off - Rate credit been achieved? : Yes

Has the Surface Water Run-Off - Volume credit been achieved? : Yes

Minimising watercourse pollution :

Yes

Credits awarded : 5

Pol 04 Reduction of Night Time Light Pollution

To ensure that external lighting is concentrated in the appropriate areas and that upward lighting is minimised, reducing unnecessary light pollution, energy consumption and nuisance to neighbouring properties.

Assessment criteria

External lighting has been designed out? :

Yes

Credits awarded : 1

Pol 05 Noise attenuation

To reduce the likelihood of noise arising from fixed installations on the new development affecting nearby noise-sensitive buildings.

Assessment criteria

Noise-sensitive areas/buildings within 800m radius of the development : Yes

Is the site compliant with all relevant criteria? :

Yes

Credits awarded : 1

Innovation (Inn)

Inn 01 Innovation

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Assessment criteria

Number of 'approved' innovation credits achieved? : 0

Credits awarded : 0