

STATION HILL NORTH READING

SUSTAINABILITY STATEMENT

DECEMBER 2019

Contents.

Audit Sheet.	2
Executive Summary.	4
1. Introduction.	5
1.1 Proposed Development	5
2. Policy Review.	5
2.1 National Planning Guidance	5
2.2 Local Planning Guidance	5
3. Strategy.	6
3.1 Management	6
3.2 Health and Wellbeing	6
3.3 Energy	6
3.4 Transport	7
3.5 Water	7
3.6 Materials	7
3.7 Waste	8
3.8 Land Use and Ecology	8
3.9 Pollution	8
4. Conclusion.	9
Appendix A: Office and Retail BREEAM 2018 Pre-Assessment.	10

Executive Summary.

This report describes how the proposed Station Hill North development in Reading, will implement sustainable measures in respects to taking a holistic approach to sustainability. Matters ranging from management, energy and water savings, sourcing of materials, waste management, transport and more will be addressed throughout this report. The purpose of this statement is to promote sustainable development and to integrate the principles of sustainability into the preparation and adoption of plans.

The Station Hill North development comprises of two phases; Phase 2 and Phase 3. This report covers the Sustainability strategy for the detailed planning application for Phase 2 which includes Plot G, and the outline planning application for Phase 3 which includes Plot AB, Plot C and Plot D. The wider site is bound by Reading Station to the North, Station Hill South to the South and hotels and retail to the East and West.

Figure 1 shows the proposed location of the site.



Figure 1 Masterplan site layout (Credit: LDA)

This Sustainability Statement responds specifically to:

- UK National Sustainable Development Policy;
- The Reading Borough Core Strategy and the Supplementary Planning Guidance on Sustainable Design and Construction
- The Reading Borough Local Plan.

In line with the local planning authority, as well as conditions issued for Phase 1 of the site, the commercial office spaces will be designed to achieve a BREEAM UK New Construction (NC) 2018 'Excellent' rating, with the retail spaces targeting BREEAM 'Very Good'

The dwellings' target is to achieve reduction in carbon emissions in line with the Local Plan, alongside achieving compliance with the requirements for water consumption in line with Building Regulations Part G.

Among the key sustainability measures which have been incorporated into the design, and the key performance levels targeted, the following should be noted.

- The main contractor will conform to the **Considerate Contractors Scheme** as well as ensure responsible construction management practices are implemented on site identifying associated risks such as vehicle movement, pollution management, tidiness, health and wellbeing and security.
- A **Building User Guide** will be committed to and provided on handover. The guide will provide guidance to help building users access, understand and operate the building efficiently and in a manner in keeping with the original design intent.
- The building services will ensure the **sub-metering of major energy consuming systems** throughout the building. This will provide efficient monitoring of operational energy consumption and help identify end uses with a higher energy demand with the intention to reduce consumption where possible.
- Materials used in the development will be **responsibly and sustainably sourced and recycled** where feasible and will be chosen with focus on achieving a low overall environmental impact.
- The development will identify the most efficient sanitary fittings available in relation to reducing potable water demand. To achieve BREEAM 'Excellent', a minimum requirement of at least a 12.5% improvement from baseline performance is required.
- **External light pollution mitigation** will be addressed on this development.
- The development will **improve site ecological biodiversity**.
- A construction waste management strategy will be implemented to **limit construction waste sent to landfill** and encourage the reuse, recovery and best practice waste management techniques.

1. Introduction.

1.1 Proposed Development

The Station Hill North development comprises of two phases; Phase 2 and Phase 3. This report covers the Sustainability strategy for the detailed planning application for Phase 2 which includes Plot G, and the outline planning application for Phase 3 which includes Plot AB, Plot C and Plot D. The wider site is bound by Reading Station to the North, Station Hill South to the South and hotels and retail to the East and West.

This Sustainability Statement responds specifically to:

- UK National Sustainable Development Policy;
- The Reading Borough Core Strategy and the Supplementary Planning Guidance on Sustainable Design and Construction
- The Reading Borough Local Plan.

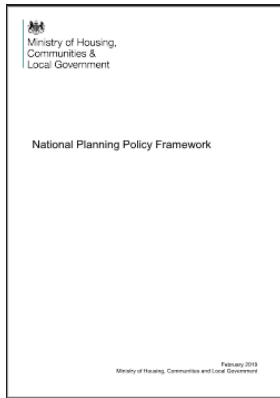
As a demonstration of the commitment to achieve a sustainable design and construction, the commercial office spaces will be designed to achieve a BREEAM UK New Construction (NC) 2018 ‘Excellent’ rating, with the retail spaces targeting BREEAM ‘Very Good’ in line with the local planning authority.

The dwellings’ target is to achieve reduction in carbon emissions in line with the Local Plan, alongside achieving compliance with the requirements for water consumption in line with Building Regulations Part G.

2. Policy Review.

2.1 National Planning Guidance

The National Planning Policy Framework, February 2019.

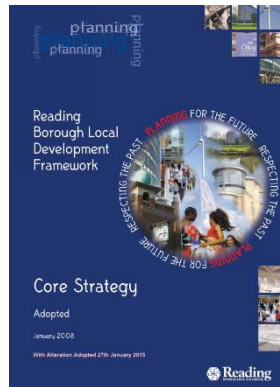


The National Planning Policy Framework sets out the Government’s planning policies for England and how these should be applied¹. It provides a framework within which locally-prepared plans for housing and other development can be produced.

The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Achieving sustainable development means that the planning system has three keys overarching objectives. (1) Economic, (2) Social and, (3) Environmental. All objectives are interdependent and need to be pursued in mutually supportive ways to ensure that all opportunities to maximise net gains across each of the different objectives is achieved.

2.2 Local Planning Guidance



Core Strategy, Reading Borough (2008, with alteration adopted 2015)

The Core Strategy sets out the Council’s adopted planning strategy for the Borough. It sets out how planning and development will achieve the Reading 2020 vision for the town. It provides a framework for how Reading can grow in a sustainable way in the future. It also sets out how Reading will accommodate the growth expected of it in the emerging South-East Plan and through the council’s commitment to New Growth Point status.

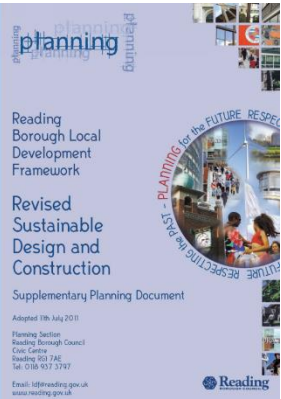
Policy CS1 “Sustainable Construction and Design” states that on larges developments, 50% of the provision meets the most up to date BREEAM ‘Excellent’ standards. All developments should also reduce mains water use and demonstrate that water conservation measures are incorporated. Further to this, developments should incorporate sustainable urban drainage facilities and techniques.

Policy CS2 “Waste Minimisation” states that developments should demonstrate measures to minimise the generation of waste in the construction, use and life of buildings and promote more sustainable approaches to waste management.

Draft Sustainable Design and Construction Supplementary Planning Document (2019)

A new version of the Draft Sustainable Design and Construction SPD is in consultation until Sept 2019 and forms part of the response to Reading Council recently declaring a climate emergency. When complete this SPD will replace the previous document adopted on 11th July 2011, however as this is still in consultation the previous edition is highlighted below.

This document details how Reading has set out its commitment to become a zero-carbon city by 2050. All new build non-residential development of 1000 sqm or more should achieve BREEAM Excellent as a minimum or BREEAM Very Good for smaller developments.

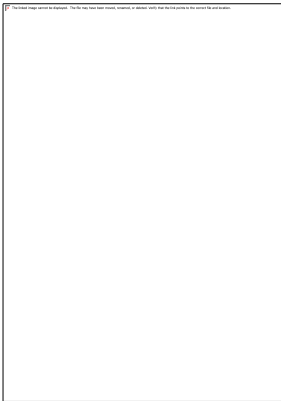


Supplementary Planning Document (SPD) – Revised Sustainable Design and Construction (2011)

This Supplementary Planning Document (SPD) aims to promote high standards of Sustainable Design and Construction, providing detail on how to comply with development plan policies set out in the Reading Borough Local Development Framework Core Strategy (2008).

It also provides practical advice on the forms of sustainable design and construction and how these policy requirements are applied at the local level through policy CS1: Sustainable Construction and Design of the adopted Core Strategy.

This document explains further details about Core Strategy's Policy CS1.



Reading Borough Local Plan (2018)

This Local Plan identifies the amount of development that will take place, the areas and sites where development is expected to be accommodated, and where it will be restricted, and sets out policies for how planning applications will be decided.

This plan has been prepared in accordance with the National Planning Policy Framework (NPPF) which sets out the overall national approach to planning.

Policy CC2 “Sustainable Design and Construction” states that all major non-residential developments are required to meet the most up-to-date BREEAM ‘Excellent’ standards where possible. In line with this, this policy supersedes the requirement in the Core Strategy’s Policy CS1 stating that 50% should meeting BREEAM ‘Excellent’.

Policy CC3 “Adaption to Climate Change” states that all development shall minimise the impact of surface water runoff from the development in the design of the drainage system, and where possible incorporate mitigation and resilience measures for any increases in river flooring levels as a result of climate change.

This plan will also replace all existing development plans in Reading once it is adopted. For this planning application, the Core Strategy is still the current development plan, however the Local Plan will also be followed.

3. Strategy.

Sustainability has been a key consideration for this development from a very early stage and consideration of the impact of design proposals and measures on the sustainable credentials of the development has been made throughout the design development to date and will continue throughout the design and construction process.

Showing a demonstration of the commitment to sustainable design and construction, the commercial office spaces will be designed to achieve a BREEAM New Construction 2018 ‘Excellent’, and the commercial retail spaces will be designed to achieve BREEAM ‘Very Good’ in line with the local planning authority.

The BREEAM 2018 Pre-Assessment is included in Appendix A.

The dwellings' target is to achieve reduction in carbon emissions in line with the Local Plan, alongside achieving compliance with the requirements for water consumption in line with Building Regulations Part G.

The following is a summary of the key sustainability issues derived from Reading Borough’s Local Plan policies and Development Management policies on Energy and Sustainable Design and Construction form the overall strategy for the project.

3.1 Management

To encourage the adoption of sustainable management practices regarding each stage of the development, the Design Team and Principle Contractor will be required to encourage an integrated design process incorporating the opinions from the project deliver stakeholders alongside third-party stakeholders into the design. The Principle Contractor will be required to demonstrate the site is being environmentally and socially considerate throughout the demolition, construction and handover period. Continual monitoring and recording throughout this phase will allow for an informative approach to be taken on the next development completed and identify changes which can be made in terms of the electrical, water and power usage on site throughout this period.

All site timber used will be legally harvested and traded.

3.2 Health and Wellbeing

The development will be designed to encourage a healthy and safe internal and external environment.

To ensure best practice in visual performance and comfort, artificial internal and external lighting levels and occupant controls will be considered at the design stage. This will ensure a high standard in visual performance is achieved as well as overall comfort for the building occupants.

The buildings acoustic performance will meet the appropriate standards for the type of buildings assessed as defined in Part E of the Building Regulations.

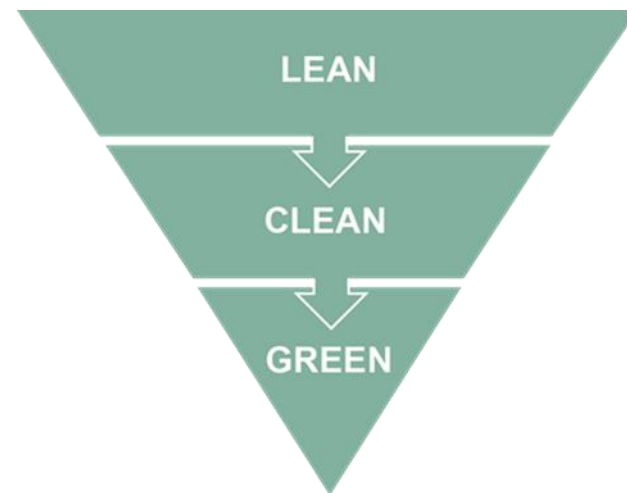
Appropriate acoustic standards, daylighting levels and artificial lighting will also benefit adequate space within the apartment to allow residents to work from home. Power and data will be provided as per SPG Appendix 4.

Consultation with the Designing Out of Crime Officer will include recommendations which will be considered during the design process.

Alongside incorporating the above aspects, a WELL Building assessment will also be completed on the Office Building for the Phase 2 development. This assessment will consider not only the above measures, but measures such as nutrition, light, sound, mind, and community and how they are to be utilised to their full potential and incorporated within the building in association with the health and wellbeing of building users.

3.3 Energy

The Energy Strategy will separately indicate the energy performance of domestic elements of the Proposed Development. Please refer to the Energy Strategy for further details on the performance.



To encourage and facilitate the monitoring of operational energy consumption, all major energy consuming systems will be sub-metered with pulsed output to proposed BMS.

Where applicable, energy efficient light fittings will be installed for all external areas of the development. In addition, they will be automatically controlled for the prevention of operation during daylight hours.

Vertical transportation demand and usage pattern analysis will be carried out and energy efficient features that offer the greatest potential energy savings to lifts will be specified.

3.4 Transport

Phases 2 and 3 form the northern half of the larger Station Hill development site. This site is located in Central Reading, opposite the southern entrance to Reading mainline station.

The site itself provides central access to the train station, cycle routes, and main vehicle access routes providing accessibility throughout the city into neighbouring towns.

A desk based study has confirmed, Reading train station provides frequent services to London, Cheltenham, Bristol and Cornwall. Further to these facilities, the site has easy access to a plethora of bus services surrounding the development, similarly ensuring frequent access to neighbouring towns such as Caversham, Southcote, Lower Earley and Sandford.

These facilities, as well as the train line can be identified in Figure 2.

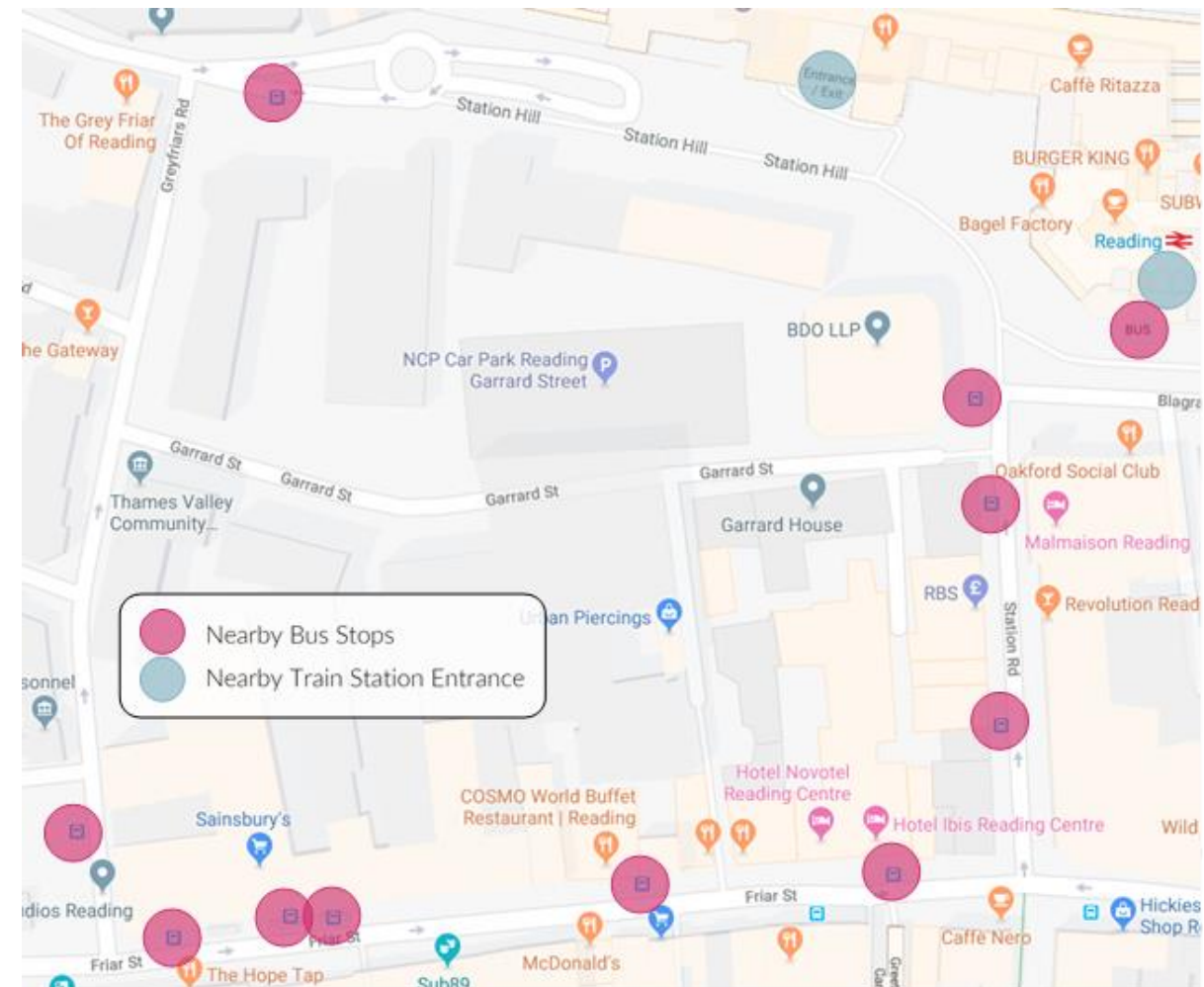


Figure 2 - Nearby bus and train facilities

Secure, well-lit accessible cycle storage spaces will be provided at the ground floor levels of the development for both residents and employees on site. Car parking spaces will also be provided in the podium levels.

The site itself is in a well-connected location providing a wide range of transport facilities and easy access to local services such as recreation/leisure facilities, food outlets, banks and schools.

3.5 Water

Reducing the consumption of potable water will be a significant consideration in the design process. Water use will be reduced as much as possible mainly through the specification of efficient sanitary ware and water efficient fittings. All dwellings will be designed to comply with the requirements of Building Regulations Part G.

A water meter will be supplied on the mains water supply to each of the buildings. This will ensure that water consumption can be monitored and managed and therefore encourage reductions.

A water leak detection system which can detect a major water leak on the mains water supply within the building will be specified.

3.6 Materials

Materials with low environmental impact will be implemented where feasible. Recycled, sustainable and locally sourced materials will be used where possible. All timber and timber based products used will be legally

harvested and traded. A full review of the materials specified for the development will be undertaken during the detailed design development stages using the BRE's Green Guide to Specification.

Thermal insulation used in the building fabric and services will be selected with consideration of their embodied environmental impact relative to its thermal properties.

As part of the design, vulnerable parts of the building will be protected from damage, for example doors in areas of high pedestrian traffic.

3.7 Waste

A pre-demolition audit will be undertaken to maximise the recovery of materials from demolition for subsequent high grade / value applications. The Principal Contractor will develop a Resource Management Plan (RMP) covering non-hazardous waste related to on-site construction and dedicated off-site manufacture or fabrication generated by building's design and construction. A commitment to achieving a reduction in construction waste per 100m² (GIA) will be made.

Communal refuse and recyclable stores will be easily accessible to all users, and sized to cater the segregation and storage of operational recyclable waste volumes by the assessed building, its occupants and activities. Where organic waste is to be stored, a water outlet is provided within the facility for cleaning and hygiene purpose.

3.8 Land Use and Ecology

The landscape and public realm have been designed to ensure full utilisation of the surrounding areas. Open green space will be provided throughout the development providing building users with an aesthetically pleasing environment to benefit from. A Suitably Qualified Ecologist will be appointed to report on the existing ecological value of the site, protection of any existing ecological features during site clearance and construction, and finally to confirm the change in ecological value, and to provide recommendations and a landscape/habitat management plan to enhance site ecology and long-term impact on biodiversity.

Figure 3 shows the proposed landscape strategy.



Figure 3 Proposed Masterplan – Phase 2 and 3 Landscaped Areas (Credit: LDA)

The Principal Contractor will follow the ecologist's recommendations to protect ecological features, to minimise the impact on existing site ecology and to ensure a long-term impact on biodiversity of the development.

3.9 Pollution

The site has been identified in Flood Zone 1, confirming there to be a low risk of flooding from river and tidal sources. A FRA Consultant will be appointed in order to confirm the flood resilience from the site, as well as

establish a drainage strategy outlining how the site will manage the propose surface water runoff. SuDS will be utilised where feasible in order to reduce any potential risk of flooding, and pressure of the surrounding infrastructure. Please refer to Figure 4 for Station Hill, Environment Agency Flood Map.

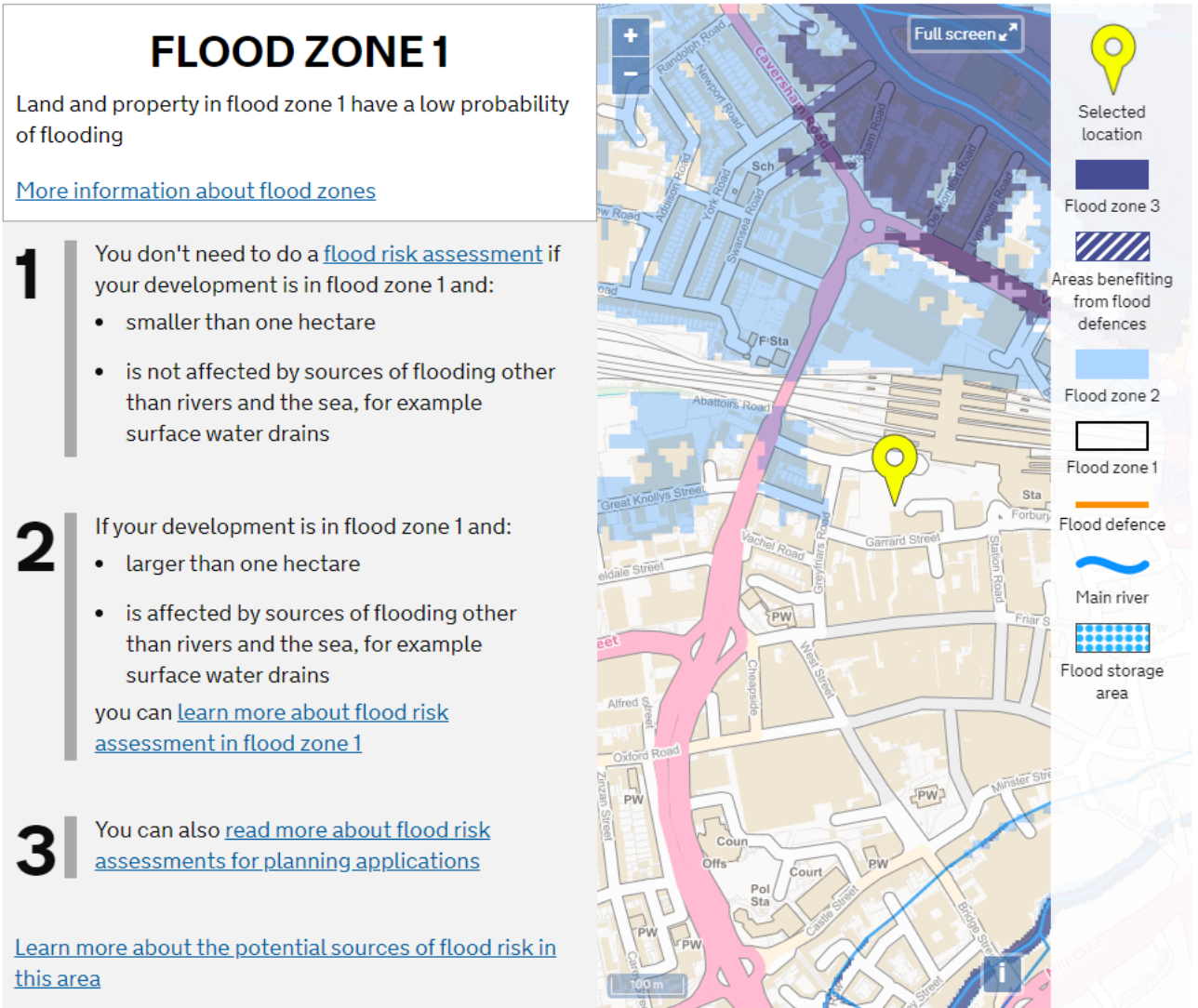


Figure 4 Station Hill - Environment Agency Flood Map

Any external lighting provided will be considered and designed in the appropriate areas and facing downwards to avoid unnecessary light pollution, energy consumption and nuisance to residential areas. All future plant noise will be taken into consideration and well thought out mitigation measures will be incorporated to limit its impact on the surrounding environment and neighbouring properties.

4. Conclusion.

The proposals summarised within this report promote a design centred on a low energy and sustainable development with an ambitious carbon performance and sustainable measures benchmarked against the Housing Supplementary Planning Guidance and BREEAM 2018 targets.

A BREEAM 'Excellent' and 'Very Good' Pre-Assessment document has been completed outlining the proposed BREEAM Strategy for the site, as per policy CC2 of the Local Plan 2018. The Pre-Assessment has provided a design strategy which ensures that a range of sustainable measures, such as those highlighted below, are incorporated into this development.

- The main contractor will conform to the **Considerate Contractors Scheme** as well as ensure responsible construction management practices are implemented on site identifying associated risks such as vehicle movement, pollution management, tidiness, health and wellbeing and security.
- A **Building User Guide** will be committed to and provided on handover. The guide will provide guidance to help building users access, understand and operate the building efficiently and in a manner in keeping with the original design intent.
- The building services will ensure the **sub-metering of major energy consuming systems** throughout the building. This will provide efficient monitoring of operational energy consumption, and help identify end uses with a higher energy demand with the intention to reduce consumption where possible.
- Materials used in the development will be **responsibly and sustainably sourced and recycled** where feasible, and will be chosen with focus on achieving a low overall environmental impact.
- The development will identify the most efficient sanitary fittings available in relation to reducing potable water demand. To achieve BREEAM Excellent, a minimum requirement of at least a 12.5% improvement from baseline performance is required and will be achieved.
- **External light pollution mitigation** will be addressed on this development.
- The development will **improve site ecological biodiversity**.
- A construction waste management strategy will be implemented to **limit construction waste sent to landfill** and encourage the reuse, recovery and best practice waste management techniques.

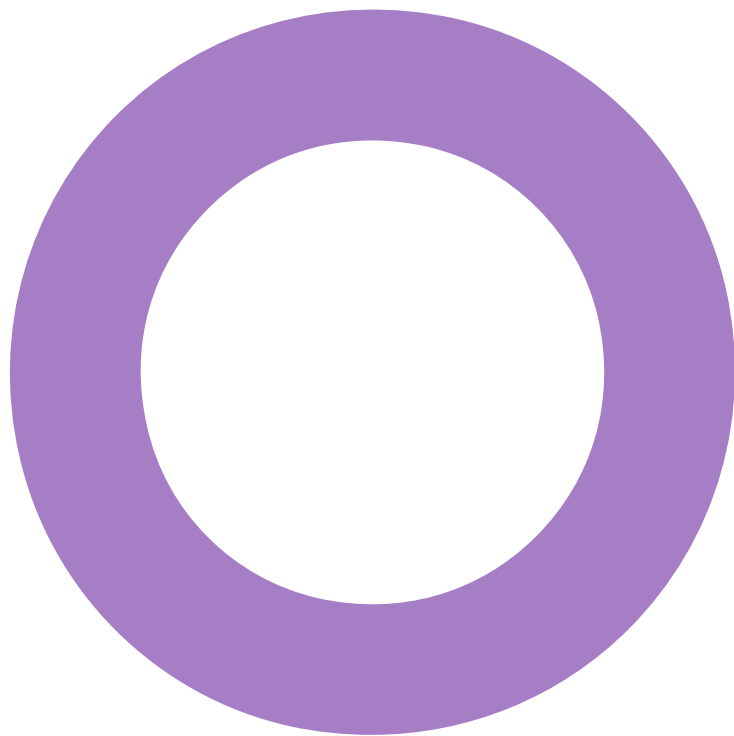
Appendix A: Office and Retail BREEAM 2018 Pre-Assessment.

**Station Hill, North Site.
Reading.**
SH Reading Master LLP.

SUSTAINABILITY

BREEAM NEW CONSTRUCTION 2018 - RETAIL + OFFICE PRE-ASSESSMENT REPORT

REVISION 0 - 25 SEPTEMBER 2019



Audit Sheet.

Rev.	Date	Description	Prepared	Verified
0	25/09/2019	Issue for Planning	AB	JD

This document has been prepared for SH Reading Master LLP only and solely for the purposes expressly defined herein. We owe no duty of care to any third parties in respect of its content. Therefore, unless expressly agreed by us in signed writing, we hereby exclude all liability to third parties, including liability for negligence, save only for liabilities that cannot be so excluded by operation of applicable law. The consequences of climate change and the effects of future changes in climatic conditions cannot be accurately predicted. This report has been based solely on the specific design assumptions and criteria stated herein.

BREEAM Audit box.

Assessment	Retail North Site
	Office North Site
BRE registration number	Retail Phase 2: BREEAM-0078-4470
	Office Phase 2: BREEAM-0078-4488
Licensed assessor	Alexandra Bryant
Assessor support	N/A
BREEAM scheme	BREEEAM UK New Construction 2018
BREEAM scheme version	2018 – Retail + Office
Assessment Stage	Pre-Assessment
Technical Manual Version	2.0

BREEAM Credit filtering box.

Building type and sub-group	Retail
Building type and sub-group	Office
Building floor area (Retail)	Retail – Phase 2: 1,168 sqm
Building floor area (Office)	Office – Phase 2: 23,430 sqm
Building services (heating)	Wet System
Building services (cooling)	Comfort Cooling
Building services (DHW system)	Centralised (TBC)
Building services (controls)	Standard times/controls
Commercial cold storage systems	N/A
Transportation systems	N/A
Laboratory (type, area and size)	N/A
Laboratory containment level	N/A
Fume cupboards / containment devices	N/A
Unregulated water uses	Yes (Irrigation – TBC)

Contents.

Audit Sheet.	2
BREEAM Audit box.	3
BREEAM Credit filtering box.	3
1. Executive Summary.	5
2. Assessment Details	6
2.1 Introduction	6
2.2 Assessment Type	6
2.3 Assessment Rating	6
2.4 Initial Pre-Assessment	6
2.5 Revised Pre-Assessment.	6
Project Team Members.	6
3. Early Action Credits.	7
4. Summary Score Sheet.	8
5. Conclusion.	9

1. Executive Summary.

This report provides an indicative BREEAM 2018 New Construction pre-assessment approach for the proposed Retail and Offices spaces in the Station Hill North Site development.

The North Site comprises of Phase 2 and Phase 3. The Phase 2 areas will include 1 Retail Shell Only BREEAM Assessment, targeting BREEAM 'Very Good' (55%+) and 1 Office Shell Only BREEAM Assessment, targeting BREEAM 'Excellent' (70%+). This approach has been adopted in line with local planning authority requirements.

The planning application will be a hybrid, incorporating a detailed application for phase 2, and an outline for Phase 3. The approach to BREEAM on Phase 3 will remain the same as Phase 2.

The current anticipated baseline score for the Phase 2 areas are as follows:

- Retail Phase 2: **68.50% BREEAM 'Very Good'**; and
- Office Phase 2: **76.40% BREEAM 'Excellent'**.

The Office assessment is currently exceeding the minimum requirements for BREEAM 'Excellent' rating by 6.40%, whilst the Retail areas are currently exceeding by 13.5%.

A margin of at least 5% – 7% is recommended to be attained above the minimum required score at this stage to secure the target rating considering contingency for design changes and potential constraints identified during the construction stage.

Figure 1 summarises the current anticipated 'baseline' score relative to the minimum required score for each BREEAM rating threshold.

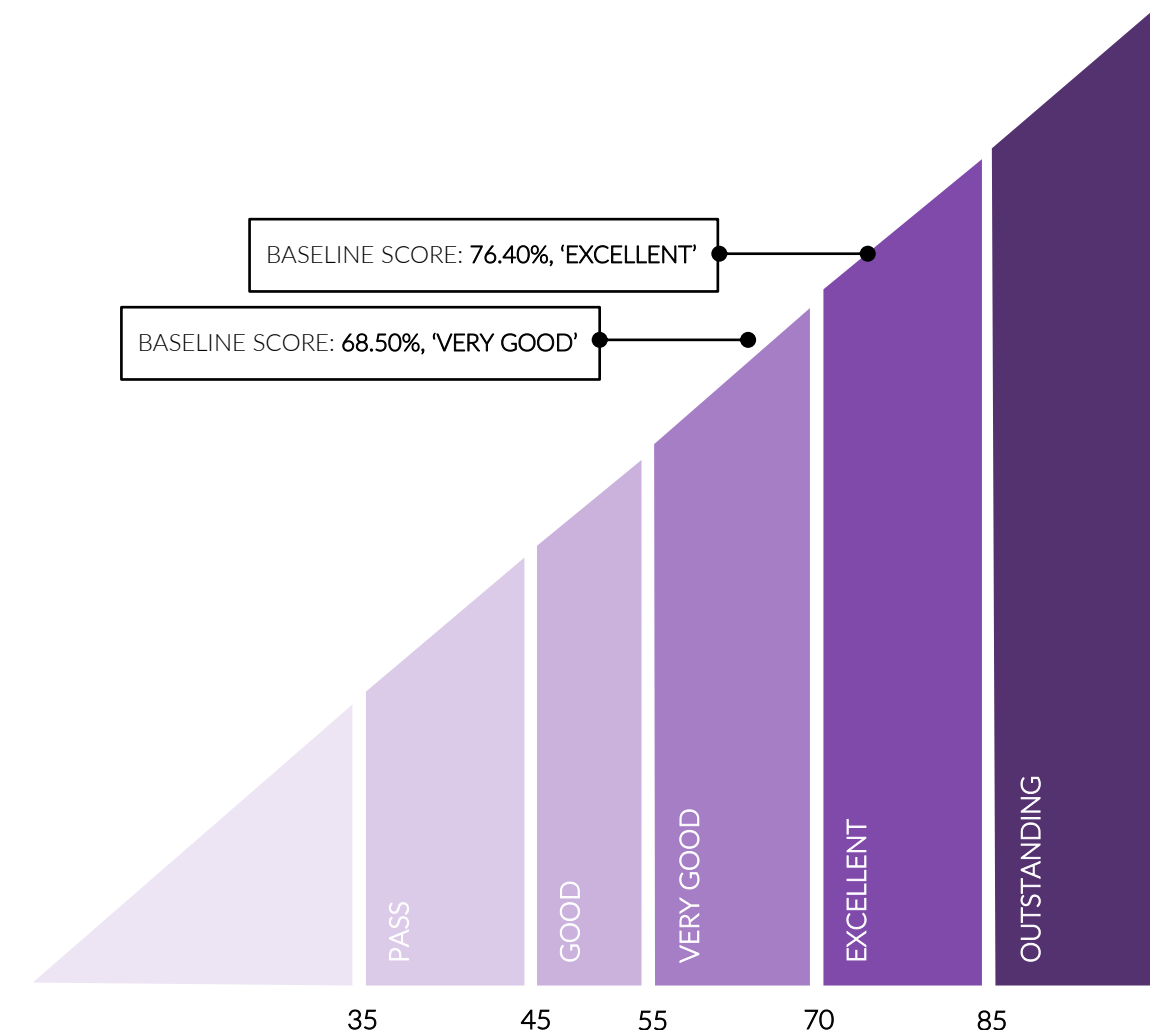


Figure 1: BREEAM 2018 Scale and Anticipated Performance Scores.

2. Assessment Details

2.1 Introduction

This report relates to the proposed new Retail and Office areas included in Phase 2 of the Station Hill development, in Reading. Both Phase 2 assessments have been registered with the BRE under the BREEAM UK New Construction (NC) 2018 scheme and are being assessed with the corresponding Retail and Office criteria.

2.2 Assessment Type

After discussions with the team an agreement has been made to assess the Retail and Office Space using a “Shell Only” assessment type, as defined by BREEAM.

Please note, that the “Shell Only” assessment route aligns with that of a Shell & Core approach for the Design Team. Please see Figure 2 for an explanation of the level of assessment type.

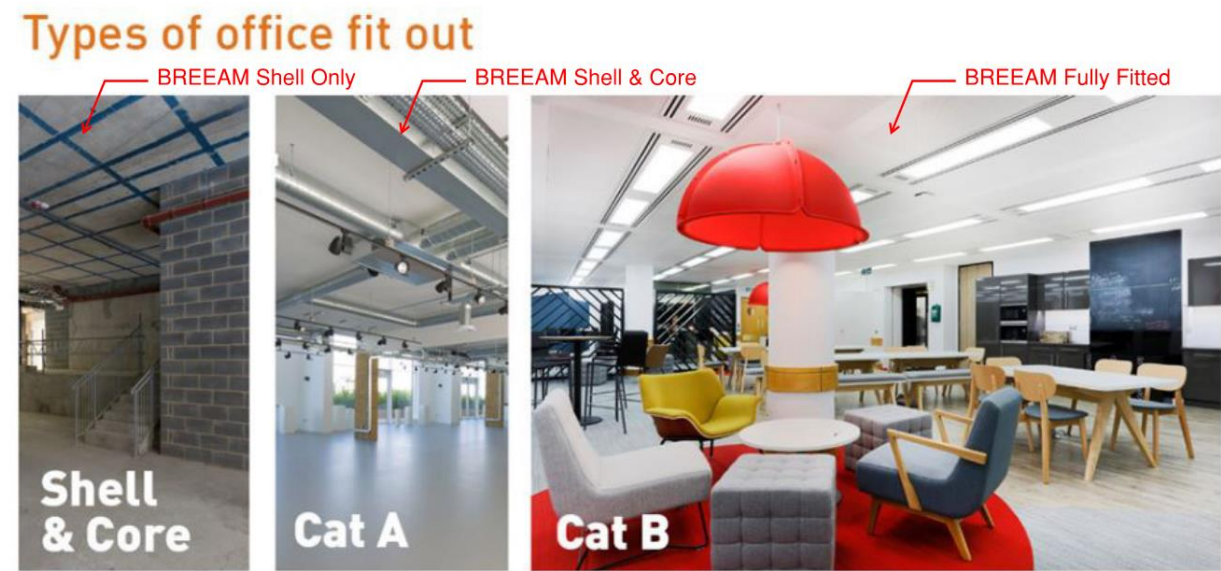


Figure 2 BREEAM Assessment Type Definitions

2.3 Assessment Rating

As a demonstration of the commitment to achieve a sustainable design and construction, the commercial office spaces will be designed to achieve a BREEAM UK New Construction (NC) 2018 ‘Excellent’ rating (70%>), with the retail spaces targeting BREEAM ‘Very Good’ (55%>) in line with the local planning authority.

2.4 Initial Pre-Assessment

An initial pre-assessment was undertaken by an independently by a qualified BREEAM Assessor prior to review by the design team. The report set out a route to achieving the target ratings and highlights the design team members responsible for each credit issue.

Credits currently included in the credit score are to be reviewed by the design team, and each team member is expected to provide feedback regarding credits under their responsibility, identifying any relevant issues. Once comments have been raised by the project team, the report and the predicted scores will be updated.

The following predicted score was calculated based upon experience with similar buildings and Hoare Lea’s current understanding of the proposed development:

- Retail: Baseline score / rating: 81.30% equivalent to a BREEAM ‘Excellent’.
- Office: Baseline score / rating: 81.30% equivalent to a BREEAM ‘Excellent’.

All mandatory and minimum standards for the BREEAM ‘Excellent’ rating was included within the assessment strategy for the target baseline score.

2.5 Revised Pre-Assessment.

Numerous BREEAM Workshops were held prior to the planning submission involving discussions with the wider design team regarding the overall strategy approach to delivering BREEAM ‘Excellent’ for the site. Following from this, in line with the local planning conditions conditioned for Phase 1, in order to allow for continuity, the same approach was adopted ensuring all retail areas to target and achieve BREEAM ‘Very Good’, and all office areas to be targeting BREEAM ‘Excellent’.

Following on from these workshops and discussions, the new baseline score was established for each of the Phase 2 areas:

- Retail Phase 2: 68.50% BREEAM ‘Very Good’;
- Office Phase 2: 76.40% BREEAM ‘Excellent’.

Please refer to Section 3, Early Action Credits, and Section 4, Summary Approach to BREEAM for an update on these corresponding subjects.

Project Team Members.

Discipline	Organisation
Developer	Lincoln MGT
Project Manager	Cast
Architect	Gensler
Building Services Consultant	Hoare Lea LLP
Civils / Drainage / Structural Consultant	Ramboll
Cost Consultant	Cast
Vertical Transportation Consultant	Hoare Lea LLP
Security Consultant	Hoare Lea LLP
Daylighting and Glare Control Consultant	GIA
Air Quality Consultant	Arup
Energy Assessor (Part L)	Hoare Lea LLP
Landscape Architect	LDA
Ecologist	Waterman
Acoustician	Hoare Lea LLP
Planning Consultant	DP9
Transport Consultant	Peter Brett

3. Early Action Credits.

Under the BREEAM Assessment, there are a number of credits that are time critical and require early action by the design team in order for the credits to be achieved. For these credits, the actions required prior to end of RIBA Stages 1 and 2.

It is advised the Design Team fully to review the actions required in Tables 2 and Table 3 below to understand the required evidence needed to be demonstrated prior to the completion of RIBA Stages 1 and 2.

Table 1 BREEAM NC 2018 Stage 1 Evidence Requirements

Credit Issues	RIBA Stage 1 Actions	Owner	Status
Man 01 Project brief and design	– First credit: Stakeholder consultation: By the end of Stage 1 – definition and engagement of key stakeholders (incl. team member with significant construction experience) and their roles and responsibilities.	Cast	Consultation has taken place. BREEAM Evidence currently outstanding. Cast to provide.
LE 04 Enhancing site ecology	– The ecologist must be appointed by RIBA Stage 1 to carry out initial surveys, and subsequently provide recommendations in a report at RIBA Stage 2.	Waterman	Watermans have confirmed appointment.
LE 05 Long term impact on biodiversity			

Table 2 BREEAM NC 2018 Stage 2 Evidence Requirements

Credit Issues	RIBA Stage 2 Actions	Owner	Status
Man 01 Project brief and design	– First credit: Develop roles, responsibilities and contributions schedule detailing relevant roles throughout the project. – Second Credit: Stakeholder consultation by completion of Concept Design	Cast	Project Programme, meeting minutes, and stakeholder consultation to be provided demonstrating compliance with criteria.
Man 02: Life cycle costing and service life planning	– An elemental level Life Cycle Cost (LCC) analysis has been carried out based on the proposals developed during RIBA Work Stage 2	Cast	Elemental Life Cycle Cost (LCC) analysis to be provided.
Hea 06 Security	– Appoint a Suitability Qualified Security Specialist (SQSS) to conduct a Security Needs Assessment (SNA).	HL Security	SQSS has been appointed and will be provided a Security Needs Assessment (SNA).
Mat 03 Responsible sourcing of materials	– Development and use a project Sustainable Procurement Plan for the project.	Cast	BREEAM Evidence Outstanding.

Credit Issues	RIBA Stage 2 Actions	Owner	Status
Wst 01 Construction waste management	– Carry out (where relevant) a pre-demolition audit.	Cast (Demolition Contractor)	Phase 2 Demolition currently taking place. Cast to provide pre-demolition audit.
Wst 05 Adaptation to climate change	– Conduct a climate change adaption strategy appraisal for structural and fabric resistance	Gensler & Ramboll	Stage 2 Compliant evidence has been received by Gensler and Ramboll.
Wst 06 Design for disassembly and adaptability	– Undertake a building-specific disassembly assessment and functional adaptation strategy study.	Gensler & Ramboll	All Stage 2 evidence has been received by Gensler and Ramboll.
LE 02 Identifying and understanding the risks and opportunities for the project	– The project team is required to liaise and collaborate with representative stakeholders to identify and consider the ecological outcome for the site.	Waterman	On -going. Stage 4 Ecology report will be provided demonstrating criteria with all LE 02 + LE 03 requirements.
LE 03 Managing negative impacts on ecology	– 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.	Waterman	

4. Summary Score Sheet.

The summary table below highlights the list of targeted credits for the current BREEAM UK NC 2018 pre-assessment. Mandatory credits to achieve a 'Very Good' rating and above are highlighted by (M). Additional mandatory credits for an 'Excellent' or 'Outstanding' rating are highlighted by (Me) and (Mo) respectively. Exemplary (innovation) credits are written in brackets; e.g. (+1).

Table 3: BREEAM Target Summary.

Category	Issue	Retail BREEAM: 'Very Good'		Office BREEAM: 'Excellent'	
		Available	Targeted	Available	Targeted
Management	Man 01: Project brief and design	4	2	4	2
	Man 02: Lifecycle cost and service life planning	4	1	4	4
	Man 03: Responsible construction practices (Me), (Mo)	6	6	6	6
	Man 04: Commissioning and handover (Me), (Mo)	1	0	1	0
	Man 05: Aftercare (Me), (Mo)	N/A	N/A	N/A	N/A
Health & Wellbeing	Hea 01: Visual comfort	4	1	4	4
	Hea 02: Indoor air quality	N/A	N/A	N/A	N/A
	Hea 04: Thermal comfort	N/A	N/A	N/A	N/A
	Hea 05: Acoustic performance	1	1	1	1
	Hea 06: Safety	1	1	1	1
	Hea 07 Safe and healthy surroundings	2	2	2	2
Energy	Ene 01: Reduction of energy use and CO2 emissions (Me) (Mo)	9	0	9	4
	Ene 02: Energy monitoring (M) (Me) (Mo)	N/A	N/A	N/A	N/A
	Ene 03: External lighting	1	1	1	1
	Ene 04: Low carbon design	3	0	3	0
	Ene 05: Energy efficient cold storage	N/A	N/A	N/A	N/A
	Ene 06: Energy efficient transportation systems	N/A	N/A	N/A	N/A
	Ene 07 Energy efficient laboratory systems	N/A	N/A	N/A	N/A
	Ene 08: Energy efficient equipment	N/A	N/A	N/A	N/A
Transport	Tra 01: Transport assessment and travel plan	2	2	2	2
	Tra 02: Sustainable transport measures	10	9	10	9
Water	Wat 01: Water consumption (M) (Me) (Mo)	N/A	N/A	N/A	N/A
	Wat 02: Water monitoring (M) (Me) (Mo)	1	1	1	1
	Wat 03: Water leak detection and prevention	1	1	1	1
	Wat 04: Water efficient equipment	1	1	1	1

Category	Issue	Retail BREEAM: 'Very Good'		Office BREEAM: 'Excellent'	
		Available	Targeted	Available	Targeted
Materials	Mat 01: Environmental impacts from construction products - Building life cycle assessment	7	2	7	2
	Mat 02: Environmental impacts from construction products	1	1	1	1
	Mat 03: Responsible sourcing of materials (M) (Me) (Mo)	4	3	4	3
	Mat 05: Designing for durability and resilience	1	1	1	1
	Mat 06: Material efficiency	1	0	1	0
Waste	Wst 01: Construction waste management (Mo)	5	4	5	4
	Wst 02: Use of recycled and sustainably sourced aggregates	1	0	1	0
	Wst 03: Operational waste (Me), (Mo)	1	1	1	1
	Wst 04 Speculative floor and ceiling finishes	N/A	N/A	N/A	N/A
	Wst 05: Adaptation to climate change	1	1	1	1
	Wst 06: Design for disassembly and adaptability	2	2	2	2
Land Use and Ecology	LE 01: Site selection	2	1	2	1
	LE 02: Identifying and understanding the risks and opportunities for the project	2	2	2	2
	LE 03: Managing negative impacts on ecology	3	3	3	3
	LE 04: Change and enhancement of ecological value	4	4	4	4
	LE 05: Long term ecology management and maintenance	2	2	2	2
Pollution	Pol 01: Impact of refrigerants	N/A	N/A	N/A	N/A
	Pol 02: Local air quality	N/A	N/A	N/A	N/A
	Pol 03: Flood and surface water management	5	4	5	4
	Pol 04: Reduction of night time light pollution	1	1	1	1
	Pol 05: Reduction of noise pollution	N/A	N/A	N/A	N/A
Innovation	Inn 01: Approved Innovation and Exemplary Level Credits	10	1	10	1
Totals	Targeted weighted score:	68.50%		76.40%	
	Targeted weighted Rating	BREEAM 'Very Good'		BREEAM 'Excellent'	

5. Conclusion.

Based upon an initial credit review, alongside early stage engagement and workshops held within the design team, it is anticipated that the assessed Retail areas can achieve a score of 68.50% (BREEAM 'Very Good') and Office areas, 76.40% (BREEAM 'Excellent'), based on the current design proposals, and plans for the development.

Figure 3 and 4 provide a visual representation for the scores targeted and unachievable credit scores currently identified for each assessment.



Figure 3 BREEAM Performance Summary and Targeted Credits: Office assessment.

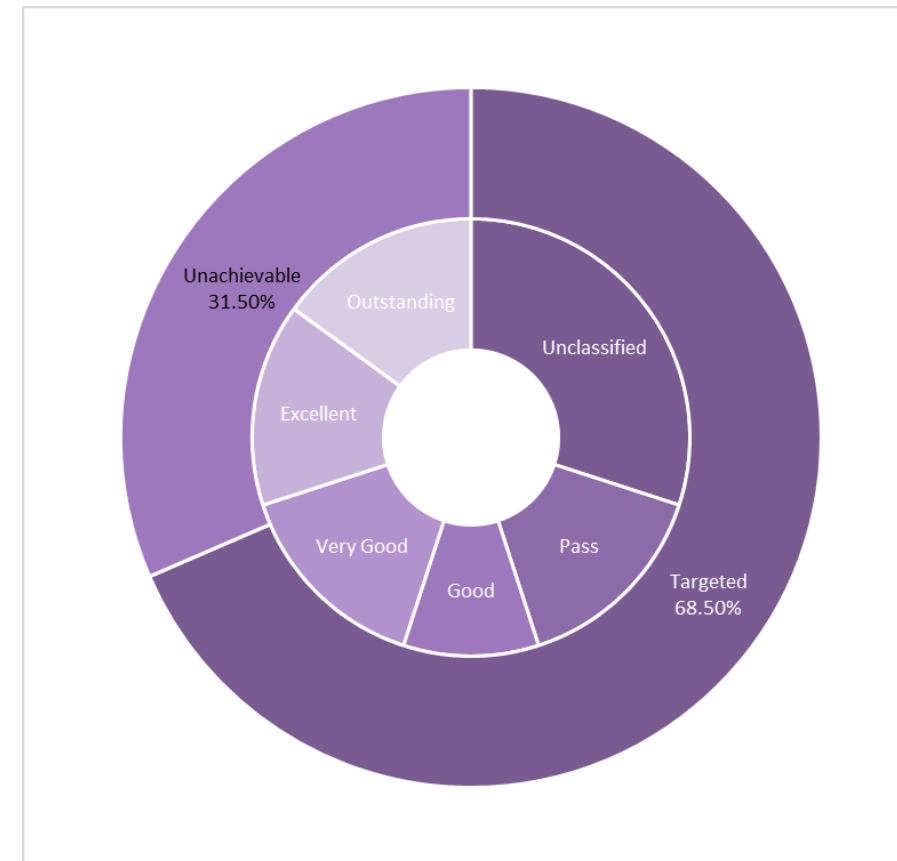


Figure 4 BREEAM Performance Summary and Targeted Credits: Retail Assessment.



ALEXANDRA BRYANT
SUSTAINABILITY ASSESSOR

alexandrabryant@hoarelea.com

[HOARELEA.COM](https://www.hoarelea.com)

Enterprise House
Old School Close
Ferndown
Bournemouth
BH22 9UN
England





ALEXANDRA BRYANT
SUSTAINABILITY ASSESSOR

alexandrabryant@hoarelea.com

[HOARELEA.COM](https://www.hoarelea.com)

Enterprise House
Old School Close
Ferndown
Bournemouth
BH22 9UN
England

