BREEAM STATEMENT

PROPOSED GYM
305 GRAYS INN ROAD, CAMDEN

JULY 2014

REF: 2014.061

ELEMENT SUSTAINABILITY – ISSUE NOTES

Project No: **2014.061**

Title: **BREEAM Review Statement**
Proposed Gym
Grays Inn Road, Camden

Client: **PFP Leisure Ltd.**

Issue Date: **July 2014**

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17th July 2014

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1. INTRODUCTION

Element Sustainability has been commissioned by PFP Leisure Ltd. to review the potential BREEAM rating that may achieved by the proposed gymnasium complex following the refurbishment of the lower floors of 305 Grays Inn Road, Camden.

This section reviews the planning policy requirements and sustainability targets that are relevant to this scheme.

National Planning Policy

In addition to the local planning policies, the National Planning Policy Framework 2012 is a material consideration. The National Planning Policy Framework (published 27th March 2012) replaces all previous PPSs and PPGs.

The NPPF states that the planning system should play an active role in guiding development to sustainable solutions. There are three dimensions to sustainable development, as stated within the NPPF: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:

- An economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;

- A social role – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and

- An environmental role – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development - for decision-taking this means approving development proposals that accord with the development plan without delay.

Local Planning Policy

The **Camden Core Strategy** contains a number of policies which promote sustainable construction, as follows:

DP22 – Promoting Sustainable Design and Construction states that the Council will promote and measure sustainable design and construction by expecting non-domestic developments of 500m^2 of floor space or above to achieve 'very good' in BREEAM assessments, with the aim of increasing the target to a rating of at least 'excellent' in 2016, **if feasible**, and zero carbon from 2019, in line with the government's ambitions.

DP23 – Water states that the Council will require developments to reduce their water consumption, the pressure on the combined sewer network and the risk of surface water flooding by:

a) incorporating water efficient features and equipment and capturing, retaining and re-using surface water and grey water on-site;

b) limiting the amount and rate of run-off and waste water entering the combined storm water and sewer network through the methods outlined in part a) and other sustainable urban drainage methods to reduce the risk of flooding;

c) reducing the pressure placed on the combined storm water and sewer network from foul water and surface water run-off and ensuring developments in the areas identified by the North London Strategic Flood Risk

Assessment and shown on Map 2 as being at risk of surface water flooding are designed to cope with the potential flooding; and

d) encouraging the provision of attractive and efficient water features.

CS13 – Tackling Climate Change Through Promoting Higher Environmental Standards states that the Council will require all development to take measures to minimise the effects of, and adapt to, climate change and encourage all development to meet the highest feasible environmental standards that are financially viable by:

a) ensuring patterns of land use that minimise car travel and help support local energy networks;

b) promoting the efficient use of land and buildings;

c) minimising carbon emissions from the redevelopment, construction and occupation of buildings by implementing, in order, all of the elements of the energy hierarchy

Policy CS13 also expects development or alterations to existing buildings to include proportionate measures to be taken to improve their environmental sustainability, where possible.

The Camden Planning Guidance CPG3 - Sustainability document has been prepared to support the policies in the Local Development Framework (LDF). This guidance is consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions. It also highlights the Council's requirements and guidelines which support the relevant Local Development Framework (LDF) policies:

- CS13 - Tackling climate change through promoting higher environmental standards
- DP22 - Promoting sustainable design and construction
- DP23 - Water

In accordance with Development Policy DP22 - Promoting sustainable design and construction, The Camden Planning Guidance CPG3 - Sustainability document encourages developers to achieve the standards presented in Table 1.1.

Table 1.1 - Camden CPG3, Target Sustainability Standards

Time period	Minimum rating	Minimum standard for categories (% of un-weighted credits)
2010-2012	'very good'	Energy 60% Water 60% Materials 40%
2013+	'excellent'	

BREEAM

In accordance with the planning policy requirements, the developer of this site is encouraged to achieve a BREEAM Excellent rating. BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's leading and most widely used environmental assessment method for buildings. The standard aims to mitigate the life cycle impacts of buildings on the environment and enable buildings to be recognised according to their environmental benefits.

The building's performance is assessed under a number of categories, including:

- Energy;
- Water;
- Transport;
- Materials;
- Land use and ecology;
- Pollution;
- Health and wellbeing; and
- Management.

The BREEAM rating benchmarks for new construction projects assessed using the 2011 version of BREEAM are presented in Table 1.1.

Table 1.1 – BREEAM Rating Benchmarks

BREEAM Rating	% Score Required
Outstanding	≥ 85
Excellent	≥ 70
Very Good	≥ 55
Good	≥ 45
Pass	≥ 30

To ensure that performance against fundamental environmental issues are not over-looked in pursuit of a particular rating, BREEAM sets minimum standards of performance in key areas e.g. energy, water, waste etc. A BREEAM Excellent rating requires minimum performance standards in respect to:

- Ene 01: Reduction of CO_2 emissions;
- Ene 02: Energy monitoring;
- Ene 04: Low or zero carbon technologies;
- Wat 01: Water consumption;
- Wat 02: Water monitoring;
- Mat 03: Responsible Sourcing;
- Wst 03: Operational waste; and
- LE 03: Mitigating eco-logical impact.

The purpose of this Statement is to review the development proposals and assess the feasibility for credit award within a formal BREEAM assessment and in turn determine the potential rating the scheme may achieve.

The review has been undertaken by independent, qualified and licensed BREEAM assessors. The Statement details the commitments that will ensure this scheme achieves a viable, deliverable and environmentally sustainable re-development of the site that seeks to accord with policy aims and sustainability targets.

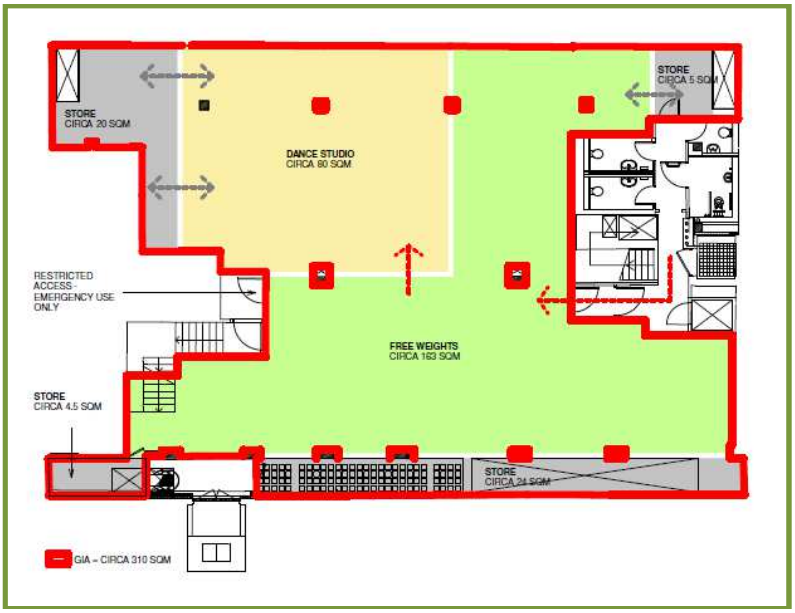
2. DEVELOPMENT PROPOSALS

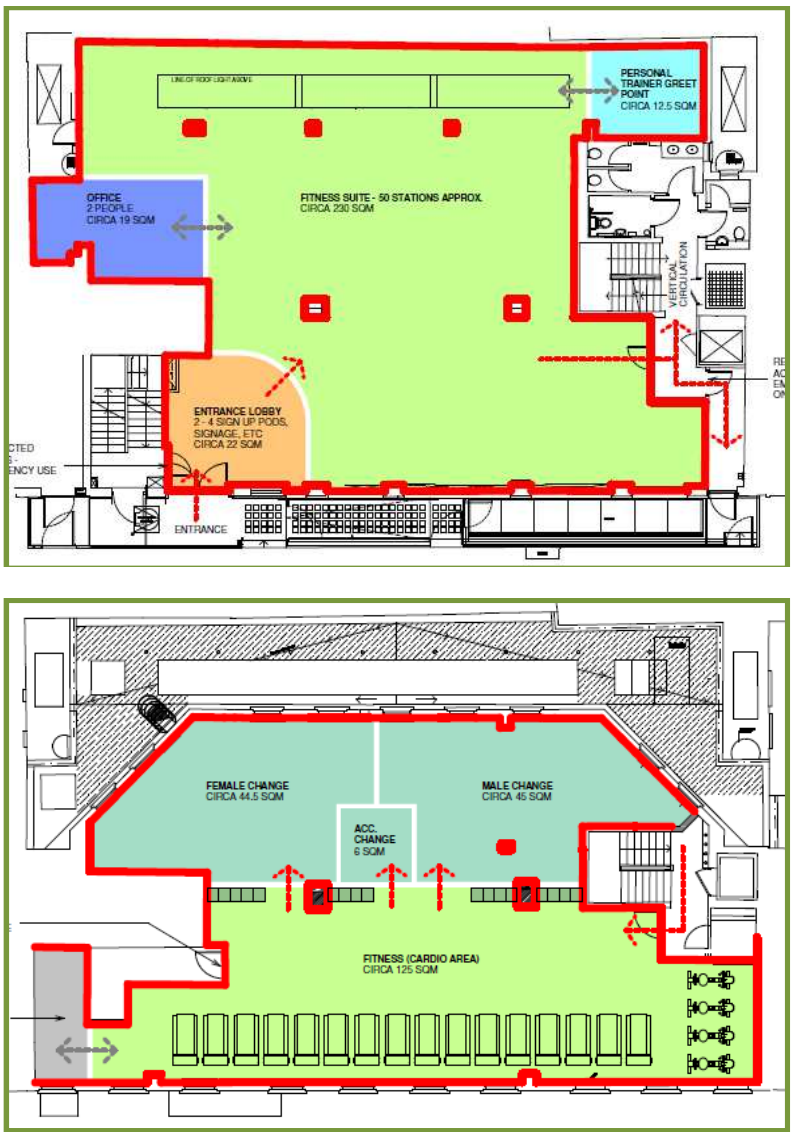
The proposed refurbishment building at 305 Grays Inn Road, Camden is currently utilised as office accommodation (see figure 2.1) and is located within a densely developed urban centre.

Figure 2.1 –Site Location

The development proposals are for the refurbishment of part of the existing building. The basement, ground and first floors will be converted from office accommodation into the Proposed Gym including a dance studio, free weights area, fitness suite, changing areas and ancillary spaces. Figure 2.2, Proposed Layout shows how these areas will be accommodated throughout the building.

Figure 2.2 – Proposed Layout (Lower Ground, Ground and First Floor Plans)





The building is understood to be of concrete frame with block and brick infill construction and dates to the mid 1980's. The building was modernised in 2007/8 comprising the following -

- Upgraded double glazing and secondary glazing;
- Gas fired condensing boilers;
- Cylon Building Management System;
- Air handling unit with matrix cross flow heat-recovery;
- Chiller beam cooling system linked to central chiller plant; and,
- Sensor lighting which can be adjusted by way of a laptop

The upper floors of the building will remain occupied as office accommodation following the proposed refurbishment and change of use of the lower floors.

3. BREEAM PERFORMANCE REVIEW

A BREEAM Pre-Assessment report has been completed to determine the feasible credits and potential BREEAM rating of this building. A BREEAM New Construction 2011 Retail (Assembly and Leisure; Indoor Fitness Centre; Refurbishment, Fully Fitted Out) Pre-Assessment of the proposals has been undertaken. Working alongside the qualified BREEAM assessor, the technical design team has reviewed the individual credit criteria and award of credits within the Pre-Assessment in order to optimise the building's BREEAM performance.

In reviewing and assessing the feasibility of the BREEAM Credit award and the overall BREEAM performance of this scheme, financial viability has been considered along with constraints arising from the nature of the proposed refurbishment of an existing building in this location.

Please note that due to the nature of the proposed redevelopment scheme and its operational characteristics, many credits are automatically removed from the scope of the BREEAM assessment. All credits allocated within this BREEAM Pre-Assessment will require further technical verification during the formal Design Stage and Post Construction BREEAM assessment.

BREEAM Credit Award Review

An overview of the BREEAM credit award for each issue is presented below. Where credits are deemed unachievable the rationale for non-award is provided. The BREEAM 2011 Pre-Assessment report is presented in the appendices of this document and contains a full commentary on the individual credit award and specification requirements.

Management = 17/22 credits awarded

Man01 Sustainable Procurement – It is considered that a BREEAM AP assessor may not necessarily be instructed for the formal assessment stage and therefore, a number of these credits cannot be awarded.

Man02 Responsible Construction Practices – Full credit award.

Man03 Construction Site Impacts – Full credit award.

Man04 Stakeholder Participation - Opportunities for pre-planning consultation have been missed due to the scheme having progressed past RIBA Stage C (concept design stage) of the development cycle. These credits cannot therefore be awarded.

Man05 Lifecycle Costing – Full credit award.

Health and Wellbeing = 9/15 credits awarded

Hea01 Visual Comfort – It is assumed that, due to the existing building's dimensions and lack of fenestration to certain floors/areas, point daylight factors will not be achievable for all areas of the building and therefore the day lighting credit is not sought.

Hea02 Indoor Air Quality – Natural ventilation cannot be provided as, in order to do so, the openable window area must be at least 5% of the gross internal floor area which is inappropriate for a building of this nature. Due to the site location adjacent to a main road, it is not possible to locate openable windows/ventilators over 20m from sources of external pollution (i.e. road and forecourt). These credits therefore, cannot be awarded.

Hea03 Thermal Comfort – Full credit award.

Hea04 Water Quality – Full credit award.

Hea05 Acoustic Performance – It is thought however, that ambient noise levels may not be achieved given the proposed use for this building. Furthermore, as this is an existing building there are significant constraints regarding what is possible to achieve in terms of acoustic performance.

Hea06 Safety and Security – Full credit award.

Energy = 15/27 credits awarded

Ene01 Reduction of CO_2 Emissions - Based on SBEM calculations completed for the proposed specification and the results from the BREEAM 2011 Ene01 calculator, it has been determined that this building will score 0 credits for this issue. (a minimum of 6 credits are required for BREEAM Excellent).

Ene02 Energy Monitoring - Full credit award.

Ene03 External Lighting - Full credit award.

Ene04 LZC Technology - At least 1 credit is required under in order to achieve BREEAM Excellent. This credit is awarded for the undertaking of a BREEAM compliant feasibility study by an energy specialist, and the subsequent specification of a local LZC energy technology for the development (in line with the recommendations of the study). Alternatively, the credit may be awarded where evidence is provided to confirm that the occupier has a contract with an energy supplier to provide electricity for the assessed building/development from a 100% renewable energy source. However, it is understood that LZC technologies cannot form part of the development due to site constraints and that, therefore, this credit cannot be awarded.

Ene08 Energy Efficient Equipment - Full credit award.

Transport = 6/9 credits awarded

Tra01 Public Transport - Full credit award. It is assumed however, that a dedicated bus service will not be provided for staff due to the limited scale of the operation and provision of excellent public transport networks within the area.

Tra02 Proximity to Amenities - Full credit award.

Tra03 Cyclist Facilities – Single credit award only. Although compliant cyclist facilities (showers, changing rooms with lockers and drying space) will be provide within the gym cycle, secure spaces will not be provided.

Tra04 Maximum Car Parking Capacity - No credit award.

Tra05 Travel Plan - No credit award.

Water = 7/8 credits awarded

Wat01 Water Consumption - At least 1 credit is required for BREEAM Excellent. Indicative 4 credit awarded for a minimum 50% improvement above the baseline based upon previous performance of BREEAM assessments. It is proposed that sanitary fittings & showers be specified with optimum flow rates.

Wat02 Water Monitoring - Full credit award.

Wat03 Leak Detection - Full credit award.

Materials = 8/12 credits awarded

Mat01 Lifecycle Impacts – As the assessed building is re-using existing in-situ elements as part of its structure, those elements can be allocated an A+ Green Guide rating. It is assumed that a high score will be feasible for this credit given that the majority of the existing building elements are to be retained and reused.

Mat02 Hard Landscaping - Full credit award.

Mat03 Responsible Sourcing - It is assumed that 2 credits will be awarded under Mat 03 for using suppliers who are able to provide relevant certification for the responsible sourcing of materials. This section applies to a number of materials, as listed within the BREEAM guidance (e.g. bricks, timber, concrete, plastic, glass etc) in the following elements: structural frame, ground floor, roof, external walls, internal walls, foundation/substructure, fittings including windows (frame and glazing units), doors (internal and external), floor finishes and any other significant fitting or finish present and hard landscaping.

Mat04 Insulation - It is understood that fabric alterations do not form part of the refurbishment proposals thus these credits are withheld.

Mat05 Designing for Robustness - Full credit award.

Waste Score = 6/6 credits awarded

Wst01 Construction Waste Management - Full credit award.

Wst02 Recycled Aggregates - Full credit award.

Wst03 Operational Waste - Full credit award.

Wst04 Speculative Floor and Ceiling Finishes - Full credit award.

Land Use and Ecology Score = 4/10 credits awarded

LE01 Site Selection - One credit will be awarded for developing on previously developed land. It is understood that the site is not contaminated so the second credit cannot be awarded.

LE02 Ecological Value of the Site - Full credit award.

LE03 Mitigating Ecological Impact – The potential for ecological enhancement and features at this site is constrained by the nature of the building and its location. It is assumed that there will be no negative change in plant species richness as a result of the proposed refurbishment. Two credits awarded.

At least 1 credit is required for BREEAM Excellent. It is therefore assumed that there will be no negative change in plant species richness as a result of the proposed refurbishment. This will be calculated by the assessor using the BREEAM LE03 calculator tool.

LE04 Enhancing Site Ecology - Credit not sought. Due to the location of the building and the fact that the refurbishment proposals extend to the lower floors only, it is thought that this credit award will not be feasible.

LE05 Long Term Impact on Biodiversity - Credit not sought. In order to award this credit, an ecologist must produce a landscape and habitat management plan covering at least the first five years after project completion. Due to the size, location and nature of the proposed scheme it is considered unfeasible.

Pollution Score = 10/13 credits awarded

Pol01 Impact of Refrigerants - Two credits are be awarded where the future tenants commit to using refrigerants which have Direct Effect Life Cycle CO2 equivalent emissions (DELC CO2e) of ≤ 100 kgCO2e/kW cooling capacity OR where air-conditioning or refrigeration systems are installed the refrigerants used have a Global Warming Potential (GWP) ≤ 10. The remaining 1 credit for specifying a refrigerant leakage/charge loss detection system is withheld.

Pol02 NOx Emissions – Space heating will be supplied by existing condensing, gas fired boilers. It is assumed that the NOx emissions from these boilers ≤ 100 mg/kWh, given that they are condensing boilers that are over eight years old.

Pol03 Surface Water Run Off - Full credit award.

Pol04 Reduction of Night Time Light Pollution - Full credit award.

Pol05 Noise Attenuation - Full credit award.

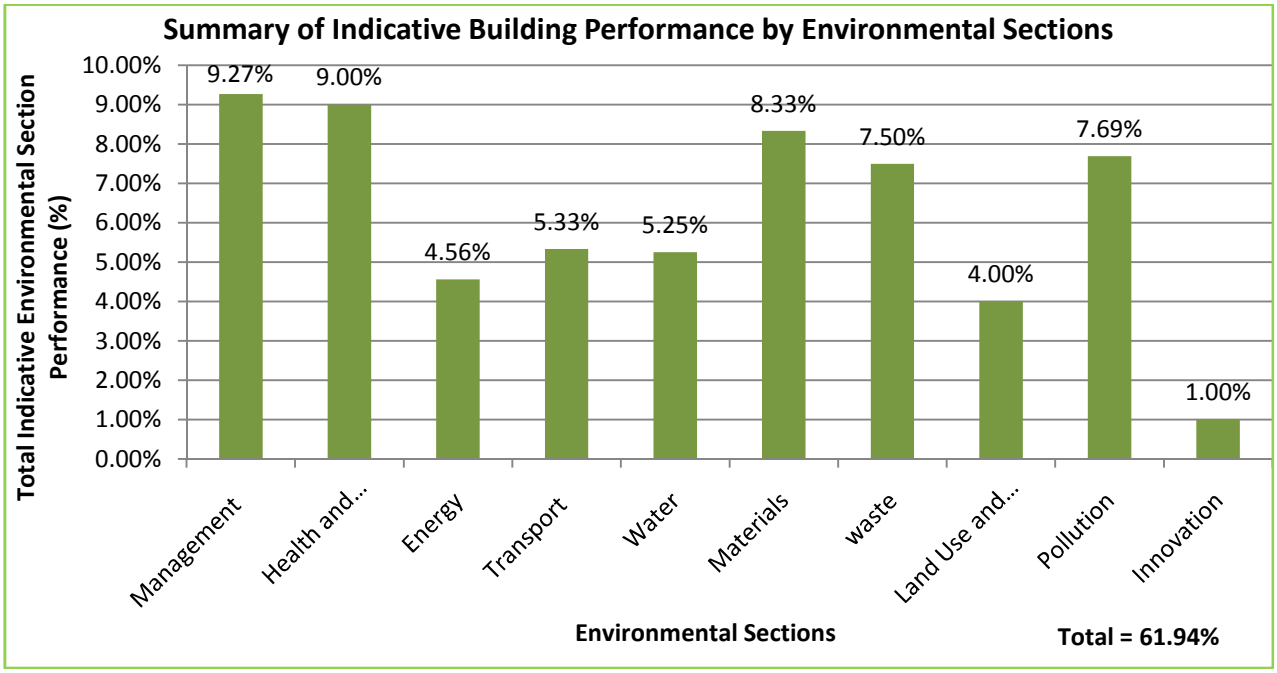
Potential BREEAM score and rating

The BREEAM Pre-Assessment shows that the building is expected to performs as follows:

- **Indicative building score = 61.94%**
- Indicative BREEAM rating = Potential for **BREEAM Very Good rating**
- Indicative minimum standards level achieved = **Minimum standards for BREEAM Very Good**

The relative percentage scores in each environmental assessment category are presented in Figure 3.1.

Figure 3.1. - Environmental Assessment Category Percentage Scores



Mandatory Credit Allocation

As previously referenced, BREEAM Excellent buildings must achieve a number of mandatory credits. This building cannot meet the target BREEAM Excellent rating because many of the 'tradable' credits are not being feasible due to the inherent nature of the development proposals and site constraints.

Nonetheless, the development has been assessed as potentially capable of meeting most *mandatory* credit issues associated with the BREEAM Excellent rating.

In accordance with Development Policy DP22 - Promoting sustainable design and construction, The Camden Planning Guidance CPG3 - Sustainability document encourages developers to achieve the standards presented in Table 3.2.

Table 3.2 - Camden CPG3, Target Sustainability Standards

Time period	Minimum rating	Minimum standard for categories (% of un-weighted credits)
2010-2012	'very good'	Energy 60% Water 60% Materials 40%
2013+	'excellent'	

The BREEAM Pre-Assessment report completed for the proposed refurbishment of this building details how the following un-weighted credits may be achieved for each of these three sections, as follows:

Energy = 24%

Water = 88%

Materials = 67%

4. SUMMARY

This Statement has reviewed the proposed refurbishment proposed refurbishment of the lower floors of 305 Grays Inn Road, Camden to form a gymnasium complex against the BREEAM assessment criteria.

- The proposals for the site have the potential to achieve the majority of BREEAM Excellent mandatory credit criteria.
- The proposals for the site have the potential to achieve an overall BREEAM Very Good rating:
    - This represents 'advanced good practice' according to the Building Research Establishment's classification and would be amongst the top performing 25% of UK new non-domestic buildings.
- As detailed in Section 3, the scheme is expected to perform well in all areas of the assessment despite a number of inherent constraints that preclude the award of a number of credits
- The proposals, despite the inherent constraint associated with the refurbishment of this building respond positively to the aims of a number of policies that form part of the Local Development Plan as follows:

DP22 – Promoting Sustainable Design and Construction states that the Council will promote and measure sustainable design and construction by expecting non-domestic developments of 500sqm of floor space or above to achieve 'very good' in BREEAM assessments, with the aim of increasing the target to a rating of at least 'excellent' in 2016.

DP23 – Water states that the Council will require developments to reduce their water consumption, the pressure on the combined sewer network and the risk of surface water flooding.

CS13 – Tackling Climate Change Through Promoting Higher Environmental Standards states that the Council will require all development to take measures to minimise the effects of, and adapt to, climate change

The proposals accord with the aims of the NPPF:

- In committing to delivering a BREEAM Very Good development, the proposals are considered to enhance the existing built environment;
- The proposals represent prudent use natural resources as this is redevelopment of a brown field site,
- In meeting the BREEAM credit criteria outlined in section 3, a commitment will be made to minimise waste and pollution; and
- In exceeding the regulatory compliance criteria the building will assist in mitigate the impact of climate change.

- This statement demonstrates that the proposals will deliver a sustainable commercial scheme. It is therefore, aligned with guidance provided within the National Planning Policy Framework, which states a presumption in favour of such development.
- Although every effort has been made to determine the building's optimal BREEAM rating, a number of credits cannot be awarded due to technical feasibility constraints. This leads to the building achieving a potential maximum rating of BREEAM Very Good.

In conclusion, the proposals will deliver an efficient and sustainable scheme which is in accordance with key policy requirements at the national and regional level. Although not able to meet all aspects of the BREEAM rating targeted by local planning policies, a commitment is made to providing a good quality re-development of the site and delivering significant environmental improvement over the current building.

Appendix A - BREEAM Pre-Assessment

BREEAM®

BREEAM 2011 New Construction Pre-Assessment Estimator

This assessment and indicative BREEAM rating is not a formal certified BREEAM assessment or rating and must not be communicated as such. The score presented is indicative of a buildings potential performance and is based on a simplified pre-formal BREEAM assessment and unverified commitments given at an early stage in the design process.

Building name	Proposed Gym, 305 Grays Inn Road, Camden
Indicative building score (%)	61.94%
Indicative BREEAM rating	Pre-Assessment result indicates potential for BREEAM Very Good rating
Indicative minimum standards level achieved	Pre-Assessment result indicates the minimum standards for Very Good level

MANAGEMENT — Section Weighting 12.00% — Indicative Section Score 9.27%

Man01 Sustainable Procurement

No. of BREEAM credits available	8	Available contribution to overall score	4.36%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will roles, responsibilities and a training schedule be defined in accordance with BREEAM?	Yes	1	1
Will a BREEAM AP be appointed at RIBA stage A/B and performance targets contractually agreed?	No	1	0
Will a BREEAM AP be appointed to monitor and report progress during RIBA stage B-E ?	No	1	0
Willa BREEAM AP be appointed to monitor and report progress during RIBA stage F-L?	No	1	0
Will a thermographic survey be conducted and any defects uncovered remedied?	No	1	0
Will compliant commissioning of building services be carried out?	Yes	1	1
Will compliant seasonal commissioning of building services be carried out?	Yes	1	1
Will water/energy consumption data be recorded and aftercare support provided for 12 months?	Yes	1	1
Will water/energy consumption be recorded/reported for 3 years post construction?	Yes	1	1

Total indicative BREEAM credits achieved	4
Total indicative contribution to overall building score	2.18%
Total indicative BREEAM innovation credits achieved	1
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

It is considered that a BREEAM AP assessor may not be instructed for the formal assessment stage and therefore, a number of these credits cannot be awarded. At this stage it is assumed that credits will be awarded for the involvement of relevant parties (e.g. client, occupier etc) from RIBA stage B in contributing to the decision making process for the project (as defined in the guidance). An appropriate project team member(s) must be appointed to monitor and programme pre-commissioning, commissioning and, where necessary, re-commissioning on behalf of the client. The second credit (required to achieve credits under Ene 05) will be awarded where all building services are included in the commissioning schedule and commissioning is to be carried out in line with current guidance (see BREEAM Guidance for further details). Finally, a compliant seasonal commissioning of building services must be carried out and water / energy consumption recorded and reported by the building occupier for 2 years post construction.

BREEAM 2011 New Construction Pre-Assessment Estimator

Man02 Responsible Construction Practices

No. of BREEAM credits available	2	Available contribution to overall score	1.09%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria

Which considerate construction scheme will be used or required to be used by the principal contractor?	Considerate Constructors Scheme
For the required scheme, what will be the target performance level set for the site/contractor?	A CCS score between 32 and 35.5.

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.09%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

The development will be registered with the CCS and, under the revised scheme, will score a minimum of 32 with no less than 5 in each of the subsections.

BREEAM 2011 New Construction Pre-Assessment Estimator

Man03 Construction Site Impacts

No. of BREEAM credits available	5	Available contribution to overall score	2.73%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will site energy consumption be metered/monitored?	Yes	1	1
Will site water consumption be metered/monitored?	Yes	1	1
Will the transport of construction materials and waste to/from site be measured/monitored?	Yes	1	1
Will timber be sourced in accordance with the Government's Timber Procurement Policy?	Yes	1	1
Will/does the principal contractor operate a compliant Environmental Management System?	Yes	1	1
Will the principal contractor adopt best practice pollution prevention policies & procedures?	Yes		

Total indicative BREEAM credits achieved	5
Total indicative contribution to overall building score	2.73%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

It is assumed that at least 4 credits will be awarded where responsibility has been assigned to an individual(s) for monitoring, recording and reporting energy and water consumption data resulting from all construction processes. To ensure the robust collection of information, this individual(s) has the appropriate authority, responsibility and access to the data required. The appointed contractor will operate a compliant EMS, source timber in accordance with the the Govt. Procurement Policy and wil ladopt best practice in terms of pollution prevention procedures.

BREEAM 2011 New Construction Pre-Assessment Estimator

Man04 Stakeholder Participation

No. of BREEAM credits available	4	Available contribution to overall score	2.18%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will an appropriate level of consultation activities be undertaken?	No	1	0
Will an access statement be developed and appropriate building user facilities provided?	Yes	1	1
Will building user guides and relevant user information be provided?	Yes	1	1
Will a post occupancy evaluation assessment be undertaken and information disseminated?	Yes	1	1

Total indicative BREEAM credits achieved	3
Total indicative contribution to overall building score	1.64%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

Opportunities for pre-planning consultation have been missed due to the scheme having progressed past this stage of the development cycle. In order to reach BREEAM Excellent, a compliant Building User Guide must be provided - as a minimum the Guide includes all relevant sections with each completed as far as is possible given the services and fabric installed. The Guide must then be handed on to the fit-out team who can then complete the relevant sections based on the fit-out strategy before handing the completed Guide over to the tenant/building owner. In order to gain an extra credit, the occupier must commit to undertaking a post occupancy evaluation assessment.

BREEAM 2011 New Construction Pre-Assessment Estimator

Man05 Life cycle cost and service life planning

No. of BREEAM credits available	3	Available contribution to overall score	1.64%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a feasibility stage Life Cycle Cost (LCC) analysis be commissioned and completed?	Yes	1	1
Will a strategic and system level LCC be commissioned and completed?	Yes	1	1
Will a technical design LCC to be commissioned and completed?	Yes	1	1

Total indicative BREEAM credits achieved	3
Total indicative contribution to overall building score	1.64%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

A Life Cycle Cost (LCC) analysis will be carried out based on the proposals developed during RIBA Work Stages C/D (concept design/design development) or equivalent.

BREEAM 2011 New Construction Pre-Assessment Estimator

HEALTH & WELLBEING	Section Weighting	15.00%	Indicative Section Score	9.00%

Hea01 Visual Comfort

No. of BREEAM credits available	4	Available contribution to overall score	4.00%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will all fluorescent lamps be fitted with high frequency ballasts?	Yes	N/A	N/A
Will all relevant building areas be designed to achieve the appropriate daylight factor(s)?	No	2	
Will the design provide adequate glare control and view out for building users?	Yes	1	1
Will internal/external lighting be specified in accordance with the relevant CIBSE Guides/British Standards?	Yes	1	1
Will all relevant building areas be designed to achieve exemplary level daylight factor(s)?		1	0

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	2.00%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

It is a minimum requirement for all BREEAM levels that all fluorescent lamps be fitted with high frequency ballasts. It is assumed that, due to the existing building's dimensions and lack of fenestration to certain floors/areas, point daylight factors will not be acheivable for all areas of the building and therefore the daylighting credit not sought. The refurbished building will provide adequate glare control and view out for building users and all internal and external lighting specified will be in accordance with the relevant CIBSE Guides / British Standards.

BREEAM 2011 New Construction Pre-Assessment Estimator

Hea02 Indoor Air Quality

No. of BREEAM credits available	4	Available contribution to overall score	4.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will an air quality plan be produced?	Yes	1	0
Will the building be designed to minimise sources of internal air pollution?	No		
Will the relevant products be specified to meet the VOC testing and emission levels required?	Yes	1	1
Will formaldehyde and total VOC levels be measured post construction?	Yes	1	1
Will the building be designed to, or have the potential to provide, natural ventilation?	No	1	0

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	2.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

Due to the location of he building on a mian road in an urban centre it is thought that the credit for minimising air pollution will not be achievable. However, further credits are available where, presuming an air quality plan has been produced, relevant products (paints, adhesives etc, as listed in the BREEAM guidance) meet the VOC testing and emissions levels required, and where formaldehyde and VOC levels are measured post-construction (based on confirmation from the building user etc). Natural ventilation cannot be provided as, in order to do so, the openable window area must be at least 5% of the gross internal floor area which is inappropriate for a building of this nature.

BREEAM 2011 New Construction Pre-Assessment Estimator

Hea03 Thermal Comfort

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will thermal modelling of the design be carried out?	Yes	1	1
Will the modelling inform the development of a thermal zoning and control strategy?	Yes	1	1

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	2.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

Thermal modelling has been carried out using software in accordance with CIBSE AM11 1Building Energy and Environmental Modelling. The thermal modelling analysis will inform the temperature control strategy / zoning for the building and it's users.

BREEAM 2011 New Construction Pre-Assessment Estimator

Hea04 Water Quality

No. of BREEAM credits available	1	Available contribution to overall score	1.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will all water systems be designed to comply with the relevant HSE Approved Code of Practice and Guidance?	Yes	1	1
Where humidification is to be provided, will a failsafe humidification system be specified?	N/A		
Will a wholesome supply of accessible, clean and fresh drinking water be supplied for building users?	Yes		

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	1.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

In addition to designing water systems to comply with the relevant guidance and, if applicable, providing failsafe humidification systems, this credit will be awarded where evidence can be provided that all permanently staffed building/office areas will be provided with chilled, mains-fed point-of-use water supplies or point-of-use water coolers.

BREEAM 2011 New Construction Pre-Assessment Estimator

Hea05 Acoustic Performance

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will/has a suitably qualified acoustician be appointed to provide appropriate design advice?	Yes		
Will the building meet the relevant acoustic performance standards and testing requirements?	No	2	

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

As a pre-requisite for this credit, a suitably qualified acoustician must be appointed by the client at the appropriate stage of the project to provide early advice on influencing outline design solutions to external sources of noise impacting the chosen site, site layout and zoning of the building for good acoustics, acoustic requirements for users with special hearing and communication needs, and acoustic treatment of different zones and facades. It is thought however, that ambient noise levels may not be acheived given the proposed use for this building. Furthermore, as this is an existing building there are significant constraints regarding what is possible to achieve in terms of acoustic performance.

BREEAM 2011 New Construction Pre-Assessment Estimator

Hea06 Safety and Security

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Where external site areas are present, will safe access be designed for pedestrians and cyclists?	N/A	N/A	N/A
Will a suitably qualified security consultant be appointed and security considerations accounted for?	Yes	2	2

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	2.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

The requriemetns of the first credit is awarded by default for safe pedestrian/cyclist access due to the access provision directly from the highway for this existing building. The second credit will be awarded for consulting with a suitably qualified security consultant during or prior to RIBA stage C (or equivalent).

BREEAM 2011 New Construction Pre-Assessment Estimator

ENERGY	Section Weighting	19.00%	Indicative Section Score	4.56%

Ene01 Reduction of CO_2 Emissions

No. of BREEAM credits available	15	Available contribution to overall score	11.40%
No. of BREEAM innovation credits available	5	Minimum standards applicable	Yes

How do you wish to assess the number of BREEAM credits achieved for this issue?	Define a target number of BREEAM credits achieved		
Select the target number of BREEAM credits for the Ene01 issue	0	BREEAM Innovation credits	

BREEAM 2011 New Construction Pre-Assessment Estimator

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Very Good level

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

Ene02 Energy Monitoring

No. of BREEAM credits available	2	Available contribution to overall score	1.52%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a BMS or sub-meters be specified to monitor energy use from major building services systems?	Yes	1	1
Will a BMS or sub-meters be specified to monitor energy use by tenant/building function areas?	Yes	1	1

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.52%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

These credits will be provided for the specification of a BMS or sub-meters to monitor energy use from the major building services systems (space heating, domestic hot water, humidification, cooling, major fans, lighting, small power and other major energy-consuming items, where applicable) and where the BMS or sub-metres are specified to monitor energy use by function areas . The end energy consuming use must be identifiable to the building user through labelling or data outputs.

BREEAM 2011 New Construction Pre-Assessment Estimator

Ene03 External Lighting

No. of BREEAM credits available	1	Available contribution to overall score	0.76%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will external light fittings and controls be specified in accordance with the BREEAM criteria?	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.76%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

All external fittings, where provided, within the construction zone will meet the BREEAM lighting requirements and be controlled through a time switch, or daylight sensor, to pre-vent operation during daylight hours.

BREEAM 2011 New Construction Pre-Assessment Estimator

Ene04 Low and Zero Carbon Technology

No. of BREEAM credits available	5	Available contribution to overall score	3.80%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Compliant LZC feasibility study to be undertaken	Yes	2	1
What will be the intended scope of the feasibility study?	Operational stage carbon savings/emissions		
Target percentage net reduction in operational stage CO2 emissions	0.00%	2	0
Please confirm the intended energy source of the Low and/or zero carbon system?	Please select		
Please select	No	1	0

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.76%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

At least 1 credit is required under Ene 04 in order to achieve BREEAM Excellent. This credit is awarded for the undertaking of a BREEAM compliant feasibility study by an energy specialist, and the subsequent specification of a local LZC energy technology for the development (in line with the recommendations of the study). Alternatively, the credit may be awarded where evidence is provided to confirm that the occupier has a contract with an energy supplier to provide electricity for the assessed building/development from a 100% renewable energy source. However, it is thought that LZC technologies cannot form part of the development due to site constraints and that, therefore, a BREEAM Excellent rating may not be achievable.

BREEAM 2011 New Construction Pre-Assessment Estimator

Ene05 Energy Efficient Cold Storage **Assessment Issue Not Applicable**

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved

Total indicative BREEAM credits achieved	N/A
Total indicative contribution to overall building score	N/A
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

Ene06 Energy Efficient Transportation Systems

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved

Total indicative BREEAM credits achieved	N/A
Total indicative contribution to overall building score	N/A
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

Ene07 Energy Efficient Laboratory Systems — **Assessment Issue Not Applicable**

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved

Total indicative BREEAM credits achieved	N/A
Total indicative contribution to overall building score	N/A
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

Ene08 Energy Efficient Equipment

No. of BREEAM credits available	2	Available contribution to overall score	1.52%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Present	Significant majority contributor
Which of the following will be present and likely to be a/the major contributor to 'unregulated' energy use:		
Small power/plug in equipment?	Yes	No
Swimming pool?	No	
Communal laundry?	No	
Data centre?	No	
IT-intensive operation areas?	Yes	Yes
Residential areas?	No	
Healthcare?	No	
Kitchen and catering facilities?	No	

	Indicative compliance?	Credits available	Indicative credits achieved	
Will the significant majority contributor(s) to 'unregulated' energy use (above) meet the BREEAM criteria?	Yes	2	2	N/A

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.52%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

These credits will be awarded where evidence can be provided to confirm that all small power/plug in equipment (office equipment, domestic scale white goods and other small powered equipment) qualifies for an Enhanced Capital Allowance Scheme, has been awarded an Energy Star labelling scheme, has been procured in accordance with the Government Buying Standards or are identified as products with at least a 'green tick' standard on the Buying Solutions website. In addition, the credit is awarded where the project team can demonstrate that the project has incorporated at least one energy efficiency measure outlined in each of the following sections of CIBSE Guide TM50CIBSE TM50: Energy Efficiency in Commercial Kitchens, CIBSE8 for all kitchen and catering facilities: Section 8 (Drainage and kitchen waste removal); Section 9 (Energy controls - specifically controls relevant to equipment); Section 11 (Appliance specification, fabrication specification - not utensil specification); Section 12 (Refrigeration); Section 13 (Warewashing: dishwashers and glasswashers); Section 14 (Cooking appliance selection) and Section 15 (Water temperatures, taps, faucets and water saving controls).

BREEAM 2011 New Construction Pre-Assessment Estimator

Ene09 Drying Space **Assessment Issue Not Applicable**

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved

Total indicative BREEAM credits achieved	N/A
Total indicative contribution to overall building score	N/A
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

TRANSPORT	Section Weighting	8.00%	Indicative Section Score	5.33%

Tra01 Public Transport Accessibility

No. of BREEAM credits available	5	Available contribution to overall score	4.44%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria

What is the building type category (for the purpose of Tra01 issue assessment)?	Retail
What is the degree of public transport provision for the building's location?	Excellent provision of public transport, i.e. large urban/metropolitan city centre
Building's indicative Accessibility Index	18
Does the building have a dedicated bus service?	

Total indicative BREEAM credits achieved	5
Total indicative contribution to overall building score	4.44%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

At this stage it is thought that at maximum credits will be awarded under Tra 01 for the number proximity of the site to a number of transport nodes and the frequency of services. It is thought that a dedicated bus service will not be provided for staff.

BREEAM 2011 New Construction Pre-Assessment Estimator

Tra02 Proximity to Amenities

No. of BREEAM credits available	1	Available contribution to overall score	0.89%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will the building be in close proximity of and accessible to applicable amenities?	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.89%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

Based on a review of the local area it is thought that this credit will be gained for the location of a post box, cash machine and food/grocery shop within 500m of the development.

BREEAM 2011 New Construction Pre-Assessment Estimator

Tra03 Cyclist facilities

No. of BREEAM credits available	2	Available contribution to overall score	1.78%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

What is the building type category (for the purpose of Tra03 issue assessment)?	Retail – Individual retail unit

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will cycle storage spaces be provided?	No	2	0
Will cyclist facilities be provided?	Yes		

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

Site plans do not indicate provision of cycle storage spaces although cyclist facilities (showers, changing rooms with lockers and drying space) will be provided. No credits may be awarded.

BREEAM 2011 New Construction Pre-Assessment Estimator

Tra04 Maximum Car Parking Capacity

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Building type category (for the purpose of Tra04 issue)?	
Buildings indicative Accessibility Index (sourced from issue Tra01)	

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will the building meet BREEAM's maximum parking capacity criteria for this building type/Accessibility Index?			

Total indicative BREEAM credits achieved	N/A
Total indicative contribution to overall building score	N/A
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

Tra05 Travel Plan

No. of BREEAM credits available	1	Available contribution to overall score	0.89%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a transport plan based on site specific travel survey/assessment be developed?	No	1	0

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

WATER	Section Weighting	6.00%	Indicative Section Score	5.25%

Wat01 Water Consumption

No. of BREEAM credits available	5	Available contribution to overall score	3.75%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Select the level that corresponds closely to the target or likely water component specification?	Level 4 - Four credits

Total indicative BREEAM credits achieved	4
Total indicative contribution to overall building score	3.00%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

At least 1 credit is required for BREEAM Excellent. Indicative 4 credit targetted for a minimum 50% improvement above the baseline. It is proposed that sanitary fittings & showers be specified with optimum flow rates.

BREEAM 2011 New Construction Pre-Assessment Estimator

Wat02 Water Monitoring

No. of BREEAM credits available	1	Available contribution to overall score	0.75%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will there be a water meter on the mains water supply to the building(s)?	Yes	1	1
Will metering/monitoring equipment be specified on the water supply to any relevant plant/building areas?	Yes		
Will all specified water meters have a pulsed output?	Yes		
If the site/building has an existing BMS connection, will all pulsed meters be connected to the BMS?	N/A		

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.75%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

In order to achieve BREEAM Excellent the developer must specify a water meter on the mains water supply to the building.

BREEAM 2011 New Construction Pre-Assessment Estimator

Wat03 Water Leak Detection and Prevention

No. of BREEAM credits available	2	Available contribution to overall score	1.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a mains water leak detection system be installed on the building's mains water supply?	Yes	1	1
Will flow control devices be installed in each sanitary area/facility?	Yes	1	1

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.50%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

The first credit is awarded for the installation of a leak detection system which is capable of detecting a major water leak on the mains water supply within the building and between the building and the utilities water meter. The system must be audible when activated, activated when the flow of water passing through the water meter/data logger is at a flow rate above a pre-set maximum for a pre-set period of time, able to identify different flow and therefore leakage rates, programmable to suit the owner/occupiers' water consumption criteria and, where applicable, designed to avoid false alarms caused by normal operation of large water-consuming plant such as chillers.The second credit is awarded where one of the following types of flow control device is fitted to each WC area/facility to ensure water is supplied only when needed (and therefore prevent minor water leaks): a time controller; a programmed time controller; a volume controller; a presence detector and controller; or a central control unit.

BREEAM 2011 New Construction Pre-Assessment Estimator

Wat04 Water Efficient Equipment

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved

Total indicative BREEAM credits achieved	N/A
Total indicative contribution to overall building score	N/A
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

MATERIALS	Section Weighting	12.50%	Indicative Section Score	8.33%

Mat01 Life Cycle Impacts

No. of BREEAM credits available	5	Available contribution to overall score	5.21%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Pre-Assessment question/criteria

How do you wish to assess the number of BREEAM credits achieved for this issue?	Define a target number of BREEAM credits to be achieved		
Select the number of BREEAM credits being targeted for the Mat01 issue	4	BREEAM Innovation credits	

Total indicative BREEAM credits achieved	4
Total indicative contribution to overall building score	4.17%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	N/A

Comments/notes:

As the assessed building is re-using existing in-situ elements as part of its structure, those elements can be allocated an A+ Green Guide rating. It is assumed that a high score will be feasible for this credit given that the majority of the existing building elemetns are to be retained and reused.

BREEAM 2011 New Construction Pre-Assessment Estimator

Mat02 Hard Landscaping and Boundary Protection

No. of BREEAM credits available	1	Available contribution to overall score	1.04%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will ≥80% of all external hard landscaping and boundary protection achieve a Green Guide A or A+ rating?	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	1.04%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

It is understood that the exterior of the building will remain unaltered as a result of the proposed refurbishment. Where there is hard landscaping or boundary protection which is to remain as existing, then provided no more than 20% of the total area of the existing hard landscaping and boundary protection elements are subject to minor alterations, repair or maintenance, these elements can be awarded an A+ rating for the purposes of determining compliance with this issue.

BREEAM 2011 New Construction Pre-Assessment Estimator

Mat03 Responsible Sourcing

No. of BREEAM credits available	3	Available contribution to overall score	3.13%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria

How do you wish to assess the number of BREEAM credits achieved for this issue?	Define the building elements that will be responsibly sourced
Will all timber used on the project be sourced in accordance with the UK Govt's Timber Procurement Policy?	Yes

For each element below please confirm if it is present or not and, where present, confirm whether or not it will be responsibly sourced and the responsible sourcing tier level:

Building elements	Element present / assessed	Element responsibly sourced	Responsible sourcing tier level
Structural Frame	No		
Ground floor	No		
Upper floors (including separating floors)	No		
Roof	No		
External walls	No		
Internal walls	Yes		Tier 6
Foundation/substructure	No		
Fittings	Yes		Tier 6
Hard landscaping	No		

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	2.08%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

It is assumed that credits will be awarded under Mat 03 for using suppliers who are able to provide relevant certification for the responsible sourcing of materials. This section applies to a number of materials, as listed within the BREEAM guidance (e.g. bricks, timber, concrete, plastic, glass etc) in the following elements: structural frame, ground floor, roof, external walls, internal walls, foundation/substructure, fittings including windows (frame and glazing units), doors (internal and external), floor finishes and any other significant fitting or finish present and hard landscaping.

BREEAM 2011 New Construction Pre-Assessment Estimator

Mat04 Insulation

No. of BREEAM credits available	2	Available contribution to overall score	2.08%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Is the building targeting an insulating index of 2 or more?	No	1	0
Will the building's insulating materials be responsibly sourced?	No	1	0

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

It is understood that fabric alterations do not form part of the refurb proposals thus these credits are withheld.

BREEAM 2011 New Construction Pre-Assessment Estimator

Mat05 Designing for Robustness

No. of BREEAM credits available	1	Available contribution to overall score	1.04%
No. of BREEAM innovation credits available	0	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will suitable durability/protection measures be specified and installed to vulnerable areas of the building?	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	1.04%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

It is assumed that full credits will be awarded under Mat 03 in order to gain enough credits for BREEAM Excellent, for using suppliers who are able to provide relevant certification for the responsible sourcing of materials. This section applies to a number of materials, as listed within the BREEAM guidance (e.g. bricks, timber, concrete, plastic, glass etc) in the following elements: structural frame, ground floor, roof, external walls, internal walls, foundation/substructure, fittings including windows (frame and glazing units), doors (internal and external), floor finishes and any other significant fitting or finish present and hard landscaping.

BREEAM 2011 New Construction Pre-Assessment Estimator

WASTE	Section Weighting	7.50%	Indicative Section Score	7.50%

Wst01 Construction Waste Management

No. of BREEAM credits available	4	Available contribution to overall score	5.00%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria

How do you wish to assess the number of BREEAM credits achieved for this issue?	Define a target number of BREEAM credits to be achieved		
Select the number of BREEAM credits being targeted for the Wst01 issue	4	BREEAM Innovation credits	0

Total indicative BREEAM credits achieved	4
Total indicative contribution to overall building score	5.00%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

It is assumed that at least 4 credits will be awarded for Construction Waste Management for construction resource efficiency and the diversion of waste from landfill. 3 credits will be awarded where non-hazardous construction waste (excluding demolition and excavation waste) generated by the building's design and construction is ≤ 3.4m3 per 100m2 (gross internal floor area) or ≤ 3.2 tonnes per 100m2 (gross internal floor area). The 4th credit is awarded where there is a compliant Site Waste Management Plan (SWMP). Where existing buildings on the site will be demolished a pre-demolition audit of any existing buildings, structures or hard surfaces is required to determine if, in the case of demolition, refurbishment/reuse is feasible and, if not, to maximise the recovery of material from demolition for subsequent high-grade/value applications. The audit must be referenced in the SWMP and cover the identification of the key refurbishment/demolition materials and potential applications and any related issues for the reuse and recycling of the key refurbishment and demolition materials.

BREEAM 2011 New Construction Pre-Assessment Estimator

Wst02 Recycled Aggregates

No. of BREEAM credits available	1	Available contribution to overall score	1.25%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Pre-Assessment question/criteria

How do you wish to assess the number of BREEAM credits achieved for this issue?	Define a target number of BREEAM credits to be achieved		
Select the number of BREEAM credits being targeted for the Wst02 issue	1	BREEAM Innovation credits	0

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	1.25%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	N/A

Comments/notes:

It is assumed that this credit will be awarded where the total amount of recycled and/or secondary aggregate specified is greater than 25% (by weight or volume) of the total high-grade aggregate specified for the development. To contribute to the total amount, the percentage of high-grade aggregate specified per application (where present) that is recycled and/or secondary aggregate, must meet the following minimum levels (by weight or volume): structural frame 25%; floor slabs including ground floor slabs 25%; bitumen or hydraulically bound base, binder, and surface courses for paved areas and roads 50%; concrete road surfaces 25%; pipe bedding 50%; building foundations 25%; granular fill and capping 75%. The aggregates must either be: obtained on site; obtained from waste processing site(s) within a 30km radius of the site or secondary aggregates obtained from a non-construction post-consumer or post-industrial by-product source.

BREEAM 2011 New Construction Pre-Assessment Estimator

Wst03 Operational Waste

No. of BREEAM credits available	1	Available contribution to overall score	1.25%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will appropriate facilities for the storage of operational recyclable waste volumes be provided?	Yes	1	1
If relevant, will a static waste compactor(s) or baler(s) be specified/installed?	N/A		
If relevant, will a vessel for composting suitable organic waste be specified/installed?	N/A		

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	1.25%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

A dedicated space for waste segregation and storage of operational recyclable waste will be required. Where the consistent generation in volume of the appropriate operational waste streams is likely to exist, e.g. large amounts of packaging or compostable waste generated by the building's use and operation, the following facilities are provided as part of its waste management strategy:a. Static waste compactor(s) or baler(s); situated in a service area or dedicated waste management space.b. Vessel(s) for composting suitable organic waste resulting from the building's daily operation and use OR adequate space(s) for storing segregated food waste and compostable organic material prior to collection and delivery to an alternative composting facility.c. Where organic waste is to be stored/composted on site, a water outlet is provided adjacent to or within the facility for cleaning and hygiene purposes.

BREEAM 2011 New Construction Pre-Assessment Estimator

Wst04 Speculative Floor and Ceiling Finishes

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved

Total indicative BREEAM credits achieved	N/A
Total indicative contribution to overall building score	N/A
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

LAND USE & ECOLOGY	Section Weighting	10.00%	Indicative Section Score	4.00%

LE01 Site Selection

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will at least 75% of the proposed development's footprint be located on previously been developed land?	Yes	1	1
Is the site deemed to be significantly contaminated?	No	1	0

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	1.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

At least 1 credit will be awarded for developing on previously developed land. It is understood that the site is not contaminated.

BREEAM 2011 New Construction Pre-Assessment Estimator

LE02 Ecological Value of Site and Protection of Ecological Features

No. of BREEAM credits available	1	Available contribution to overall score	1.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Can the land within the construction zone be defined as 'land of low ecological value'?	Yes	1	1
Will all features of ecological value surrounding the construction zone/site boundary be protected?	Yes		

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	1.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

This credit is awarded where the land within the construction zone is defined as 'land of low ecological value' using the BREEAM checklist. If any features of ecological value exist within the surrounding construction zone and site boundary area, these must be adequately protected from damage during clearance, site preparation and construction activities. In all cases, the principal contractor is required to construct ecological protection prior to any preliminary site construction or preparation works (e.g. clearing of the site or erection of temporary site facilities).

BREEAM 2011 New Construction Pre-Assessment Estimator

LE03 Mitigating Ecological Impact

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria

What is the likely change in ecological value (plant species richness) as a result of the sites development?	No negative change or improvement in plant species richness

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	2.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

At least 1 credit is required for BREEAM Excellent. It is therefore assumed that there will be no negative change in plant species richness as a result of the proposed refurbishment. This will be calculated by the assessor using the BREEAM LE03 calculator tool.

BREEAM 2011 New Construction Pre-Assessment Estimator

LE04 Enhancing Site Ecology

No. of BREEAM credits available	3	Available contribution to overall score	3.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a suitably qualified ecologist be appointed to report on enhancing and protecting site ecology?		3	0
Will the suitably qualified ecologists general recommendations be implemented?			
What is the targeted/intended improvement in ecological value as a result of enhancement actions?	Please select		

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

It is assumed that this credit will not be sought. In order for the credit to be awarded, a ecologist will be required and their recommendations implemented. Due to the location of the building and the fact that the refurb. proposals extend to the lower floros only, it is thought that this credit will not be feasible.

BREEAM 2011 New Construction Pre-Assessment Estimator

LE05 Long Term Impact on Biodiversity

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will the building meet BREEAM's mandatory criteria for this BREEAM issue?	No	2	0
Will a Biodiversity Champion be appointed to monitor/minimise impacts of site activities on biodiversity?			
Will the contractor provide training for the site workforce on how to protect ecology during the project?			
Will the contractor record actions to protect biodiversity and monitor their effectiveness during construction?			
Will a new ecologically valuable habitat, appropriate to the local area, be created?			
Where flora/fauna habitats exist on site, will the contractor programme site works to minimise disturbance?			

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

It is assumed that this credit will not be sought as it is deemed inappropriate given the location and nature of the refurb. proposals. If required, an ecologist will must produce a landscape and habitat management plan covering at least the first five years after project completion. Due to the size and nature of the site it is thought that this may not be feasible.

BREEAM 2011 New Construction Pre-Assessment Estimator

POLLUTION	Section Weighting	10.00%	Indicative Section Score	7.69%

Pol01 Impact of Refrigerants

No. of BREEAM credits available	3	Available contribution to overall score	2.31%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will refrigerant containing systems be installed in the assessed building?	Yes	2	2
Is the Global Warming Potential of the specified refrigerant(s) likely to be 10 or less?	Yes		
What is the target range Direct Effect Life Cycle CO_2eq. emissions for the system?		kgCO2eq/kW coolth capacity	
Will a refrigerant leak detection and containment system be specified/installed?	No	1	0

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.54%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

Two credits will be awarded where the future tenants commit to using refrigerants which have Direct Effect Life Cycle CO2 equivalent emissions (DELC CO2e) of ≤ 100 kgCO2e/kW cooling capacity OR where air-conditioning or refrigeration systems are installed the refrigerants used have a Global Warming Potential (GWP) ≤ 10. The remaining 1 credit will be awarded where: if applicable, a refrigerant leakage/charge loss detection system is specified, which is not based on the principle of detecting or measuring the concentration of refrigerant in air; the automatic shutdown and pump down of refrigerant occurs on the detection of refrigerant leakage/charge loss; automatic pump-down to either a separate storage tank or into the heat exchanger is acceptable, but only where automatic isolation valves are fitted to contain the refrigerant once fully pumped down; the alarm threshold that triggers automatic pump down upon detection of refrigerant in the plant room/enclosure is set to a maximum of 2000ppm (0.2%), but lower levels can be set; for the use of a robust and tested automated permanent refrigerant leak detection system, normally defined as that included on the Enhanced Capital Allowance (ECA) Energy Technology Product Listwww.eca.gov.uk1 (or an equivalent list).

BREEAM 2011 New Construction Pre-Assessment Estimator

Pol02 NO_x Emissions

No. of BREEAM credits available	3	Available contribution to overall score	2.31%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	
Please enter the target/maximum NO_x emission level for space heating system	99.00	mg/kWh

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.77%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

Space heating will be supplied by existing condensing, gas fired boilers. It is assumed that the Nox emissions from these boiles ≤ 100 mg/kWh.

BREEAM 2011 New Construction Pre-Assessment Estimator

Pol03 Surface Water Run off

No. of BREEAM credits available	5	Available contribution to overall score	3.85%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
What is the actual/likely annual probability of flooding for the assessed site?	Low	2	2
Will a compliant Flood Risk Assessment be undertaken?	Yes		
Will the site meet the BREEAM criteria for peak rate surface water run off?	Yes	1	1
Will the site meet the criteria for surface water run off volume, attenuation and/or limiting discharge?	Yes	1	1
Will the site be designed to minimise watercourse pollution in accordance with the BREEAM criteria?	Yes	1	1

Total indicative BREEAM credits achieved	5
Total indicative contribution to overall building score	3.85%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

A BREEAM compliant flood risk assessment will confirm the low annual probability of flooding and, in addition, that the peak rate of run-off will be no greater post-development (3 credits). A further credit will be awarded where 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 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. The final credit will be awarded for minimising water course pollution through the inclusion of oil/petrol separators (designed in accordance with the relevant policies/guidelines). Where the building has chemical/liquid gas storage areas, shut-off valves are fitted to the site drainage system to prevent the escape of chemicals to natural watercourses (in the event of a spillage or bunding failure).

BREEAM 2011 New Construction Pre-Assessment Estimator

Pol04 Reduction of Night Time Light Pollution

No. of BREEAM credits available	1	Available contribution to overall score	0.77%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will the external lighting be designed to reduce light pollution?	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.77%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

In order for this credit to be awarded the external lighting strategy must be designed in compliance with Table 2 (and its accompanying notes) of the ILP Guidance notes for the reduction of obtrusive light, 2011GN01 Guidance notes for the reduction of obtrusive light, Institution of Lighting Professionals(ILP). Furthermore, all external lighting (except for safety and security lighting) must be automatically switched off between 23:00 hr and 07:00 hr. This can be achieved by providing a timer for all external lighting set to the appropriate hours. If safety or security lighting is provided and will be used between 23:00 hr and 07:00 hr, this part of the lighting system complies with the lower levels of lighting recommended during these hours in Table 2of the ILP's Guidance notes, for example by using an automatic switch to reduce the lighting levels at 23:00 hr or earlier. Illuminated advertisements, where specified, must be designed in compliance with ILE Technical Report 5 – The Brightness of Illuminated AdvertisementsTechnical Report No. 5: The Brightness of Illuminated Advertisements, Institution of Lighting Engineers (ILE), Third Ed, 2001.2

BREEAM 2011 New Construction Pre-Assessment Estimator

Pol05 Noise Attenuation

No. of BREEAM credits available	1	Available contribution to overall score	0.77%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will there be, or is there noise-sensitive areas/buildings within 800m radius of the development?	Yes	1	1
Will a noise impact assessment be completed and, if applicable, noise attenuation measures specified?	Yes		

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.77%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

In order for this credit to be awarded a suitably qualified acoustic consultant must confirm in their noise impact assessment that the noise level from the site, as measured in the locality of the nearest or most exposed noise-sensitive development, is a difference no greater than +5dB during the day (07:00 hr to 23:00 hr) and +3dB at night (23:00 hr to 07:00 hr) compared to the background noise level.

BREEAM 2011 New Construction Pre-Assessment Estimator

INNOVATION	Section Weighting	10.00%	Indicative Section Score	1.00%

Inn01 Innovation

No. of BREEAM innovation credits available	10	Available contribution to overall score	10.00%
		Minimum standards applicable	No

Pre-Assessment question/criteria	Exemplary level achieved	Credits available	Indicative credits achieved
Man01 Sustainable Procurement	Yes	1	1
Man02 Responsible Construction Practices	No	1	0
Hea01 Visual Comfort	No	1	0
Ene01 Reduction of CO2 Emissions	No	5	0
Ene04 Low and Zero Carbon Technology	No	1	0
Ene05 Energy Efficient Cold Storage	N/A	N/A	N/A
Wat01 Water Consumption	No	1	0
Mat01 Life Cycle Impacts	No	1	0
Mat03 Responsible Sourcing of Materials	No	1	0
Wst01 Construction Waste Management	No	1	0
Wst02 Recycled Aggregates	No	1	0

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	1.00%
Indicative minimum standard(s) level	N/A

Comments/notes: