



BREEAM Refurbishment Domestic Buildings 2014

Pre-Assessment Tracker and Action List

For

Heath House, Hampstead

London

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Revision: 01

Date: 30 October 2015

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A handwritten signature in black ink, appearing to read 'Clare Hardy'.

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Revision Sheet

Revision	Date	Report	Prepared	Checked
01	30 October 2015	Pre-Assessment	C. Hardy	M. Wells

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1 Introduction

This report has been prepared by MLM Consulting Engineers Ltd Sustainability Group and provides guidance to the Design Team in relation to the BREEAM Refurbishment Domestic Buildings SD5077 - 2014 -2.0 requirements for the refurbishment at Heath House, Hampstead. The report is based upon information obtained at the conference call meeting held on 28 October 2015.

The site currently consists of a four/five storey Grade II listed residential property, the project proposes refurbishing the existing building and conversion into 6 apartments. The apartments are proposed to be two or three bed units.

The existing property was in a poor condition and as such much of the internal structure have been removed. Only the external walls and ground floor has been retained in their entirety, the roof, internal walls, upper floors and windows will be a mixture of retained and new.

The Design Team has committed to upgrade the key elements (external/internal walls, windows, floors and roof). The heating source is to be confirmed and comfort cooling is not proposed. The building is located close to good transport links. Under the BREEAM Domestic Refurbishment Assessment version SD5077-2014-2.0 the project is classified as a large scale project and historic.

As per Camden Council Development Policy DP22 - Promoting sustainable design and construction. The development is required to achieve a BREEAM Domestic Refurbishment 'excellent' rating with 60% of un-weighted credits achieved in energy and water and 40% under materials.

Section 6 of this pre-assessment report confirms that the site is targeting a score of 73.48% which equates to an 'excellent' rating. In addition the site is targeting 62% in energy, 80% in water and 60% in materials.

1.1 What is BREEAM?

This guidance report is based on the BREEAM Refurbishment Domestic Buildings SD5077 - 2014 -2.0 issued by the BRE. As with all schemes under the BREEAM umbrella, the Assessment seeks to minimise the adverse effects of new and existing buildings on the environment at global and local scales, whilst promoting healthy indoor conditions for the occupants. The environmental implications of any building are assessed at the Design Stage, and compared with good practice by Independent Assessors.

BREEAM establishes a set of categories under which specific credit requirements are grouped. These are:

- Management;
- Health and Wellbeing;
- Energy;
- Water;
- Materials;
- Pollution;
- Waste.

Within each category there are a number of credits meaning that Clients, Designers and Contractors have some flexibility in terms of how they achieve the desired rating. It should be noted that the credit criteria has in some areas a minimum standard required to be achieved to reach a specific rating level. Building designs are compared against the credit criteria by Registered Assessors and credits awarded where the criteria have been met. An overall rating of the building's performance is given using the terms; Pass, Good, Very Good, Excellent or Outstanding. The rating is determined from the number of credits achieved in each of the categories, which are then weighted (i.e. credits multiplied by environmental weighting factor) to provide an overall score.

This report is for advice only. This report outlines the overall performance of the development and provides a written and tabulated summary that should be used as a quick reference guide. For full details of the credit criteria refer to the BRE website www.breeam.org where copies of the Assessor Manuals are available for download. The final rating achieved in a certified BREEAM Refurbishment Domestic Buildings SD5077 - 2014 -2.0 Assessment will be dependent on the provision of acceptable information as evidence that the compliance requirements of the credits have been met. Such evidence could be in the form of marked-up drawings, specification clauses, manufacturers' literature and project specific documents or reports.

1.2 Scoring and Rating Assessed Buildings

BREEAM ratings benchmarks.

The BREEAM rating benchmarks for domestic refurbishments using the 2014 version of BREEAM are as follows:

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

Minimum Standards

The BREEAM categories contain a number of environmental issues which reflect the choices available when procuring, designing and constructing a building.

Each category has a set number of credits available and these credits are awarded where the building demonstrates that it complies with the requirements set by BREEAM.

Mandatory Requirements

The following outlines the minimum requirements to meet specific ratings:

		BREEAM Rating/Minimum No. of credits				
BREEAM Issue		PASS	Good	Very Good	Excellent	Outstanding
Ene 02	Energy Efficiency Rating Post Refurbishment	0.5	1	2	2.5	3.5
Wat 01	Internal Water Use			1	2	3
Hea 05	Ventilation	1	1	1	1	1
Hea 06	Safety	1	1	1	1	1
Pol 03	Flooding				2	2
Mat 02	Responsible Sourcing of Materials	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only

Innovation Credits

In addition to the categories above there are innovation credits in the BREEAM schemes. Innovation credits provide recognition for designs which innovate in the field on sustainable performance, above and beyond the level that is currently recognised and rewarded by standard BREEAM issues. Innovation credits are awarded for either complying with pre-defined BREEAM issue exemplary level requirements or via application to BRE Global to have a particular building feature, system or process approved as 'innovative'. These innovation credits do not have an environmental weighting but each one achieved will contribute an additional 1% to the final score up to a maximum of 10%.

Environmental Weightings, Final Score and BREEAM Rating

Once each BREEAM credit has been assessed the category percentage scores are determined (based on the number of credits achieved over those available within a category) and an environmental weighting applied. The weighted category scores are then totalled to give an overall score and any additional score for innovation is added to give the final BREEAM score which is used to determine the BREEAM rating.

1.3 BREEAM Workshops

Due to timescales a conference call meeting held on 28 October 2015 and was attended by:

Name of Attendee	Company	Role in Project
Clare Hardy	MLM	BREEAM Assessor
Sean Strowger	Consero	Project Manager
Lilian Martins*	MLM	Daylight Assessor
Deepshikha Mittal*	MLM	Daylight Assessor

* Only present for introduction of project meeting.

1.4 Summary

The project currently scores 73.48% which equates to an excellent rating.

To ensure that the Excellent rating is maintained and achieved, it is vital that all Design Team Members read through the action list of credits required and ensure that the credit criteria are incorporated in the developing design and that suitable evidence can be provided to validate achievement. Where information could be provided to support the achievement of a credit, this should be provided to the Assessor at the earliest opportunity. The Assessor should also be informed of any credit criteria, which cannot be met. Changes to existing specifications and tender package documents to address the criteria contained in this report would enable the Design Team to deliver the necessary rating.

This document should be used as a 'live' tool throughout the project and the BREEAM options and requirements should be considered at every stage of development.

Any changes made to the document from the last issue will be shown in red ink for tracking purposes.

The table below shows the progress of the score of the project based on the development of the scheme:

Revision	Report	Currently Targeted Score (CTS)	Achieved Score (ACH)
01	Pre-Assessment	73.48%	0.00%

2 Score Summary

Heath House, hampstead

Internal Reference: 7133361

BRE Reference Number:

BREEAM Refurbishment Domestic Buildings SD5077 - 2014 -2.0

Pre-assessment Date: 28 October 2015

BREEAM Requirement: Excellent - 70%

Revision: 01

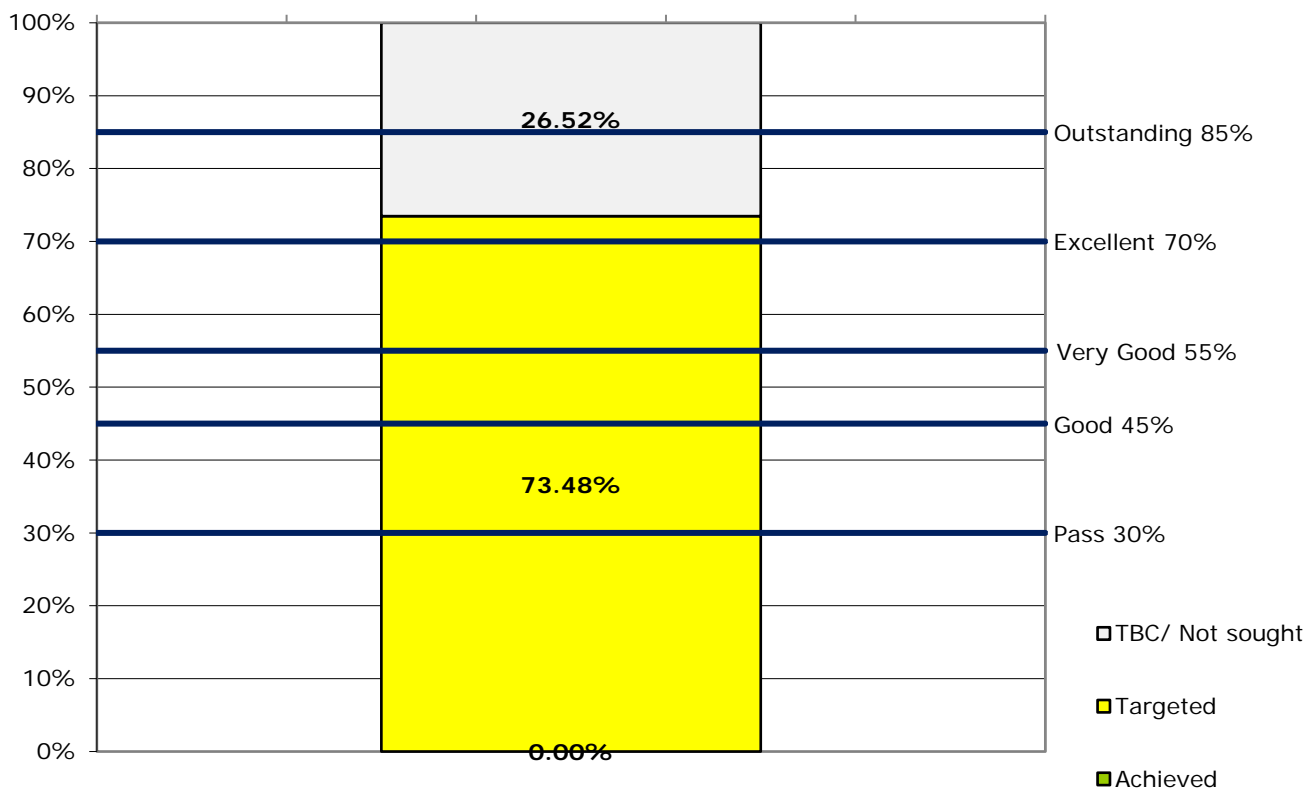
Targeted Score at Pre-assessment: 73.48%

Updated: N/A

Current Targeted Score: 73.48%

Score Achieved: 0.00%

Score Summary



This report provides an overview of the current position of the project in terms of the BREEAM assessment and the progress in achieving the required rating.

The 'Targeted' credits and any still 'To Be Confirmed' (TBC) are detailed in the following pages and it is the responsibility of the Design Team to provide the evidence, as required by BREEAM, to the Assessor as soon as it becomes available.

'TBC' items are not included in the 'Current Targeted Score' and should be confirmed as either 'Targeted' or 'Not Sought' as soon as possible to clarify the projects position.

Each credit has been assigned to a responsible party. It is their responsibility to refer to the relevant section of the Action List in this document; the Action List can be found in Section 6.

Please note that it is not possible to achieve 100% in a BREEAM assessment, therefore there will always be credits that are 'Not Sought' due to the nature of the assessment.

3 Credit Status

		Action By	Credit Status	Evidence Status
MANAGEMENT				
MAN 01 - HOME USER GUIDE				
Criteria 1: Provision of HUG		M Contractor	Targeted	No evidence provided
MAN 02 RESPONSIBLE CONSTRUCTION PROCESSES				
Criteria 1-2: CCS Compliance				
	CCS Score between 25 and 34	M Contractor	Targeted	No evidence provided
	Scoring no less than 5 in any section	Client	Targeted	No evidence provided
Criteria 3-4: CCS Score between 35 and 39		M Contractor	Targeted	No evidence provided
	Scoring no less than 7 in any section	Client	Targeted	No evidence provided
Criteria 5-6: Exemplary Performance >40		N/A	Not sought	N/A
	Scoring no less than 7 in any section	N/A	Not sought	N/A
MAN 03 CONSTRUCTION SITE IMPACTS				
Energy Consumption		M Contractor	Targeted	No evidence provided
		Client	Targeted	No evidence provided
Water Consumption		M Contractor	Targeted	No evidence provided
		Client	Targeted	No evidence provided
Timber Procurement		M Contractor	Targeted	No evidence provided
		Client	Targeted	No evidence provided
Environmental material policy (Main contractor)		M Contractor	Targeted	No evidence provided
		Client	Targeted	No evidence provided
MAN 04 SECURITY				
Criteria 1-2: Secure windows and Doors		Architect	Targeted	No evidence provided
		Client	Targeted	No evidence provided
Criteria 3-4: Secured by Design		Architect	Targeted	No evidence provided
		Client	Targeted	No evidence provided
MAN 05 PROTECTION AND ENHANCEMENT OF ECOLOGICAL FEATURES				
Criteria 1 - 3: Protecting Ecological Features		M Contractor	Targeted	No evidence provided
Criteria 4: Exemplary Performance: SQE Appointed and Recommendations Undertaken		M Contractor	Targeted	No evidence provided

	Action By	Credit Status	Evidence Status
MAN 06 PROJECT MANAGEMENT			
Criteria 1: Project Roles and Responsibilities	M Contractor	Targeted	No evidence provided
	Project Mngr	Targeted	No evidence provided
Criteria 2-3: Handover and Aftercare	Client	Targeted	No evidence provided
Criteria 4-5: Exemplary Performance: BREEAM AP	Client	Targeted	No evidence provided
	BREEAM AP		No evidence provided
Criteria 6-7: Exemplary Performance: Thermographic Surveying and Air Tightness Testing	N/A	Not sought	N/A

	Action By	Credit Status	Evidence Status
HEALTH AND WELLBEING			
HEA 01 DAYLIGHTING			
Criteria 1-2: Maintaining Good Daylighting	N/A	Not sought	N/A
Criteria 3: Minimum Daylighting	N/A	Not sought	N/A
HEA 02 SOUND INSULATION			
Criteria 1 and 4: Sound Testing	Acoustician	Targeted	No evidence provided
Criteria 2-3: Sound Testing not Feasible and not Required by Building Control Body	Acoustician	Targeted	No evidence provided
HEA 03 VOLATILE ORGANIC COMPOUNDS			
Criteria 1 - 3: Avoiding the Use of VOC's	M Contractor	Targeted	No evidence provided
	Client	Targeted	No evidence provided
HEA 04 INCLUSIVE DESIGN			
Criteria 1: Minimum Accessibility	N/A	Not sought	N/A
	N/A	Not sought	N/A
Criteria 2: Advanced Accessibility	N/A	Not sought	N/A
	N/A	Not sought	N/A
Criteria 3: Exemplary Performance: Lifetime Homes and Part M	N/A	Not sought	N/A
	N/A	Not sought	N/A
HEA 05 VENTILATION			
Criteria 1-4: Minimum Ventilation Requirements	M&E Eng	Targeted	No evidence provided
	M Contractor	Targeted	No evidence provided
Criterion 5-6: Advanced Ventilation	N/A	Not sought	N/A
HEA 06 SAFETY			
Criteria 1- 4: Fire Detection, CO Detection and Alarm Systems	M&E Eng	Targeted	No evidence provided
	M Contractor	Targeted	No evidence provided

	Action By	Credit Status	Evidence Status
ENERGY			
ENE 01 IMPROVEMENT IN ENERGY EFFICIENCY RATING			
Criteria 1: Energy Efficiency Rating			
Targeted Credits Based on EER Improvement - 1 CREDIT	SAP Ass	Targeted	No evidence provided
	M&E Eng	Targeted	No evidence provided
	BREEAM Ass	Targeted	No evidence provided
ENE 02 ENERGY EFFICIENCY RATING POST REFURBISHMENT			
Criteria 1: EER Post Refurbishment			
Targeted Credits Based on Post EER - 2.5 CREDITS	M&E Eng	Targeted	No evidence provided
	SAP Ass	Targeted	No evidence provided
	BREEAM Ass	Targeted	No evidence provided
Criterion 2: Exemplary Performance: >90EER	N/A	Not sought	N/A
Criterion 3: Exemplary Performance: >100EER	N/A	Not sought	N/A
ENE 03 PRIMARY ENERGY DEMAND			
Criteria 1: PED Post Refurbishment (kWh/M2/year)			
Targeted Credits Based on PED - 5.5 CREDITS	SAP Ass	Targeted	No evidence provided
	M&E Eng	Targeted	No evidence provided
	BREEAM Ass	Targeted	No evidence provided
ENE 04 LOW AND ZERO CARBON TECHNOLOGIES			
Criteria 1-2: 10% Renewable Supply and PED of: - detached, semi-detached, bungalows and end terraces: 250 kWh/m2/year - mid terraces and flats: 220 kWh/m ² /year	N/A	Not sought	N/A
	N/A	Not sought	N/A
Criterion 3 and 5: 15% Renewable Supply (mid-high rise flats) and PED of: - Mid terraces and flats: 220 kWh/m ² /year	N/A	Not sought	N/A
	N/A	Not sought	N/A
Criteria 4 and 5: 20% Renewable Supply and PED of: - detached, semi-detached, bungalows and end terraces: 250 kWh/m ² /year	N/A	Not sought	N/A
	N/A	Not sought	N/A

	Action By	Credit Status	Evidence Status
ENE 05 ENERGY LABELLED WHITE GOODS			
Criteria 1: Compliant Fridges and Freezers	M Contractor	Targeted	No evidence provided
	Client	Targeted	No evidence provided
Criteria 3: Compliant Washing Machine	M Contractor	Targeted	No evidence provided
	Client	Targeted	No evidence provided
Criteria 4: Compliant Dishwasher	M Contractor	Targeted	No evidence provided
	Client	Targeted	No evidence provided
Criteria 5: Compliant Washer Dryer or Tumble Dryer	M Contractor	Targeted	No evidence provided
	Client	Targeted	No evidence provided
ENE 06 DRYING SPACE			
Criteria 1: Drying Space	M Contractor	Targeted	No evidence provided
	Client	Targeted	No evidence provided
ENE 07 LIGHTING			
Criteria 1: External Space Lighting and Security Lighting	M&E Eng	Targeted	No evidence provided
	M Contractor	Targeted	No evidence provided
Criterion 2: External Space Lighting and No Security Lighting	N/A	N/A	N/A
	N/A	N/A	N/A
Criteria 3: Internal lighting	N/A	Not sought	N/A
	N/A	Not sought	N/A
ENE 08 ENERGY DISPLAY DEVICES			
Criterion 2-3: Current electricity AND primary heating fuel consumption data	M Contractor	Targeted	No evidence provided
	M&E Eng	Targeted	No evidence provided
Exemplary Performance: Criterion 5-6: Device capable of recording consumption data	M Contractor	Targeted	No evidence provided
	M&E Eng	Targeted	No evidence provided
ENE 09 CYCLE STORAGE			
Criteria 1: Compliant cycle provision for 1 credit	M Contractor	Targeted	No evidence provided
	Architect	Targeted	No evidence provided
Criteria 2: Compliant cycle provision for 2 credits	M Contractor	Targeted	No evidence provided
	Architect	Targeted	No evidence provided
ENE 10 HOME OFFICE			
Criteria 1: Provision of home office	Architect	Targeted	No evidence provided
	M&E Eng	Targeted	No evidence provided

		Action By	Credit Status	Evidence Status
WATER				
WAT 01 INTERNAL WATER USE				
Criteria 1 - 2: Water Consumption				
	From 140 to ≤ 150 litres/person/day	Architect	Targeted	No evidence provided
		Client	Targeted	No evidence provided
		BREEAM Ass	Targeted	No evidence provided
	From 129 to ≤ 140 litres/person/day	Architect	Targeted	No evidence provided
		Client	Targeted	No evidence provided
		BREEAM Ass	Targeted	No evidence provided
	From 118 to ≤ 129 litres/person/day	Architect	Targeted	No evidence provided
		Client	Targeted	No evidence provided
		BREEAM Ass	Targeted	No evidence provided
	From 107 to ≤ 118 litres/person/day	Architect	Targeted	No evidence provided
		Client	Targeted	No evidence provided
		BREEAM Ass	Targeted	No evidence provided
	From 96 to ≤ 107 litres/person/day	N/A	Not sought	N/A
	<96 litres/person/day	N/A	Not sought	N/A
Exemplary Level Criteria: <80		N/A	Not sought	N/A
WAT 02 EXTERNAL WATER USE				
Criterion 1: Rainwater collection system	Architect	Targeted	No evidence provided	
	M Contractor	Targeted	No evidence provided	
WAT 03 WATER METER				
Criteria 1: Water meter	M&E Eng	Targeted	No evidence provided	
	M Contractor	Targeted	No evidence provided	

		Action By	Credit Status	Evidence Status	
MATERIALS					
MAT 01 ENVIRONMENTAL IMPACT OF MATERIALS					
Criteria 1 - 5: Material Specification - 6 CREDITS					
	Roof	N/A	Not sought	N/A	
	External Walls	Architect	Targeted	No evidence provided	
		M Contractor	Targeted	No evidence provided	
		BREEAM Ass	Targeted	No evidence provided	
	Internal Walls	Architect	Targeted	No evidence provided	
		M Contractor	Targeted	No evidence provided	
		BREEAM Ass	Targeted	No evidence provided	
	Upper and Ground Floors	Architect	Targeted	No evidence provided	
		M Contractor	Targeted	No evidence provided	
		BREEAM Ass	Targeted	No evidence provided	
	Windows	N/A	Not sought	N/A	
	Criteria 6: Thermal Performance - 0 CREDITS		N/A	Not sought	N/A
			N/A	Not sought	N/A

		Action By	Credit Status	Evidence Status	
MAT 02 RESPONSIBLE SOURCING OF MATERIALS					
Criterion 1: UK Government's Timber Procurement Policy - Pre-requisite		Architect	Targeted	No evidence provided	
		M Contractor	Targeted	No evidence provided	
Criteria 2 - 3: Sustainable Procurment Plan		Architect	Targeted	No evidence provided	
		M Contractor	Targeted	No evidence provided	
Criterion 4: Responsible sourcing of Materials					
	>9%	Architect	Targeted	No evidence provided	
		M Contractor	Targeted	No evidence provided	
		BREEAM Ass	Targeted	No evidence provided	
	>18%	Architect	Targeted	No evidence provided	
		M Contractor	Targeted	No evidence provided	
		BREEAM Ass	Targeted	No evidence provided	
	>27%	N/A	Not sought	N/A	
		N/A	Not sought	N/A	
		N/A	Not sought	N/A	
	>36%	N/A	Not sought	N/A	
		N/A	Not sought	N/A	
	>45%	N/A	Not sought	N/A	
		N/A	Not sought	N/A	
	>54%	N/A	Not sought	N/A	
		N/A	Not sought	N/A	
	MAT 03 INSULATION				
	Criteria 1 - 2: Embodied Impact of Insulation		M Contractor	Targeted	No evidence provided
			BREEAM Ass	Targeted	No evidence provided
Criterion 3: Responsible Sourcing of Insulation		M Contractor	Targeted	No evidence provided	
		BREEAM Ass	Targeted	No evidence provided	

	Action By	Credit Status	Evidence Status
WASTE			
WST 01 HOUSEHOLD WASTE			
Criteria 1: Recycling Facilities	Architect	Targeted	No evidence provided
	M Contractor	Targeted	No evidence provided
Criterion 2-6: Composting Facilities	Architect	Targeted	No evidence provided
	M Contractor	Targeted	No evidence provided
WST 02 REFURBISHMENT SITE WASTE MANAGEMENT			
Criteria 3: Projects over £300k - Management Plan	M Contractor	Targeted	No evidence provided
	Project Mngr	Targeted	No evidence provided
Criteria 4-8: Good Practice Waste Benchmarks	M Contractor	Targeted	No evidence provided
	Project Mngr	Targeted	No evidence provided
Criteria 9-10: Best Practice Waste Benchmarks	M Contractor	Targeted	No evidence provided
	Project Mngr	Targeted	No evidence provided
Exemplary Level			
Criteria 15-16: Projects over £300k	N/A	Not sought	N/A
	N/A	Not sought	N/A

		Action By	Credit Status	Evidence Status
POLLUTION				
POL 01 NO_x EMISSIONS				
Criterion 1: NO _x Emissions of Space Heating and Hot Water Systems				
	≤100mg/kWh	M&E Eng	Targeted	No evidence provided
		M Contractor	Targeted	No evidence provided
	≤70mg/kWh	M&E Eng	Targeted	No evidence provided
		M Contractor	Targeted	No evidence provided
	≤40mg/kWh	M&E Eng	Targeted	No evidence provided
		M Contractor	Targeted	No evidence provided
POL 02 SURFACE WATER RUN OFF				
Criteria 1-34: Neutral Impact On Surface Water	Drainage Eng	Targeted	No evidence provided	
	M Contractor	Targeted	No evidence provided	
Criteria 5-7: Reducing Run-Off from Site: Basic	Drainage Eng	Targeted	No evidence provided	
	M Contractor	Targeted	No evidence provided	
Criteria 8-9: Reducing Run-Off from Site: Advanced	N/A	Not sought	N/A	
	N/A	Not sought	N/A	
Criteria 10-11: Exemplary Level	N/A	Not sought	N/A	
	N/A	Not sought	N/A	
POL 03 FLOODING				
Criteria 1- 2: Low Flood Risk Zone	Drainage Eng	Targeted	No evidence provided	
	M Contractor	Targeted	No evidence provided	

4 Action List

The credits detailed below were assessed as 'achieved subject to the provision of evidence' at the Pre-assessment Meeting for Heath House, Hampstead. All actions and evidence must be submitted to the BREEAM Assessor as soon as possible for review to and inclusion in the BREEAM report.

Where text is struck through, evidence has been received, reviewed and signed off.

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
MANAGEMENT			
MAN 01 HOME USER GUIDE (3 credits available)			
1	3	Provide written confirmation from the developer or in the specification that a Home Users Guide will be supplied to all dwellings and will as a minimum include a list of contents showing that the guide will cover all of the issues required in the Code 'User Guide Content List'	M Contractor
MAN 02 RESPONSIBLE CONSTRUCTION PRACTICES (2 credits available + 1 exemplary available)			
CCS Compliance			
ALL	2	Provide written confirmation that registration with the Considerate Constructor Scheme OR Provide confirmation that the completion of the checklists (A-2; Organisational, local or national Considerate Constructor Scheme requirements) took place no later than the commencement of the refurbishment works	M Contractor/ Client
1 and 5		Provide written detailed confirmation showing commitment to: a) Comply with the Considerate Constructors Scheme. b) Achieve Formal Certification under the scheme. c) Gain the CCS score relevant to the number of points sought. d) Complete Considerate Constructors Scheme Monitor Report.	
MAN 03 CONSTRUCTION SITE IMPACTS (1 credit available)			
Contractor Site Responsibilities (Large Scale Project)			
1	1	Provide a completed signed and dated copy of Appendix A-4: Large-scale Refurbishment Constructions Site Impacts Identifying which 2 or more items will form part of the main Contractor's obligations AND Provide confirmation that site timber will be sourced from suppliers capable of providing certification to the level required for the particular tier claimed in Mat 02 Responsible Sourcing of Materials AND Provide a copy of the policy for sourcing site timber for the project	M Contractor/ Client

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
MAN 04 SECURITY (2 credits available)			
Secure Windows and Doors			
1 and 2	1	<p>Provide confirmation that retained external windows and doors meet the minimum security requirements:</p> <p>External doors are of good quality with working key locks and a strong frame, where there is no sign of Warping, splitting or rotting to the door or its frame. Where the door contains glazing this should be a minimum of double glazing. Putty or beading to glazed areas should be on the unexposed side of the door, in good condition, with no sign of degradation</p> <p>Accessible Windows should have a minimum of double glazing with working key locks. Putty or beading to glazed areas should be on the unexposed side of the window, in good condition, with no sign of degradation. The window frame should be strong with no sign of warping, splitting or rot</p> <p>If the existing doors are not at the PAS 24:20012 or LPS 1175 Issue 7 security Rating 1 standards and windows are PAS 24:2012 or LPS1175 Issue 7 Security Rating 1 standards, then the suitably qualified security consultant (ALO/CPDA/SQSC) produce a brief containing the most optimal security measures to compensates.</p> <p>AND/OR confirmation that new external entrance doors sets and windows present meet the minimum (PAS/LPS) security requirements above</p> <p>OR Provide drawings showing the location of the windows and external and/or entrance door sets/locks</p> <p>OR Provide site inspection report and photographic evidence confirming the above</p>	Client/Architect
All		Where the above detailed documentary evidence cannot be produced at this stage, provide compliant Design Stage commitment that the above measures will be implemented	
Secure by Design			
3 and 4	1	<p>Provide detailed evidences confirming that a suitably qualified security consultant has been contacted for advice to ensure that the requirements of Section 2 – Physical Security of Secure by Design – New Homes are met</p> <p>AND Provide confirmation that the advice provided by the suitably qualified security consultant will be implemented</p>	Client/Architect
MAN 05 PROTECTION AND ENHANCEMENT OF ECOLOGICAL FEATURES (1 credit available + 1 exemplary available)			
Protecting ecological features			
1	1	<p>Provide confirmation of any ecological features present prior to commencement of refurbishment works in the form of a building and site inspection report and photographic evidence</p> <p>OR Provide drawings showing the location of the ecological features present prior to commencement of refurbishment works</p> <p>OR Provide confirmation where the above detailed documentary evidence cannot be produced at this stage compliant design stage commitment to carrying out a survey to determine the presence of ecological features.</p>	M Contractor

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
Ecological enhancement (exemplary)			
4	1	<p>Provide a copy of the ecologist's report (in the format outlined in the Checklist A-6: Ecology report template) which:</p> <ul style="list-style-type: none"> a) Clearly outlines the key and additional recommendations to protect ecological features b) Confirms that all UK and EU legislation in relation to protected species has been met and recommendations go beyond these requirements c) Confirms that the ecologist meets the requirements set out in the definition of a suitably qualified ecologist d) Confirms that the ecologist made a site visit prior to the commencement of the refurbishment works <p>AND</p> <p>Provide a written commitment from the contractor or developer detailing:</p> <ul style="list-style-type: none"> a) How the key recommendations and 30% of additional recommendations will be incorporated into the design b) The planting schedule of any species to be incorporated from suitably qualified ecologist's recommendations. 	M Contractor
MAN 06 PROJECT MANAGEMENT (2 credits + 2 exemplary available)			
Project Roles and Responsibilities			
1	1	<p>Provide written confirmation indicating when the collaboration began and the roles and responsibilities of the project team, across the following key design and refurbishment stages:</p> <ul style="list-style-type: none"> • Planning and Building control notification. • Design. • Refurbishment. • Commissioning and handover. • Occupation. <p>This can be through meeting minutes, construction programme, responsibilities schedule, relevant section/ clauses of the building specification or contract and project implementation plan (in the case of large scale projects)</p>	M Contractor/ Project Mngr
Handover and Aftercare			
2 and 3	1	<p>Provide written confirmation of a commitment to provide compliance aftercare support and training.</p> <p>Two or more of the following aftercare must be undertaken:</p> <ul style="list-style-type: none"> • A site inspection within three months of occupation. • Conduct post-occupancy interviews with building occupants or a survey via phone or posted information within three months of occupation. • Longer term after care, e.g. a helpline, nominated individual or other appropriate system to support building users for at least the first 12 months of occupation. 	Client

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
Early Design Input (exemplary)			
4 and 5	1	<p>Written confirmation of the appointment of a BREEAM Accredited Professional (AP) or BREEAM Domestic Refurbishment Assessor including relevant section or clauses of the building specification or contract</p> <p>AND</p> <p>Written confirmation from the AP that the key stages have been implemented</p> <p>AND</p> <p>A copy of the meeting notes or minutes, recorded correspondence or schedules that can demonstrate AP or BREEAM Domestic Refurbishment Assessor attendance at key Design Team meetings and that BREEAM issues are a regular agenda item.</p>	BREEAM AP/ Client
HEALTH AND WELLBEING			
HEA 02 Sound Insulation (4 credits available)			
1 and 4	4	<p>For properties where sound testing will be carried out: Written confirmation from the developer confirming the intent to:</p> <ul style="list-style-type: none"> • Meet the relevant sound insulation performance levels (8dB) • Use a Compliant Test Body to complete testing <p>OR</p> <p>Where pre-completion testing has been carried out: Either copies of the sound insulation field test results, a letter of confirmation from the suitably qualified acoustician or both, that the required sound insulation performance standards as detailed in the assessment criteria have been achieved.</p>	Acoustician
2 and 3	-	<p>Attached dwellings with separating walls or floors between habitable rooms but where testing is not required for building control purposes: A copy of the suitably qualified Acoustician's Design Statement including recommendations to meet the relevant sound insulation performance levels and written confirmation that these recommendations have been implemented</p> <p>OR</p> <p>Previous test results on comparable construction with confirmation from the suitably qualified acoustician of the potential to meet the relevant sound insulation performance standards</p> <p>AND</p> <p>Written confirmation from either the building control body or a suitably qualified acoustician stating the reasons that testing is not required.</p>	Acoustician
HEA 03 VOLATILE ORGANIC COMPOUNDS (1 credit available)			
1 – 3	1	<p>Provide written confirmation that the VOC content of the relevant specified product types will comply with the European standards/Emission levels specified within the criteria. Product types includes:</p> <ul style="list-style-type: none"> - Decorative paints and varnishes. - Wood Panels (particleboard, fibreboard, MDF, OSB, cement-bonded particleboard; plywood, solid wood panels and acoustic board; - Timber Structures (glued laminated timber). - Wood flooring (parquets flooring). - Resilient, textile and laminated floor covering (vinyl/linoleum; cork and rubber; carpet; laminated wood flooring). - Suspended tiles. 	M Contractor/ Client

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
		<ul style="list-style-type: none"> - Flooring adhesives. - Wall covering (finished wallpapers; wall vinyls and plastic wall-coverings; wallpapers for subsequent decoration; heavy duty wall-coverings; textile wall-coverings); and - Adhesive for hanging flexible wall-coverings. 	
HEA 05 VENTILATION (2 credits available)			
PLEASE NOTE THAT 1 CREDIT MUST BE ACHIEVED IN ORDER TO GAIN AN EXCELLENT RATING			
All	1	<p>Provide written confirmation of the level of background, extract and purge ventilation</p> <p>OR</p> <p>Provide confirmation of the level of background, extract and purge ventilation that will be implemented</p> <p>NB: as the build is grade II listed the BREEAM historic buildings criteria can be applied.</p>	M&E Eng/ M Contractor
HEA 06 SAFETY (1 credit available)			
PLEASE NOTE THAT 1 CREDIT MUST BE ACHIEVED IN ORDER TO GAIN AN EXCELLENT RATING			
1 – 4	1	<p>Provide detailed documentary evidence demonstrating that the fire detection and fire alarm system and carbon monoxide detectors are certified to the relevant standards</p> <p>Where there is a full rewire of all electrical circuitry the fire and carbon monoxide detector and alarm system must be mains wired in order to achieve this credit, and they must comply with relevant standards.</p>	M&E Eng/ M Contractor
All		Where the above evidence cannot be produced, provide Design Stage commitment outlining the design specification that will be implemented	
ENERGY			
ENE 01 IMPROVEMENT IN ENERGY EFFICIENCY RATING (6 credits available)			
1	1	<p>Provide a copy of the Design Stage Energy Performance Certificate report or SAP2012 worksheets pre and post refurbishment to confirm the dwellings Energy Efficiency Rating.</p> <p>AND</p> <p>Provide a copy of the output from the BREEAM Domestic Refurbishment Energy Calculator</p>	M&E Eng/ SAP Ass/ BREEAM Ass
ENE 02 ENERGY EFFICIENCY RATING POST REFURBISHMENT (4 credits available + 2 exemplary available)			
PLEASE NOTE THAT 2.5 CREDIT MUST BE ACHIEVED IN ORDER TO GAIN AN EXCELLENT RATING			
1 - 3	2.5	<p>Provide a copy of the Design Stage Energy Performance Certificate report or SAP2012 worksheets pre and post refurbishment to confirm the dwellings Energy Efficiency Rating</p> <p>AND</p> <p>Provide a copy of the output from the BREEAM Domestic Refurbishment Energy Calculator</p>	M&E Eng/ SAP Ass/ BREEAM Ass

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
ENE 03 PRIMARY ENERGY DEMAND (7 credits available)			
All	5.5	Provide a copy of the Design Stage Energy Performance Certificate report, SAP 2012 or RdSAP April 2012 worksheets (or EPC report) post refurbishment to confirm the dwelling's Primary Energy Demand AND Provide a copy of the output from the BREEAM Domestic Refurbishment Energy Calculator	M&E Eng/ SAP Ass/ BREEAM Ass
ENE 05 ENERGY LABELLED WHITE GOODS (2 credits available)			
1, 3, 4 and 5	2	Provide compliant Design Stage evidence outlining the appliances to be provided with their applicable ratings under the EU Energy Efficiency Labelling Scheme. Fridges and freezers or fridge-freezers will have a A+ or better rating; Washing machines will have an A++ rating of better; dishwashers will have an A+ rating or better AND Either Washer dryers and tumble dryers have an A rating or better OR Where washer dryers and tumble dryers are not provided, the EU energy Efficiency Labelling Scheme Information Leaflet will be provided for each dwelling	M Contractor/ Client
All		Where any of the above evidence is not available, a compliant Design Stage commitment outlining the design specification that will be implemented	
ENE 06 DRYING SPACE (1 credit available)			
All	1	For internal drying space, detailed documentary evidence confirming: <ul style="list-style-type: none"> • Location of drying fixings • Details and location of ventilation provided • The length of drying line (<i>2 beds require 4m+ and 3 beds require 6m+</i>) • Number of bedrooms 	M Contractor/ Client
All		Where any of the above evidence is not available, a compliant Design Stage commitment outlining the design specification that will be implemented	
ENE 07 LIGHTING (2 credits available)			
External Lighting			
1	1	Provide detailed documentary evidence confirming: <ul style="list-style-type: none"> • the types of light fitting for all space lighting and external lamps • control systems applicable to each light fitting or group of fittings 	M&E Eng/ M Contractor
ALL		Where the above cannot be produced at this stage, provide a compliant Design Stage commitment outlining the design specification that will be implemented	

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
ENE 08 ENERGY DISPLAY DEVICES (2 credits available + 1 exemplary available)			
2-3	2	Provide detailed documentary evidence confirming: a) The energy display device is dedicated to each individual dwelling b) The consumption data displayed by the energy display device. c) Whether the energy display device can record consumption data.	M&E Eng / M Contractor
All		Where the above cannot be produced at this stage, provide a compliant Design Stage commitment outlining the design specification that will be implemented	
Exemplary Performance (1 credit available)			
4-5	1	Criteria 2-3 must be achieved Provide detailed documentary evidence confirming the Energy Display Devices are capable of recording consumption data	M&E Eng / M Contractor
ENE 09 CYCLE STORAGE (1 credit available)			
1-2	1	Detailed documentary evidence showing: <ul style="list-style-type: none"> The number of bedrooms and the corresponding number of cycle storage spaces per dwelling (2 cycle spaces for each 2/3 bed unit) Location, type of fixing and size of storage Convenient access to cycle storage Any security measures Details of the proprietary system (if applicable) 	M Contractor/ Architect
All		Where the above cannot be produced at this stage, provide a compliant Design Stage commitment outlining the design specification that will be implemented	
ENE 10 HOME OFFICE (1 credit available)			
1	1	Provide detailed documentary evidence showing: a) location of and sufficient space for the home office b) location and number of double sockets c) location of telephone points d) that adequate ventilation will be provided e) window (either of the width and height of less than 450mm)	M&E Eng / Architect
All		Where the above cannot be produced at this stage, a compliant Design Stage commitment outlining the design specification that will be implemented	

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
WATER			
WAT 01 INTERNAL WATER USE (3 credits available + 1 exemplary available)			
Water Consumption			
PLEASE NOTE THAT 2 CREDITS MUST BE ACHIEVED IN ORDER TO GAIN AN EXCELLENT RATING			
1 - 2	2	<p>Provide a copy of the Wat 1 Calculator showing the internal potable water use per Dwelling Type (≤ 118 litres/person/day)</p> <p>AND</p> <p>Provide drawings describing the location, details and type of appliances/ fittings that use water in the dwellings, including any specific water reduction equipment</p> <p>OR</p> <p>Where evidence above cannot be produced, provide compliant Design Stage commitment to implement the specification required for the targeted credits</p>	Architect / Client / BREEAM Ass
All		Where the above cannot be produced at this stage, a compliant Design Stage commitment outlining the design specification that will be implemented	Architect / Client
WAT 02 EXTERNAL WATER USE (1 credit available)			
1-2	1	Detailed documentary evidence stating the type, size and location of any rainwater collection systems	Architect/ M Contractor
All		Where the above cannot be produced at this stage, a compliant Design Stage commitment outlining the design specification that will be implemented	
WAT 03 WATER METER (1 credit available)			
1	1	<p>Provide detailed documentary evidence confirming:</p> <p>a) the water meter make and model b) the consumption data displayed by the water meter c) the location of the water meter</p>	M&E Eng / M Contractor
All		Where the above cannot be produced at this stage, provide a compliant Design Stage commitment outlining the design specification that will be implemented	

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
MATERIALS			
MAT 1 ENVIRONMENTAL IMPACT OF MATERIALS (25 credits available)			
1 - 5	15	Provide specification showing detailed description of each applicable element (Roof/ external walls/ internal walls/ floors and windows) and its constituent materials AND Provide design drawings or specification detailing the location and area (m ²) of each applicable element AND	Architect/ M Contractor / BREEAM Ass
6	0	Provide a copy of the output from the Mat 1 calculator or tool, including Green Guide/ Refurbishment Green Guide ratings and element numbers of each specification assessed Where relevant: <ul style="list-style-type: none"> ▪ Provide copies of Environmental Product Declarations. ▪ Provide a link/ reference to the EPD's Product Category Rules. ▪ Provide Online Green Guide and/ or refurbishment calculator output. ▪ Provide Environmental Profile certificates (or certificate number. 	
MAT 02 RESPONSIBLE SOURCING OF MATERIALS (15 credits available + 1 exemplary available)			
PLEASE NOTE THAT CRITERION 1 MUST BE ACHIEVED IN ORDER TO GAIN AN EXCELLENT RATING			
1	Pre-requisite	Provide a confirmation that all timber will come from a 'legal source' and is not on the CITES list or in the case of the Appendix III of the CITES list, it has not been sourced from the country seeking to protect his species as listed in Appendix III	Architect/ M Contractor
2 and 3	3	Provide a commitment to responsible sourcing which should take the form of : A sustainable procurement Plan OR A completed checklist A-9: Sustainable procurement statement if the Principal Contractor is a 'micro-enterprise'.	
4	3	Provide design drawings and/ or specification confirming the location of elements and materials specified, and details of the materials specified for each element AND If the material has been ordered, supplied or the supplier is known, provide a copy of the purchase order from the supplier including Chain of Custody (CoC) number and/ or BES6001@2008 (2) certificate number and/ or EMS certificate number OR Provide compliant Design Stage commitment from the Contractor or developer that the product shall be sourced from suppliers capable of providing certification to the level required for the particular tier claimed	M Contractor/ Architect
All	-	Completed BREEAM Domestic Refurbishment Mat 2 calculator tools	BREEAM Ass

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
MAT 03 INSULATION (8 credits available)			
Pre-requisite	-	<p>Provide text (on drawings or in specification) describing the location and area (m²) and thickness (m) or volume (m³) of insulation specified</p> <p>AND</p> <p>Manufacturer's technical details confirming the thickness and thermal conductivity of the insulating materials specified</p> <p>AND</p> <p>Provide the Green Guide rating and element number for the assessed insulation specifications including Green Guide ratings and element numbers for each new insulation specification assessed.</p> <p>Where relevant:</p> <ul style="list-style-type: none"> ▪ Provide copies of Environmental Product Declarations ▪ Provide a link/reference to the EPD's Product Category Rules ▪ Provide online Green Guide calculator output ▪ Provide environmental Profile Certificates (or certificate number) 	M Contractor/ BREEAM Ass
Four Credits - Responsible Sourcing			
3	4	Provide evidence confirming that the insulation is responsible sourced (refer to Mat 2 credit criteria 2) and carried out using the BREEAM Refurbishment Mat3 Calculator	M Contractor
All	-	Completed BREEAM Domestic Refurbishment Mat 3 calculator tools	BREEAM Ass
WASTE			
WAS 01 HOUSEHOLD WASTE (2 credits available)			
First credit: Recycling Facilities			
1	1	<p>Provide detailed documentary evidence highlighting:</p> <p>a) The types and sizes of internal storage bins. b) The location of internal and external storage bins and distance to kitchen. c) The types and sizes of external storage bins.</p> <p>AND</p> <p>Where there is a local authority collection scheme or private recycling scheme, provide a letter, leaflet, website or other published information from the Local Authority or private recycling scheme operator describing the types of waste collected, the frequency of collection and the type of collection sorting.</p>	Architect/ M Contractor
Second credit: Composting Facilities			
1	1	<p>Provide detailed documentary evidence highlighting:</p> <p>a) the location and size of external composter a) distance of external storage and/or composter from external door b) Location of the sufficiently sized internal space</p> <p>AND</p> <p>Where there is a local authority collection scheme or private recycling scheme: A letter, leaflet, website or other published information from the local authority or private scheme describing details of the scheme location.</p>	Architect/ M Contractor

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
WAS 02 REFURBISHMENT SITE WASTE MANAGEMENT (3 credits available + 1 exemplary available)			
All credits			
3 - 10	3	<p>Provide a copy of the compliant Site Waste Management Plan containing the appropriate benchmarks, commitments and procedures.</p> <p>AND</p> <p>Where appropriate, provide a copy of the re-refurbishment audit.</p> <p>OR</p> <p>Provide compliant Design Stage commitment that requires the Principal Contractor to produce a SWMP/ complete Checklist A-9 in line with the criteria and to outline in detail the criteria with respect to resource efficiency and targets and procedures to be included in the SWMP.</p>	M Contractor/ Project Mngr
POLLUTION			
POL 01 NITROGEN OXIDE EMISSIONS (3 credits available)			
1	3	<p>Provide detailed documentary evidence describing:</p> <ul style="list-style-type: none"> The primary and any secondary heating systems and flue type Dry NOx levels and/or boiler class of the primary and any secondary heating systems 	M&E Eng / M Contractor
All		Where the above cannot be produced at this stage, provide a compliant Design Stage commitment outlining the design specification that will be implemented	
POL 02 SURFACE WATER RUNOFF (3 credits available + 1 exemplary available)			
Neutral impact on surface water			
1 - 4	1	<p>Provide a copy of all relevant calculations and information necessary to meet the requirements</p> <p>AND</p> <p>Provide drawings showing the impermeable areas pre and post refurbishment</p> <p>OR</p> <p>Where evidence above cannot be produced, provide compliant Design Stage commitment outlining the design specification that will be implemented</p> <p>AND</p> <p>Provide written confirmation of the appointment of an appropriately qualified professional to carry out the calculations and provide design criteria for all relevant elements</p>	Drainage Eng/ M Contractor
Reducing run-off from site: Basic			
5 - 7	1	<p>Criteria 1 to 4 must be achieved</p> <p>Provide a copy of all relevant calculations and information necessary to meet the requirements</p> <p>AND</p> <p>Provide copies of any drawings and specification text necessary to support the claims made</p>	Drainage Eng/ M Contractor

Credit Criteria	Credits Targeted	Evidence/Action Required	Action By
POL 03 FLOODING (2 credits available)			
PLEASE NOTE THAT 2 CREDITS MUST BE ACHIEVED IN ORDER TO GAIN AN EXCELLENT RATING			
Low Flood Risk Zone or Floor Mitigation			
1 - 2	2	Provide a copy of a floor risk assessment confirming flood zone or annual probability of flooding in the site location AND Where appropriate, provide correspondence from the appropriate statutory body confirming reduced annual probability of flooding due to existing flood defences	Drainage Eng/ M Contractor

5 Amendments

Heath House, hampstead

BREEAM Rating Required: Excellent - 70%

Pre-assessment Date: 28 October 2015

Pre-assessment score: 73.48%

The initial score targeted at the Pre-assessment meeting will allow for the required BREEAM rating to be achieved provided sufficient and compliant evidence is received by MLM.

The Pre-assessment meeting held for this project on the date above details the credits targeted, who is responsible for providing evidence for each credit, and the evidence that must be provided to the BREEAM assessor in order to secure credits and achieve the required BREEAM rating. Any changes to the targeted credits and/ or changes to the score are detailed below for reference. Where any changes to the score have occurred, this is reflected in the current targeted score on the Summary page of this document.

Current Targeted Score: 73.48%

The current projected score will allow for the required BREEAM rating to be achieved once sufficient and compliant evidence is received by MLM.

Credit(s) added/removed since the Pre-assessment:

Credit	Date	From	Result	Comments

6 Appendices

Appendix A - BREEAM Assessment Tool

Building name	
Indicative Building Score	73.48%
Indicative Building Rating	BREEAM Excellent

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 dwelling's potential performance and is based on a simplified pre-formal BREEAM assessment and unverified commitments given at an early stage in the design process.

	Issue	Credits Available	Indicative Credits Achieved	Weighting	Section Score
Management	Man 01	3	3	12%	12.00%
	Man 02	2	2		
	Man 03	1	1		
	Man 04	2	2		
	Man 05	1	1		
	Man 06	2	2		

Health and Wellbeing	Hea 01	2	0	17%	9.92%
	Hea 02	4	4		
	Hea 03	1	1		
	Hea 04	2	0		
	Hea 05	2	1		
	Hea 06	1	1		

Energy	Ene 01	6	1	43%	26.69%
	Ene 02	4	2.5		
	Ene 03	7	5.5		
	Ene 04	2	0		
	Ene 05	2	2		
	Ene 06	1	1		
	Ene 07	2	1		
	Ene 08	2	2		
	Ene 09	2	2		
	Ene 10	1	1		

Water	Wat 01	3	2	11%	8.80%
	Wat 02	1	1		
	Wat 03	1	1		

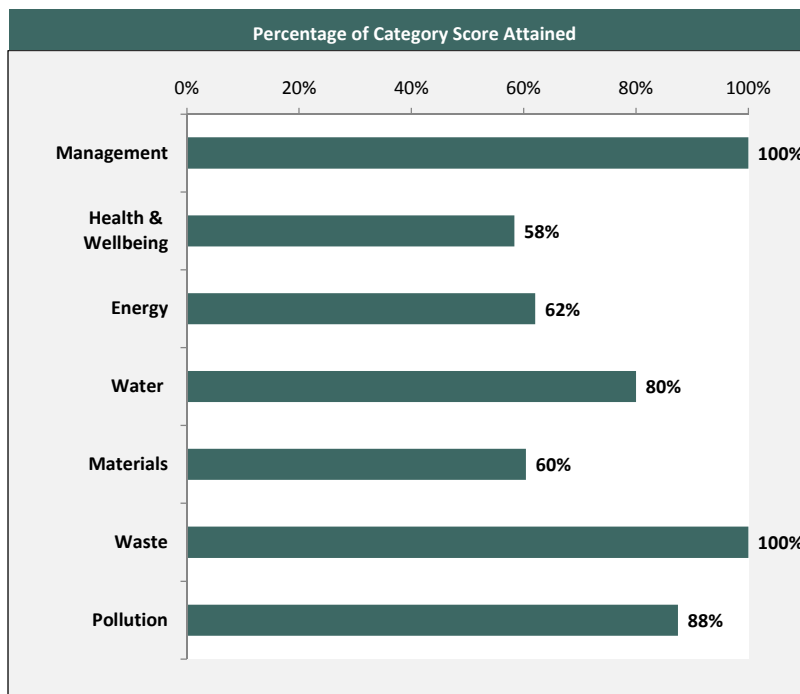
Materials	Mat 01	25	15	8%	4.83%
	Mat 02	15	6		
	Mat 03	8	8		

Waste	Was 01	2	2	3%	3.00%
	Was 02	3	3		

Pollution	Pol 01	3	3	6%	5.25%
	Pol 02	3	2		
	Pol 02	2	2		

Innovation	10	3	N/A		3.00%
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	Minimum Standards				
	Pass	Good	Very Good	Excellent	Outstanding
Ene 02	✓	✓	✓	✓	✗
Wat 01	✓	✓	✓	✓	✗
Hea 05	✓	✓	✓	✓	✓
Hea 06	✓	✓	✓	✓	✓
Pol 03	✓	✓	✓	✓	✓
Mat 02	✓	✓	✓	✓	✓





BREEAM UK Domestic Refurbishment 2014 Pre-Assessment Estimator v0.1

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 dwelling's 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	
Indicative building score (%)	73.48%
Indicative BREEAM rating	BREEAM Excellent
Management	Health & Wellbeing
Energy	Water
Materials	Waste
Pollution	

	Minimum Standards				
	Pass	Good	Very Good	Excellent	Outstanding
Ene 02	✓	✓	✓	✓	✗
Wat 01	✓	✓	✓	✓	✗
Hea 05	✓	✓	✓	✓	✓
Hea 06	✓	✓	✓	✓	✓
Pol 03	✓	✓	✓	✓	✓
Mat 02	✓	✓	✓	✓	✓

INNOVATION Section Weighting: 10% Indicative Section Score: 3.00%

Comments

MANAGEMENT Section Weighting: 12% Indicative Section Score: 12.00%

Man 01 Home Users Guide			
No. of BREEAM credits available	3	Available contribution to overall score:	3.27%
No. of BREEAM innovation credits	0	Minimum Standards applicable:	No

Assessment Criteria Where a Home Users Guide be provided to all dwellings, covering all issues set out in the 'Users Guide Contents list', three credits may be awarded Indicative Credits: 3

Comments Sean Strowger of Consero confirmed a compliant HUG will be produced and issued to the occupants.

Man 02 Responsible Construction Practices			
No. of BREEAM credits available	2	Available contribution to overall score:	2.18%
No. of BREEAM innovation credits	1	Minimum Standards	No

Assessment Criteria Where a compliant considerate construction scheme will be used, credits are awarded depending on the score achieved as outlined below: Indicative Credits: 2

Large Scale - project with more than 5 units		
	One Credit	Two Credits
Considerate Constructors Scheme	Score of 25-34 with a score of 5 in each section	Score of 35-39 with a score of 7 in each section
Alternative Compliant Scheme	Compliance	Beyond Compliance
Small Scale - project with 5 units or fewer		
	One Credit	Two Credits
Considerate Constructors Scheme	Score of 25-34 with a score of 5 in each section	Score of 35-39 with a score of 7 in each section
Alternative Compliant Scheme	Compliance	Beyond Compliance
Checklist A-3	50% of the optional items	80% of the optional items
Exemplary Credit		
Considerate Constructors Scheme	Score of 40 or more with a score of 7 in each section	* Small Scale Project Only
Alternative Compliant Scheme	Exemplary Level Compliance	
Checklist A-3*	All Items (Optional & Mandatory)	

Indicative Innovation Credits Achieved: 0

Comments Sean Strowger of Consero noted that the main contractor has yet to be appointed. However, they will be required to register with CCS and achieve beyond compliance.

Man 03 Construction Site Impacts			
No. of BREEAM credits available	1	Available contribution to overall score:	1.09%
No. of BREEAM innovation credits	0	Minimum Standards applicable:	No

Assessment Criteria Where evidence demonstrate that site impacts will be monitored, as detailed below: Indicative Credits: 1

One Credit	
Large Scale	Where there is evidence to demonstrate that 2 or more of the sections in Checklist A-4 are completed
Small Scale	Where there is evidence to demonstrate that 2 or more of the sections in Checklist A-5 are completed
Sections of Checklist	
Large Scale - Checklist A-4	Small Scale - Checklist A-5
Monitor, report and set targets for CO2 production of energy use arising from site activities	Set objectives for reducing CO2 production from energy use arising from site activities
Monitor, report and set targets for water consumption arising from site activities	Set objectives for reducing water use arising from site activities
A main contractor with an environmental materials policy	Main contractor environmental materials statement
A main contractor that operates an Environmental Management System	80% of site timber is reclaimed, re-used or responsibly sourced
80% of site timber is reclaimed, re-used or responsibly sourced	

Same definition of small and large scale as in Man 02

Comments Sean Strowger of Consero noted that the main contractor has yet to be appointed. However, they will be required to monitor water & operate an environmental management system.

Man 04 Security			
No. of BREEAM credits available	2	Available contribution to overall score:	2.18%
No. of BREEAM innovation credits	0	Minimum Standards applicable:	No
Assessment Criteria			Indicative Credits
Where the following requirements will be met:			2
One Credit Secure windows and doors	External doors and accessible windows meet minimum standards and appropriately certified		
	Principles and guidance of Secured by Design Section 2 are complied with		
Two Credits Secured by design	A suitably qualified security consultant is consulted at the design stage and their recommendations are incorporated into the refurbishment		
Comments			
Sean Strowger of Consero confirmed that windows will be a mix of retained and new. These will all comply with the criteria. In addition a suitably qualified security consultant will be consulted and their recommendations incorporated.			
Man 05 Protection and Enhancement of Ecological Features			
No. of BREEAM credits available	1	Available contribution to overall score:	1.09%
No. of BREEAM innovation credits	1	Minimum Standards applicable:	No
Assessment Criteria			Indicative Credits
Where the following requirements will be met:			1
One Credit Protecting Ecological Features	Site survey carried out to determine presence of ecological features		
	Statutory Nature Conservation Organisation notified of protected species		
	Features of ecological value protected during refurbishment works		
Exemplary Credit Ecological enhancement	A suitably qualified ecologist recommends features to enhance ecology of the site		Indicative Innovation Credits Achieved
	adopts all general ecological recommendations		
	adopts 30% of additional recommendations		
Comments			
Sean Strowger of Consero confirmed that a suitable ecologist has been appointed and a survey has been undertaken. It was noted that the site is likely to be classed as low ecological value, this is to be confirmed by the ecology report. The sites landscaping is to be improved and the ecologist recommendations are to be incorporated.			
Man 06 Project Management			
No. of BREEAM credits available	2	Available contribution to overall score	2.18%
No. of BREEAM innovation credits	2	Minimum Standards applicable	No
Assessment Criteria			Indicative Credits
Where the following requirements will be met:			2
One Credit Project Roles and Responsibilities	Where all of the project team are involved in the project decision making		
	Small Scale - the project manager assigns individual and shared responsibilities amongst the project team including all trades on site		
	Large Scale - the project manager assigns individual and shared responsibilities across the following key design and refurbishment stages: i. Planning and Building control notification ii. Design iii. Refurbishment iv. Commissioning and handover v. Occupation		
Small Scale projects: five units or fewer and less than £100k		Large Scale projects: more than five units and more than £100k	
One Credit Handover and Aftercare	Handover meeting arranged		
	2 or more of the following committed to: - A site inspection within 3 months of occupation - Conduct post occupancy interviews with building occupants or a survey via phone or posted information within 3 months of occupation - Longer term after care e.g. a helpline, nominated individual or other appropriate system to support building users for at least the first 12 months of occupation		
Indicative Innovation Credits Achieved			
1			
Exemplary Credits			
One Exemplary Credit Early Design Input	Where A BREEAM Accredited Professional has been appointed to oversee key stages within the project.		
	OR Where a BREEAM Domestic Refurbishment Assessor has been appointed at an early stage of the project, prior to the production of a refurbishment specification		
One Exemplary Credit Thermographic Surveying and Airtightness Testing	Where Thermographic surveying and Airtightness testing have been carried out at both pre and post refurbishment stages		
	Where an improved air tightness target has been set at design stage and testing demonstrates that this has been achieved post refurbishment		
Comments			
Sean Strowger of Consero confirmed that 2 credits are to be targeted. A BREEAM AP/Dom Refurb assessor (MLM) has been appointed pre planning.			

HEALTH & WELLBEING		Section Weighting: 17%		Indicative Section Score 9.92%	
Hea 01 Daylighting					
No. of BREEAM credits available	2	Available contribution to overall score	2.83%		
No. of BREEAM innovation credits	0	Minimum Standards applicable	No		
Assessment Criteria				Indicative Credits	
Where the refurbishment results in a neutral impact on daylighting or where minimum daylighting standards are met, up to two credits may be awarded as follows:				0	
For Existing Dwellings and Change of Use Projects					
First Credit Maintaining Good Daylighting	The refurbishment results in a neutral impact on the dwellings daylighting levels in the kitchen, living room, dining room and study				
Where the property is being extended					
First Credit Maintaining Good Daylighting	New spaces achieve minimum daylighting levels The extension does not significantly reduce daylighting levels in the kitchen, living room, dining room or study of neighbouring properties				
For All Properties					
Second Credit Minimum Daylighting	The dwelling achieves minimum daylighting levels in the kitchen, living room, dining room and study				
Comments					
The build is to have basement room and certain rooms are to be reduced in size. Therefore this credit is not sought.					
Hea 02 Sound Insulation					
No. of BREEAM credits available	4	Available contribution to overall score	5.67%		
No. of BREEAM innovation credits	0	Minimum Standards applicable	No		
Assessment Criteria				Indicative Credits	
To ensure the provision of acceptable sound insulation standards and so minimise the likelihood of noise complaints.				4	
Properties where sound testing has been carried out:					
Up to Four Credits	Four credits awarded according to the improvement over building regulations. See table in additional information in Technical Manual				
Properties where sound testing is not feasible and not required by the appointed Building Control body					
Two Credits	Where existing separating walls and floors are designed to meet the requirements of Building Regulations with compliant construction details				
Up to Four Credits	Where a Suitably Qualified Acoustician (SQA) provides recommendations for the specification of all existing separating walls and floors				
	SQA confirms in their professional opinion that they have the potential to meet or exceed the sound insulation credit requirements				
	Where these recommendations are implemented				
	See table in additional information in Technical Manual				
Historic Buildings					
Up to Four Credits	Where the dwelling is a Historic Building and sound testing results demonstrate existing separating walls and floor meet the Historic Building credit requirements				
	See table in additional information in Technical Manual				
	Where sound testing is not feasible and not required by the appointed Building Control body meeting criteria 2 and 3 using Table 12				
	Properties where sound testing has been carried out, credits awarded according to the improvement over building regulations. See table in additional information in Technical Manual				
	Where the dwelling is a detached property				
Detached Properties					
Four Credits	By Default				
Properties with separating walls or floors only between non habitable rooms OR Testing not required by building control body					
Four Credits	By Default				
Comments					
Sean Strowger of Consero confirmed that sound testing will be undertaken and 8dB will be sought.					
Hea 03 Volatile Organic Compounds					
No. of BREEAM credits available	1	Available contribution to overall score	1.42%		
No. of BREEAM innovation credits	0	Minimum Standards applicable	No		
Assessment Criteria				Indicative Credits	
Where the refurbishment avoids the use of VOCs with new products meeting the following requirements:				1	
One Credit Avoiding the use of VOCs	Where all decorative paints and varnishes used in the refurbishment have met the requirement listed in table 5.4 in the Technical Manual				
	Where at least five of the eight remaining product categories listed in table 5.4 have met the testing requirements and emission levels for Volatile Organic Compound (VOC) emissions against the relevant standards identified within table 5.4 in the Technical Manual				
	Where five or less products are specified within the refurbishment, all must meet the requirements in order to achieve this credit.				
Comments					
Sean Strowger of Consero confirmed that all items will be compliant with the criteria.					

Hea 04 Inclusive Design			
No. of BREEAM credits available	2	Available contribution to overall score	2.83%
No. of BREEAM innovation credits	1	Minimum Standards applicable	No
Assessment Criteria			Indicative Credits
Where an access statement has been carried out using Checklist A-8 of the Technical Manual to optimise the accessibility of the home as follows:			0
Checklist A-8 of the Technical Manual			
		Section 1	Section 2
One Credit Minimum Accessibility	Completed with Evidence		
Two Credits Advanced Accessibility	Completed with Evidence	Completed with Evidence	
Exemplary Performance			Indicative Innovation Credits Achieved
One Credit	Where an access expert suitably qualified member of the design team has completed sections 1, 2 and 3 of Checklist A-8, access statement template with evidence provided of the measures implemented in the refurbishment		0
Comments			
Due to the building age and numerous stairs/steps, this credit has not been targeted.			
Hea 05 Ventilation			
No. of BREEAM credits available	2	Available contribution to overall score	2.83%
No. of BREEAM innovation credits	0	Minimum Standards applicable	Yes
Assessment Criteria			Indicative Credits
Where the dwelling meets the following ventilation requirements:			1
One Credit Minimum Ventilation Requirements	A minimum level of background ventilation is provided (with trickle ventilators or other means of ventilation) for all habitable rooms, kitchens, utility rooms and bathrooms compliant with section 7, Building Regulations Approved Document Part F, 2010 A minimum level of extract ventilation is provided in all wet rooms (e.g. kitchen, utility and bath-rooms), compliant with section 5, Building Regulations Approved Document Part F 2010. A minimum level of purge ventilation is provided in all habitable rooms and wet rooms, compliant with section 7, Building Regulations Approved Document Part F, 2010. It is an historic building and meets historic building requirements in CN4 of the technical manual		
Two Credits Advanced Requirements	Ventilation is provided for the dwelling that meets the requirements of Section 5 of Building Regulations Part F in full Where the building is a historic building and meets the requirements for Historic Buildings in compliance note 4 of the technical manual		
Comments			
Sean Strowger of Consero confirmed that all ventilation will comply with the criteria. As the build is grade II listed the BREEAM historic buildings criteria can be applied.			
Hea 06 Safety			
No. of BREEAM credits available	1	Available contribution to overall score	1.42%
No. of BREEAM innovation credits	0	Minimum Standards applicable	Yes
Assessment Criteria			Indicative Credits
Where a fire and carbon monoxide (CO) detection and alarm system is specified as follows:			1
One Credit Fire and Carbon Monoxide (CO) Detection and Alarm Systems	Where a compliant fire detection and fire alarm system is provided Carbon Monoxide detector installed if dwelling is supplied with mains gas or other fossil fuel Mains supplied fire detection and alarm system if project involves re-wiring* Battery operated fire detection and alarm system if no re-wiring* is to take place		
* see CN9 in Hea 06 for the definition of re-wiring			
Comments			
Sean Strowger of Consero confirmed that the build is 4/5storeys and complete electrical re-wiring is to be undertaken.			
ENERGY		Section Weighting: 43%	Indicative Section Score 26.69%
Ene 01 Improvement in Energy Efficiency Rating			
No. of BREEAM credits available	6	Available contribution to overall score	8.90%
No. of BREEAM innovation credits	0	Minimum Standards applicable	No
Assessment Criteria			Indicative Credits
Where the following targets are met for the improvement in Energy Efficiency Rating achieved as a result of refurbishment:			1
		Improvement in EER	Credits
		≥ 5	0.5
		≥ 9	1
		≥ 13	1.5
		≥ 17	2
		≥ 21	2.5
		≥ 26	3
		≥ 31	3.5
		≥ 36	4
		≥ 42	4.5
		≥ 48	5
		≥ 54	5.5
		≥ 60	6
Comments			
Sean Strowger of Consero confirmed that the build will incorporate insulation improvements to meet new building regulation standards. The SAPs produced shows flats 1/3/4 score 1 credit, flat 2/6 score 1.5 credits and flat 5 scores 2. For this assessment the worst score is assumed.			

Ene 02 Energy Efficiency Rating Post Refurbishment				
No. of BREEAM credits available	4	Available contribution to overall score	5.93%	
No. of BREEAM innovation credits	2	Minimum Standards applicable	Yes	
Assessment Criteria			Indicative Credits	
Where the following Energy Efficiency Rating benchmarks will be met as a result of refurbishment:			2.5	
	EER post refurbishment	Credits	Minimum requirements	
	≥50	0.5	'Pass' level EER of 50	
	≥55	1	'Good' level EER of 58	
	≥60	1.5		
	≥65	2	'Very Good level' EER of 65	
	≥70	2.5	'Excellent' level EER of 70	
	≥75	3		
	≥80	3.5	'Outstanding' level EER of 81	
	≥85	4		
	Exemplary	Credits	Indicative Innovation Credits Achieved	
	≥90	1	0	
	≥100	2		
Comments				
Sean Strowger of Consero confirmed that the build will incorporate insulation improvements to meet new building regulation standards. The SAPs produced shows flats 1/3/4/5 score 2.5 credits and flats 4/6 score 3 credits. For this assessment the worst score is assumed.				
Ene 03 Primary energy demand				
No. of BREEAM credits available	7	Available contribution to overall score	10.38%	
No. of BREEAM innovation credits	0	Minimum Standards applicable	No	
Assessment Criteria			Indicative Credits	
Where the following Primary Energy Demand benchmarks will be met as a result of refurbishment:			5.5	
	Primary Energy Demand Post Refurbishment	Credits		
	≤ 400	0.5		
	≤ 370	1		
	≤ 340	1.5		
	≤ 320	2		
	≤ 300	2.5		
	≤ 280	3		
	≤ 260	3.5		
	≤ 240	4		
	≤ 220	4.5		
	≤ 200	5		
	≤ 180	5.5		
	≤ 160	6		
	≤ 140	6.5		
	≤ 120	7		
Comments				
The SAPs produced shows flats 5/3 score 5.5 credits and flats 1/4 score 6 credits and flats 2/6 score 6.5 credits. For this assessment the worst score is assumed.				
Ene 04 Renewable Technologies				
No. of BREEAM credits available	2	Available contribution to overall score	2.97%	
No. of BREEAM innovation credits	0	Minimum Standards applicable	No	
Assessment Criteria			Indicative Credits	
Where the dwelling will meet the following % contribution from renewables and primary energy demand targets as a result of refurbishment			0	
	Dwelling Type	Primary Energy Demand	Percentage from Renewables	
			1 Credit	
			2 Credits	
	Detached	≤ 250 kWh/m ² /year	≥10%	≥20%
	Semi-Detached		≥10%	≥20%
	Bungalow		≥10%	≥20%
	End of Terrace		≥10%	≥20%
	Mid Terrace	≤ 220 kWh/m ² /year	≥10%	≥20%
	Low Rise Flat		≥10%	≥20%
	Mid Rise Flat		≥10%	≥15%
	High Rise Flat		≥10%	≥15%
Comments				
Sean Strowger of Consero confirmed that there are no planning requirements for renewables. Unless they are required in the SAP calculations they are not being provided, so credit is not sought.				
Ene 05 Energy Labelled White Goods				
No. of BREEAM credits available	2	Available contribution to overall score	2.97%	
No. of BREEAM innovation credits	0	Minimum Standards applicable	No	
Assessment Criteria			Indicative Credits	
Where Energy Efficiency White goods are to be provided as follows:			2	
First Credit				
	Appliance	Appliance provided	Appliance not to be provided	
	Fridges, Freezers and Fridge-Freezers	A+ Rating under EU Energy Efficiency Labelling Scheme	EU Energy Efficiency Labelling Scheme Information Leaflet provided to all dwellings	
Second Credit				
	Appliance	Appliance provided	Appliance not to be provided	
	Washing Machines and Dishwashers	Washing Machine A++ under EU Energy Efficiency Labelling Scheme AND Dishwasher A+ under EU Energy Efficiency Labelling Scheme	Second credit not achieved	
	Washer-Dryers and Tumble Dryers	Appliances specified with A Rating under EU Energy Efficiency Labelling Scheme	EU Energy Efficiency Labelling Scheme Information Leaflet provided to all dwellings	
Comments				
Sean Strowger of Consero confirmed that compliant white goods are to be provided.				

Ene 06 Drying Space																										
No. of BREEAM credits available	1	Available contribution to overall score	1.48%																							
No. of BREEAM innovation credits	0	Minimum Standards applicable	No																							
Assessment Criteria			Indicative Credits																							
Where adequate, secure internal or external space with posts and footings or fixings is provided with the following:			1																							
<table border="1"> <tr> <td colspan="2">1 Credit</td> </tr> <tr> <td>Number of bedrooms</td> <td>Drying line required</td> </tr> <tr> <td>1-2</td> <td>4m+</td> </tr> <tr> <td>3+</td> <td>6m+</td> </tr> </table>			1 Credit		Number of bedrooms	Drying line required	1-2	4m+	3+	6m+																
1 Credit																										
Number of bedrooms	Drying line required																									
1-2	4m+																									
3+	6m+																									
Comments																										
Sean Strowger of Consero confirmed that tidy driers will be provided in all units.																										
Ene 07 Lighting																										
No. of BREEAM credits available	2	Available contribution to overall score	2.97%																							
No. of BREEAM innovation credits	0	Minimum Standards applicable	No																							
Assessment Criteria			Indicative Credits																							
Where energy efficient internal and external lighting is provided as follows:			1																							
<table border="1"> <tr> <td colspan="2">External Lighting - 1</td> </tr> <tr> <td colspan="2">Energy Efficient Space Lighting of more than 45 lumens per circuit watt and Energy Efficient Security Lighting OR</td> </tr> <tr> <td colspan="2">Where Energy Efficient Space Lighting is provided ONLY</td> </tr> <tr> <td colspan="2">Internal Lighting - 1</td> </tr> <tr> <td colspan="2">Maximum average wattage across the total floor area of the dwelling of 9 watts/m2</td> </tr> </table>			External Lighting - 1		Energy Efficient Space Lighting of more than 45 lumens per circuit watt and Energy Efficient Security Lighting OR		Where Energy Efficient Space Lighting is provided ONLY		Internal Lighting - 1		Maximum average wattage across the total floor area of the dwelling of 9 watts/m2															
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Internal Lighting - 1																										
Maximum average wattage across the total floor area of the dwelling of 9 watts/m2																										
Comments																										
Sean Strowger of Consero confirmed that the external lighting credit can be achieved. The internal lighting credit is not to be sought as a lot of LED lights are proposed.																										
Ene 08 Display Energy Devices																										
No. of BREEAM credits available	2	Available contribution to overall score	2.97%																							
No. of BREEAM innovation credits	1	Minimum Standards applicable	No																							
Assessment Criteria			Indicative Credits																							
Where consumption data is displayed to occupants by a compliant energy display device			2																							
<table border="1"> <tr> <td rowspan="2">Electricity usage data displayed</td> <td colspan="2">Primary Heating Fuel</td> </tr> <tr> <td>Electricity</td> <td>Other</td> </tr> <tr> <td>Electricity usage data displayed</td> <td>2 credits awarded</td> <td>1 credit awarded</td> </tr> <tr> <td>Primary Heating Fuel usage data displayed</td> <td>N/A</td> <td>1 credit awarded</td> </tr> <tr> <td>Electricity & Primary Heating Fuel usage displayed</td> <td>N/A</td> <td>2 credits awarded</td> </tr> <tr> <td colspan="3">Exemplary Credits</td> </tr> <tr> <td>One credit</td> <td colspan="2">Where the first two credits are achieved</td> </tr> <tr> <td>Recording consumption data</td> <td colspan="2">Where any compliant Energy Display Device is capable of recording consumption data</td> </tr> </table>			Electricity usage data displayed	Primary Heating Fuel		Electricity	Other	Electricity usage data displayed	2 credits awarded	1 credit awarded	Primary Heating Fuel usage data displayed	N/A	1 credit awarded	Electricity & Primary Heating Fuel usage displayed	N/A	2 credits awarded	Exemplary Credits			One credit	Where the first two credits are achieved		Recording consumption data	Where any compliant Energy Display Device is capable of recording consumption data		Indicative Innovation Credits Achieved
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One credit	Where the first two credits are achieved																									
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Comments			1																							
Sean Strowger of Consero confirmed that compliant energy display devices will be provided. In addition they will be capable of recording consumption data.																										
Ene 09 Cycle Storage																										
No. of BREEAM credits available	2	Available contribution to overall score	2.97%																							
No. of BREEAM innovation credits	0	Minimum Standards applicable	No																							
Assessment Criteria			Indicative Credits																							
Where individual or communal compliant cycle storage is provided as follows:			2																							
<table border="1"> <tr> <td>Dwelling Size</td> <td>One Credit</td> <td>Two Credits</td> </tr> <tr> <td>Studios/ 1 bedroom</td> <td>1 per two dwellings</td> <td>1 per dwelling</td> </tr> <tr> <td>2-3 bedrooms</td> <td>1 per dwelling</td> <td>2 per dwelling</td> </tr> <tr> <td>4 bedrooms</td> <td>2 per dwelling</td> <td>4 per dwelling</td> </tr> </table>			Dwelling Size	One Credit	Two Credits	Studios/ 1 bedroom	1 per two dwellings	1 per dwelling	2-3 bedrooms	1 per dwelling	2 per dwelling	4 bedrooms	2 per dwelling	4 per dwelling												
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Comments																										
Sean Strowger of Consero confirmed that each 2/3 bed unit will be provided with space for 2 cycles in a communal store.																										
Ene 10 Home Office																										
No. of BREEAM credits available	1	Available contribution to overall score	1.48%																							
No. of BREEAM innovation credits	0	Minimum Standards applicable	No																							
Assessment Criteria			Indicative Credits																							
Where sufficient space and services will be provided to allow occupants to set up a home office in a suitable room with adequate ventilation			1																							
Comments																										
Sean Strowger of Consero confirmed that the apartments are 2 or 3 bed units, and all will be provided with services/space to allow for a home office.																										

WATER		Section Weighting: 11%		Indicative Section Score 8.80%	
Wat 01 Internal Water Use					
No. of BREEAM credits available	3	Available contribution to overall score	6.60%		
No. of BREEAM innovation credits	1	Minimum Standards applicable	Yes		
Assessment Criteria				Indicative Credits	
Where the dwellings water consumption meets the following consumption benchmarks, or where terminal fittings meet the following water consumption standards:				2	
Calculated Water Consumption (litres/person/day)	Equivalent terminal fitting standards	Minimum Standard	Credits		
>150	Typical baseline performance	N/A	0		
from 140 to ≤ 150	All showers specified to 'Good' OR All taps and WC's to 'Good' OR Kitchen fittings specified to 'Excellent'	N/A	0.5		
from 129 to < 140	All showers specified to 'Excellent' OR All showers and bathroom taps to 'Good'	BREEAM Very Good	1		
from 118 to < 129	All bathroom and WC room fittings specified to 'Good' OR All bathroom fittings specified to 'Excellent'	N/A	1.5		
from 107 to < 118	All Bathroom and WC room fittings specified to 'Excellent' OR All Bathroom fittings Specified to 'Excellent' and WC room fitting specified to 'Good' OR All Bathroom fittings, kitchen and utility fittings specified to 'Good'	BREEAM Excellent	2		
from 96 to < 107	All kitchen, bathroom, utility room and WC room fittings specified to 'Good' OR All bathrooms, kitchens and utility rooms specified to 'Excellent'	N/A	2.5		
< 96	All bathroom fittings specified to 'Excellent' and WC room, kitchen and utility room fittings specified to 'Good'	BREEAM Outstanding	3		
NOTE: 'Good' fittings are equivalent to good practice fittings with "Excellent" fittings equivalent to best practice fittings (see the technical manual for full details).					
			Exemplary Credit	If the water consumption is less than 80l/person/day	Indicative Innovation Credits Achieved
					0
Comments					
The mandatory 2 credits are to be targeted.					
Wat 02 External Water Use					
No. of BREEAM credits available	1	Available contribution to overall score	2.20%		
No. of BREEAM innovation credits	0	Minimum Standards applicable	No		
Assessment Criteria				Indicative Credits	
Where the following requirements will be met:				1	
Requirements:					
One Credit	Where a compliant rainwater collection system for external/internal irrigation use has been provided to dwellings. OR Where dwellings have no individual or communal garden space.				
Comments					
Sean Strowger of Consero confirmed that a communal water butt will be placed in the rear communal garden.					
Wat 03 Water Meter					
No. of BREEAM credits available	1	Available contribution to overall score	2.20%		
No. of BREEAM innovation credits	0	Minimum Standards applicable	No		
Assessment Criteria				Indicative Credits	
Where an appropriate water meter for measuring usage of mains potable water meter has been provided to dwelling(s), one credit may be awarded				1	
Comments					
Sean Strowger of Consero confirmed that the a compliant water meter will be installed.					
MATERIALS		Section Weighting: 8%		Indicative Section Score 4.83%	
Mat 01 Environmental Impact of Materials					
No. of BREEAM credits available	25	Available contribution to overall score	4.16%		
No. of BREEAM innovation credits	0	Minimum Standards applicable	No		
Assessment Criteria				Indicative Credits	
Up to 25 credits can be awarded, with credits calculated using the Mat 01 calculator tool. The table below shows the maximum number of credits available for each element:				15	
Elements	Green Guide Rating credits available	Thermal performance credits			
Roof	5	3			
External walls	5	3.8			
Internal walls (including separating walls)	5	-			
Upper and Ground Floor	5	1.2			
Windows	5	2			
The full 25 credits represents all of the elements containing refurbished or existing materials that meet the Green Guide Rating of A+(6)					
GG Rating	Points for existing / refurbished elements	Points for new elements			
A+ (6)	5				
A+ (5)	4.6				
A+ (4)	4.2				
A+ (3)	3.8				
A+ (2)	3.4				
A+	3	3			
A	2	2			
B	1	1			
C	0.5	0.5			
D	0.25	0.25			
E	0	0			
Where the full 25 credits cannot be achieved the score can be 'topped up' with thermal performance credits. The full number of thermal performance credits for each element can be achieved when achieving the minimum U-values shown below.					
Elements		Minimum U-Value			
Roof		0.11			
External walls		0.15			
Internal walls (including separating walls)		-			
Upper and Ground Floor		0.15			

Comments	Windows	1.4
<p>Sean Strowger of Consero confirmed that the ground floor and external walls are to be retained. The roof will be new and the internal walls, upper floors and windows will be a mixture of retained and new.</p> <p>It was noted that the external walls are to be improved with new insulation, therefore the thermal performance credit will be reviewed once details are confirmed.</p>		

Mat 02 Responsible Sourcing of Materials																	
No. of BREEAM credits available	15	Available contribution to overall score	2.50%														
No. of BREEAM innovation credits	0	Minimum Standards applicable	Yes														
Assessment Criteria			Indicative Credits														
Where new materials are responsibly sourced, up to 12 credits may be awarded where 80% of new materials for an element are responsibly sourced. The credits achieved are dependent on % of point achieved which is based upon the responsible sourcing tier level of each material sourced as detailed below:			6														
<table border="1"> <thead> <tr> <th colspan="2">Sustainable Procurement Plan (3 BREEAM credits)</th> </tr> </thead> <tbody> <tr> <td colspan="2">The principal contractor sources materials for the project in accordance with a documented sustainable procurement plan</td> </tr> <tr> <th colspan="2">OR Where the principal contractor is a Small Company (up to 3 BREEAM credits)</th> </tr> <tr> <td colspan="2">Checklist A-9 is filled in with supporting evidence</td> </tr> </tbody> </table>		Sustainable Procurement Plan (3 BREEAM credits)		The principal contractor sources materials for the project in accordance with a documented sustainable procurement plan		OR Where the principal contractor is a Small Company (up to 3 BREEAM credits)		Checklist A-9 is filled in with supporting evidence		<table border="1"> <tr> <td>Will all new timber used in the project be sourced in accordance with the UK Government's Timber Procurement</td> <td>Yes</td> </tr> </table>		Will all new timber used in the project be sourced in accordance with the UK Government's Timber Procurement	Yes				
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Will all new timber used in the project be sourced in accordance with the UK Government's Timber Procurement	Yes																
Table 1 <table border="1"> <thead> <tr> <th>BREEAM credits</th> <th>% of available points achieved</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>≥54%</td> </tr> <tr> <td>10</td> <td>≥45%</td> </tr> <tr> <td>8</td> <td>≥36%</td> </tr> <tr> <td>6</td> <td>≥27%</td> </tr> <tr> <td>4</td> <td>≥18%</td> </tr> <tr> <td>2</td> <td>≥9%</td> </tr> </tbody> </table>		BREEAM credits	% of available points achieved	12	≥54%	10	≥45%	8	≥36%	6	≥27%	4	≥18%	2	≥9%		
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Comments																	
Sean Strowler of Consero confirmed that the where feasible most items will be responsibility sourced. The appointed contractor will be required to comply with this requirement.																	
Mat 03 Insulation																	
No. of BREEAM credits available	8	Available contribution to overall score	1.33%														
No. of BREEAM innovation credits	0	Minimum Standards applicable	No														
Assessment Criteria			Indicative Credits														
Where any new insulation specified for use within external walls, ground floor, roof and buildings services meet the following requirements:			8														
Requirements																	
4 Credits	Where the Insulation Index for new insulation used in the buildings is ≥2																
	Where Green Guide ratings are determined using the Green Guide to specification tool																
Requirements																	
4 Credits	Where ≥ 80% of the new thermal insulation used in the building elements is responsibly sourced.																
Comments																	
Sean Strowler of Consero confirmed that all insulation will be new, and will comply with the index criteria and be responsibility sourced.																	
WASTE Section Weighting: 3% Indicative Section Score 3.00%																	
Was 01 Household Waste																	
No. of BREEAM credits available	2	Available contribution to overall score	1.20%														
No. of BREEAM innovation credits	0	Minimum Standards applicable	No														
Assessment Criteria			Indicative Credits														
Where compliant recycling and composting facilities are provided, up to two credits may be awarded as follows			2														
First Credit - Recycling Facilities																	
Compliant collection scheme in place	Internal recycling storage requirements																
	3 internal recycling containers provided where recycling is not sorted post collection																
No compliant collection scheme in place No adequate external storage	1 internal recycling container provided where recycling is sorted post collection																
	Minimum 30 litre total capacity, no single container less than 7 litre capacity																
	Dedicated position in accordance with compliance note 1																
No compliant collection scheme in place Adequate external storage provided	3 internal recycling containers provided																
	Minimum 60 litre total capacity																
	Dedicated position in accordance with compliance note 1																
Second credit - Composting facilities																	
With external space		Without external space															
Where a composting service or facility is provided for green/garden waste		Where a composting service or facility is provided for kitchen waste															
Where a composting service or facility is provided for kitchen waste		Where an interior container is provided for kitchen composting waste of at least 7 litres															
Where an interior container is provided for kitchen composting waste of at least 7 litres																	
Comments																	
Sean Strowler of Consero confirmed that the apartments will be under Camden Council which operate a recycling collection scheme. A single 30 litre recycling bin is proposed in each flat. In addition a 7litre kitchen caddy and communal compost bin will be installed, the compost bin will be located in the communal garden and be managed.																	
Was 02 Refurbishment Site Waste Management																	
No. of BREEAM credits available	3	Available contribution to overall score	1.80%														
No. of BREEAM innovation credits	1	Minimum Standards applicable	No														
Assessment Criteria			Indicative Credits														
Up to three credits are available depending on the site waste management plan to be implemented as follows			3														
Projects up to £100k																	
Three Credits	Where waste generated through the refurbishment process is managed in accordance with Checklist A-9																
Exemplary Credit	Where a compliant Level 1; Site Waste Management Plan (SWMP) is in place																
Projects up to £300k																	
Three Credits	Where a compliant Level 1; Site Waste Management Plan (SWMP) is in place																
Exemplary Credit	Where a compliant Level 2; Site Waste Management Plan (SWMP) is in place																
	Non-hazardous construction waste generated by the dwellings refurbishment meets or exceeds the resource efficiency benchmark																
Indicative Innovation Credits Achieved																	
0																	

	The percentage of non-hazardous construction waste and demolition waste generated by the project has been diverted from landfill and meets or exceeds the refurbishment & demolition waste diversion benchmarks
Projects over £300k	
First Credit Management Plan	Where a compliant Level 2; Site Waste Management Plan (SWMP) is in place
Second Credit Good Practice Waste Benchmarks	First credit achieved
	Non-hazardous construction waste generated by the dwellings refurbishment meets or exceeds the resource efficiency benchmark
	Amount of waste generated against £100,000 of project value is recorded in the SWMP
	Pre-refurbishment audit of the existing building is completed
Third Credit Best Practice Waste Benchmarks	If demolition is included as part of the refurbishment programme, then the audit should also cover demolition materials
	Where the first two credits have been achieved
Exemplary Credit	Where Non-hazardous demolition waste generated by the dwellings refurbishment meets or exceeds the refurbishment & demolition waste diversion benchmarks
	Where non-hazardous construction waste generated by the dwellings refurbishment meets or exceeds the <i>exemplary level resource efficiency benchmark</i>
	Where Non-hazardous demolition waste generated by the dwellings refurbishment meets or exceeds the exemplary level diversion benchmarks
Comments	
Sean Strowger of Consero confirmed that the project will be over 300k in value. Although a main contractor has yet to be appointed they will be required to undertake a SWMP which will incorporate good practice waste benchmarks to award 3 credits. The exemplary level credits are tbc.	

POLLUTION		Section Weighting: 6%		Indicative Section Score 5.25%									
Pol 01 NOx Emissions													
No. of BREEAM credits available	3	Available contribution to overall score	2.25%										
No. of BREEAM innovation credits	0	Minimum Standards applicable	No										
Assessment Criteria				Indicative Credits									
Credits are awarded on the basis of NOx emissions arising from the operation of space heating and hot water systems for each refurbished dwelling as follows:				3									
		<table border="1"> <thead> <tr> <th colspan="2">Dry NOx Emissions</th> </tr> </thead> <tbody> <tr> <td>One Credit</td> <td>≤100 mg/kWh (NOx class 4 boiler)</td> </tr> <tr> <td>Two Credits</td> <td>≤70 mg/kWh (NOx class 5 boiler)</td> </tr> <tr> <td>Three Credits</td> <td>≤40 mg/kWh</td> </tr> </tbody> </table>		Dry NOx Emissions		One Credit	≤100 mg/kWh (NOx class 4 boiler)	Two Credits	≤70 mg/kWh (NOx class 5 boiler)	Three Credits	≤40 mg/kWh		
Dry NOx Emissions													
One Credit	≤100 mg/kWh (NOx class 4 boiler)												
Two Credits	≤70 mg/kWh (NOx class 5 boiler)												
Three Credits	≤40 mg/kWh												
Comments													
Sean Strowger of Consero confirmed that individual gas boilers are proposed and these will have Nox emissions of <40.													
Pol 02 Surface Water Runoff													
No. of BREEAM credits available	3	Available contribution to overall score	2.25%										
No. of BREEAM innovation credits	1	Minimum Standards applicable	No										
Assessment Criteria				Indicative Credits									
Where impacts of the refurbishment on surface water runoff are neutralised or where runoff is reduced as a result of refurbishment, up to three credits can be awarded as follows:				2									
Requirements													
One Credit Neutral Impact on Surface Water		New hard standing areas must be permeable If building on to previously permeable area additional run-off must be managed on site Calculations should be carried out by an appropriately qualified professional											
Requirements													
OR Second Credits Reducing Run-Off From Site: Basic		Where the criteria needed for One Credit has been achieved Where all run-off from the roof for rainfall depths up to 5 mm, have been managed on site using source control methods Include runoff from all existing and new parts of the roof. An appropriately qualified professional should be used to design an appropriate drainage strategy for the site											
Requirements													
OR Three Credits Reducing Run-Off From Site: Advanced		Where run-off as a result of the refurbishment is managed on site using source control An appropriately qualified professional should be used to design an appropriate drainage strategy for the site. The peak rate of run-off as a result of the refurbishment for the 1 in 100 year event has been reduced by 75% from the existing site. The total volume of run-off discharged into the watercourses and sewers as a result of the refurbishment, for a 1 in 100 year event of 6 hour duration has been reduced by 75%. An allowance for climate change must be included for all of the above calculations, in accordance with current best practice (PPS25, 2010).											
Requirements													
Exemplary Credit		Where all run-off from the developed site is managed on site using source control The peak rate of run-off as a result of the refurbishment for the 1 in 1 year event is reduced to zero. The peak rate of run-off as a result of the refurbishment for the 1 in 100 year event is reduced to zero. There is no volume of run-off discharged into the watercourses and sewers as a result of the refurbishment, for a 1 in 100 year event of 6 hour duration. An allowance for climate change must be included for all of the above calculations, in accordance with current best practice (PPS25, 2010).											
				Indicative Innovation Credits Achieved									
				0									
Comments													
Sean Strowger of Consero confirmed that the size of the frontprint will be unchanged. A drainage consultant will be appointed to undertake calculations and some form of source control will be installed to achieve basic run-off credits.													
Pol 03 Flooding													
No. of BREEAM credits available	2	Available contribution to overall score	1.50%										
No. of BREEAM innovation credits	0	Minimum Standards applicable	Yes										
Assessment Criteria				Indicative Credits									
Where the dwelling is located in a low flood risk zone, or where in a medium to high flood risk zone and a flood resilience/resistance strategy has been implemented, up to two credits can be awarded as follows:				2									
Minimum Standards		A minimum of two credits must be achieved for this issue at the Excellent and Outstanding levels											
Option 1 - Low Flood Risk													
Two Credits		Where a Flood Risk Assessment (FRA) has been carried out and the assessed dwellings are defined as having a low annual probability of flooding.											
Option 2 - Medium / High Flood Risk													
Two Credits		Where a Flood Risk Assessment (FRA) has been carried out and the assessed dwellings are defined as having a medium or high annual probability of flooding. Two credits are awarded where as a result of the dwellings floor level or measures to keep water away from the dwelling is defined as achieving avoidance from flooding by following Checklist A-10; Decision Strategy Flow Chart. Where avoidance is not possible, two credits are achieved where a full flood resilience/resistance strategy is implemented for the dwellings in accordance with recommendations made by a Suitably Qualified Building Professional											
Comments													
Sean Strowger of Consero confirmed that an FRA has been undertaken and confirmed the site as low risk. This document is to be provided to confirm the credits.													