



6 John Street  
BREEAM Pre-assessment  
BREEAM Refurbishment Domestic 2014

Revision 1

10/07/2015

Confidentiality: Confidential



## Quality Management

Issue/ Revision	Issue 1	Revision 1	Revision 2	Revision 3
Remarks	Pre-Assessment: BREEAM Domestic Refurbishment 2014	Changes to credits targeted under Mat 01 and Wat 01		
Date	14th May 2015	10th July 2015		
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 BREEAM Pre-assessment  
 BREEAM Refurbishment Domestic 2014

10/07/2015

### Client

G&T

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## Executive Summary

6 John Street is a major refurbishment project.

WSP (BREEAM Team) have produced this pre-assessment report based on liaison with the design team to demonstrate the initially targeted scores under BREEAM (Building Research Establishment Environmental Assessment Method).

The targeted scores show an initial scoped route for the achievement of BREEAM 'Very Good' rating. This pre-assessment report discharges the section 106 requirement for submission of a BREEAM pre-assessment report prior to commencement works on site.

Table 1: Pre-Assessment Review Scoring Summary

Based on the meeting held on 07th May 2015, the following scoring scenarios have been presented:

Scoring Scenario	Score	Rating*
Targeted	63.87%	Very Good
Additional	67.58%	Very Good

**Table 1: Pre-Assessment Review Scoring Summary**

\* The achievement of BREEAM ratings is reliant on the overall percentage score achieved and compliance with a number of mandatory performance criteria (outlined in Section 5).

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## 1. Project Background

WSP (BREEAM Team) has been commissioned by G&T John Street Ltd. in the capacity as BREEAM assessors and to assist the design team develop a pre-assessment strategy to achieve a BREEAM rating for Very Good.

This pre-assessment report serves to discharge the planning permission section 106 requirement for the residential development at 6 John Street, in the London Borough of Camden. The development includes the refurbishment, and conversion of the Grade II Listed building to accommodate 7 residential units.

### DESIGN TEAM

<b>Role</b>	<b>Company/ Organisation</b>	<b>Contact</b>
<b>Client:</b>	G&T	Tim Plaskow
<b>Architects:</b>	Coffey Architects	Eoin O'Leary
<b>Mechanical and Electrical:</b>	Kaizenge	Robert Hunter
<b>Energy:</b>	WSP	Justin Kilduff
<b>Structural Engineer</b>	Fluid Structures	Andrew Urquhart
<b>Transport:</b>	Vectos	Kamran Haider
<b>Acoustics:</b>	WSP	Sarah Whydle

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## 2. Introduction

WSP are licensed by the Building Research Establishment (BRE) under the BREEAM Domestic Refurbishment 2014 scheme.

The aim of this pre-assessment is to initiate discussions within the project team regarding BREEAM issues, and to identify early in the design stages areas opportunities to increase the target BREEAM score.

This report provides the outcome of discussions with members of the design team, where the proposed development was discussed against the requirements of the BREEAM criteria. The requirements of the BREEAM issues are specific and can often be overlooked by the design team. Therefore it is crucial at the start of detailed design stage that one workshop is conducted between the design team and the BREEAM assessor to discuss the specific assessment criteria and ensure that these can be met and implemented within the design of the proposed development.

In order to achieve the targeted credits, the design stage and post refurbishment stage BREEAM assessments will need to be supported by the design team providing evidence compliant against the assessment criteria. It is therefore important for all project team members to ensure that commitments made at this stage are carried through the design process and are implemented through to construction. It is important to note that the cost implications of the assumptions made in this report have not been evaluated as part of this study.

The BREEAM assessment criteria requirements for achieving a BREEAM certificate can be onerous. The full assessment manual is publicly available and can be downloaded from <http://www.breeam.org/domrefurb2014manual/>.

In addition, it has been recognised that the Green Guide to Specification is a progressive document and has therefore now been released for public access on <http://www.bre.co.uk/greenguide/podpage.jsp?id=2126>. The design team should make use of these resources where required.

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### 3. Assessment Strategy

The following flow diagram shows the key stages of a typical formal BREEAM assessment and certification. This document is the first step and shows the pre-assessment considerations and early indicative performance against the BREEAM requirements.

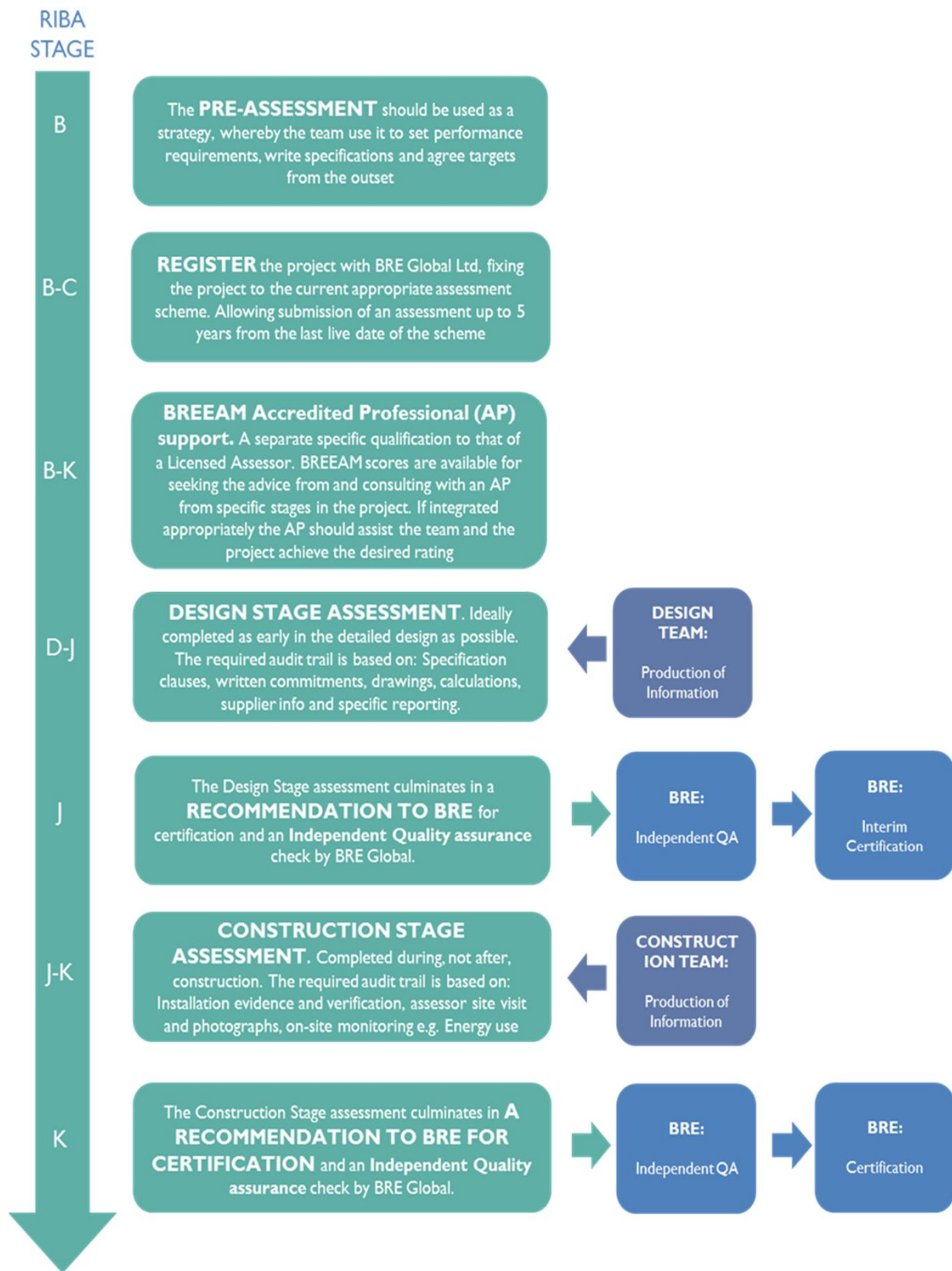
The Design and Procurement (D&P) assessment will commence during detailed design. This Pre-Assessment and advice provided by the assessor during the D&P assessment will allow the design team to produce the required design and corresponding documents to be used as evidence to demonstrate compliance with the BREEAM requirements.

Upon completion of the D&P assessment the assessor will submit a recommendation report to BRE. BRE undertake an independent quality check on that recommendation and if deemed appropriate will issue an Interim (design stage) certificate showing the rating achieved.

In order to complete the assessment and achieve a full BREEAM certificate, the assessor will be required to verify performance of the scheme throughout construction and once again submit to BRE recommending full certification.

Both the D&P and Construction stage assessments are based on information provided by the design team and construction team to demonstrate compliance with the BREEAM requirements. The project team must set up the process to gather project related documents which can be used as evidence for compliance. The assessment of evidence by the BREEAM assessor usually commences when the detailed design commences.





**Fig 1: Proposed BREEAM Assessment Process**

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## 4. Background to BREEAM

BREEAM is a market-focused tool aimed at encouraging significant improvements in the performance of buildings through the recognition of buildings with a low environmental impact.

The BREEAM score provides a means of measuring the environmental impact of a building throughout its life and so benchmarking this against other buildings. There are a number of key uses for the methodology, which provide the following benefits:

- Maximising the building's environmental performance during the design, construction and operation of new build, refurbishment and fit out schemes.
- Specifying environmental requirements in the procurement and management of developments.
- Providing an independently verifiable measurement tool for use within Environmental Management Systems.
- Providing an independently verifiable environmental label for marketing and promotional purposes.

The BREEAM rating is divided into six levels, with OUTSTANDING, EXCELLENT, VERY GOOD, GOOD, PASS and UNCLASSIFIED being the achievable ratings. The percentage score achieved within the assessment is categorised accordingly, based on calculations in the BREEAM Domestic Refurbishment 2014 methodology:

BREEAM rating benchmarks, minimum scores required:

BREEAM Rating	Percentage score required
OUTSTANDING	$\geq 85$
EXCELLENT	$\geq 70$
VERY GOOD	$\geq 55$
GOOD	$\geq 45$
PASS	$\geq 30$
UNCLASSIFIED	$< 30$

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## **BACKGROUND TO BREEAM DOMESTIC REFURBISHMENT 2014**

*The BREEAM Domestic Refurbishment scheme is intended for use on self-contained dwellings, which may include a single dwelling or multiple dwellings within a street or block of flats.*

The BREEAM Domestic Refurbishment scheme can be used to assess and rate the environmental impacts arising from the proposed refurbishment of the dwelling(s) at the following life cycle stages:

- Design Stage (DS), leading to an interim BREEAM certified rating;
- Post Refurbishment Stage (PRS), leading to a final BREEAM certified rating

The BREEAM Domestic Refurbishment 2014 scheme can be used to assess the environmental life cycle impacts of refurbishment projects including, existing dwelling's, undergoing refurbishment, extensions, domestic conversions and change of use projects in the UK only. The following section sets out the project types for which the scheme is be used:

- Category 1: Alterations to existing dwellings and extensions
- Category 2: Domestic conversions and change of use projects

*BREEAM Domestic Refurbishment 2014 Scheme Document, BRE Global Ltd*

## 5. Environmental section weightings and credit contribution in BREEAM % score

Environmental weightings provide a mechanism to define and then rank relative impact of environmental issues. BREEAM uses a weighting system based on a consensus based weightings and ranking by a panel of experts representing the industry. The output from this exercise is used to determine the value of the environmental sections and their contribution to the final BREEAM percentage score. Within each environmental section there are different number of credits and therefore individual credits carry specific percentage weightings, as a percentage of the overall total.

The number of credits available is based on the scoping of appropriate assessment criteria produced within BRE's assessment tool. This is based on parameters such as the type of building, room functions within, type of heating, cooling, building services etc.

BREEAM Domestic Refurbishment 2014 incorporates a mechanism whereby schemes achieving exemplar performance in a particular area or demonstrating innovation can achieve an additional 1% for each item up to a maximum of 10. The innovation section is shown at the end of the main assessment table.

The weightings for each environmental section under the BREEAM Domestic Refurbishment 2014 are listed below.

Environmental section	Section Weighting	Credits Available	contribution of one credit in BREEAM % score
Management	12.00%	11	1.09%
Health and Wellbeing	17.00%	11	1.55%
Energy	43.00%	28	1.54%
Water	11.00%	5	2.20%
Materials	8.00%	48	0.17%
Waste	3.00%	5	0.60%
Pollution	6.00%	8	0.75%

## MINIMUM STANDARDS

To achieve a BREEAM rating, the minimum percentage score must be achieved and the minimum standards (detailed below) applicable to that rating level must be complied with. These are shown below:

BREEAM Issue	Minimum standards by rating level				
	Pass	Good	Very Good	Excellent	Outstanding
Ene 02 - Energy efficiency rating post-refurbishment	0.5 credits	1 credit	2 credits	2.5 credits	3.5 credits
Wat 01 - Internal water use	-	-	1 credit	2 credits	3 credits
Hea 05 - Ventilation	1 credit	1 credit	1 credit	1 credit	1 credit
Hea 06 - Safety	1 credit	1 credit	1 credit	1 credit	1 credit
Pol 03 - Flooding	-	-	-	2 credits	2 credits
Mat 01 - Environmental impact of materials	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only

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## 6. Report Format

The following table shows the BREEAM Domestic Refurbishment 2014 criteria against which the building is being assessed.

The credits available for each issue are noted along with a calculated overall percentage score. This allows for simple analysis of the affect of adding or removing any credit. A summary of the actions have been shown, however the full requirements for the BREEAM assessment criteria can be viewed within the assessment scheme document publicly downloadable or can be provided upon request.

## 7. Evidence

In order to complete the assessment and recommend certification to BRE, the assessment requirements for each credit that is targeted must be complied with and evidenced using supporting documentation. As the formal BREEAM assessment is initiated and progresses, input will be required from various design team members, who will be responsible for providing information and pieces of evidence for the formal assessment. Evidence is generally required from the developer, project manager, contractor, construction manager, M&E engineers, architect, cost consultant, day lighting consultant, acoustician, transport consultant and ecologist where applicable. At the design stage evidence required will be in the form of design drawings, specifications, design brief, letters of correspondence, letters of intent, minutes from meetings, etc.

## 8. Disclaimer

WSP has undertaken the following BREEAM Domestic Refurbishment 2014 Pre-Assessment Strategy with the attendance from the Design Team to agree on the targeted BREEAM credits. The cost implications of any of the proposed strategies are not included.

All information provided has been accepted in good faith as being accurate and representative of the proposed scheme at the time of this pre-assessment review. The credits and assessment criteria requirements are based on the BREEAM Domestic Refurbishment 2014 methodology.

The assessor (for itself and as agent for its staff) and its staff shall not be liable whether in Contract or in Tort or otherwise for any loss or damage sustained as a result of using or relying on the information contained in this report or the final certificate from BRE that it is based on.

## 9. Copyright

The BREEAM name and logo are registered trademarks of the Building Research Establishment Ltd. Copyright exists on BREEAM and it may not be used or reproduced in any form or for any purpose without prior written consent of BRE.

## 6 John Street

## BREEAM Refurbishment Domestic 2014

Date 10/07/2015  
Version 1.1  
Prepared by KR

Ref	Title	BREEAM issue summary	Max Available	% Worth (in total for each BREEAM issue)	Targeted (Very Good BREEAM rating Strategy)	Additional Identified as potential	Comments	Indicative Responsibility
		To be confirmed						
		Credit / BREEAM issue not sought						
		Minimum standards required for Very Good						
<b>Management</b>								
Man 01	Home user guide	Three credits - provision of a home users guide – containing the information listed in the User Guide Contents List	3	3.27%	3	0	G&T have advised that the Home user guide will be developed for each dwelling. G&T to include requirement for main contractor to develop the Home user guide.	G&T
Man 02	Responsible construction practices	Large scale – assessed using the Considerate Constructors Scheme score.	2	2.18%	2	0	G&T have advised that the main contractor will be required to sign up for the Considerate Constructors Scheme and meet the score of 35-39 with score of 7 in each section.	G&T
Man 03	Construction site impacts	Construction site impacts are assessed against a checklist for large scale projects. The checklists consider issues such as CO2 production, water consumption and the sourcing of construction materials.	1	1.09%	1	0	G&T have advised that the main contractor will be required to meet 2 or more of the section in checklist A4 and the main contractor will be required to monitor, report and set targets for CO2 production of energy use and water use from construction activities. The main contractor will also be required to operate an Environmental Management System.	G&T
Man 04	Security	First credit – achieving best practise security requirements for external door sets and windows and minimum security requirements for retained doors and windows. Second credit—implementing the principles and guidance of Secured by Design.	2	2.18%	0	0	This issue is not sought. Therefore no credit is targeted.	None
Man 05	Protection and enhancement of ecological features	First credit – protection of ecological features that have been identified during a site survey Exemplary credit- implementation of recommendations made by a suitably qualified ecologist to enhance the site ecology	1	1.09%	1	0	G&T have advised that site survey has been carried out and there are no ecological features present on site.	G&T - ecology survey report
Man 06	Project management	First credit – assigning project roles and responsibilities Second credit – arranging a handover meeting and implementing a minimum of 2 methods of aftercare.	2	2.18%	2	0	G&T have advised that the roles and responsibilities have been developed across the key design and refurbishment stages. G&T have advised that a handover meeting will be arranged. In addition, a site inspection will be scheduled within 3 months of occupation and longer term after care such as a helpline will be set-up to support building users for at least the first 12 months of occupation.	G&T
<b>Health &amp; Wellbeing</b>								
Hea 01	Daylighting	First Credit—maintaining good daylighting levels Second Credit—achieving minimum daylighting standards	2	3.09%	1	1	BREEAM assessor has reviewed the daylight study. The Daylighting study indicates that 19 of 21 rooms meet the best practice and BRE guidance. The Daylight consultant to advise regarding potential for second credit with confirmation that the refurbishment dwelling achieves the minimum daylighting levels in the kitchen, living room, dining room and study.	WSP daylighting consultant
Hea 02	Sound insulation	Credits are awarded for bringing the home up to and beyond national regulations. Criteria differ depending on the type of dwelling and whether sound testing is feasible.	4	6.18%	2	1	BREEAM assessor has reviewed the noise impact assessment. The noise impact assessment study indicates Camden policy requires the sound insulation to be 5dB lower than before refurbishment. On the assumption that the Camden policies will be met, 2 credits are targeted. WSP noise consultant to advise the sound insulation values in table 13 of BREEAM issue Hea 02 are achievable and potential for the third credit.	WSP noise consultant
Hea 03	Volatile organic compounds	One Credit—for avoiding the use of VOCs—assessed by ensuring applicable products have met European standards and testing requirements, or equivalent national standards.	1	1.55%	1	0	Architect has advised that all decorative paints and varnishes will comply with BREEAM requirements. In addition, the Architect has advised that wood panels, laminated wood flooring, flooring adhesives are the only products from BREEAM manual table 16 and the VOC requirements for these product types will be included in the specification to comply with the BREEAM requirements.	Coffey Architects
Hea 04	Inclusive Design	All credits assessed against the accessibility template checklist First Credit—achieving minimum accessibility Second Credit—achieving advanced accessibility Exemplary credit—achieving a level of accessibility equivalent to lifetime homes and Part M compliance.	2	3.09%	0	0	Architects has advised that the requirements for Lifetime Homes will be included in the design. However the credit is not targeted until the architect team can confirm the inclusive design champion within the existing design team meets the minimum core competencies and skills requirements listed by the National Register of Access Consultants (NRAC) for access auditors. Architect team to populate checklist A8 and advise on targeted credits.	Coffey Architects
Hea 05	Ventilation	First Credit—achieving minimum ventilation requirements for background, extract and purge ventilation. Second Credit—achieving advanced ventilation requirements in line with Building regulations Part F NB separate requirements for historic buildings	2	3.09%	1	0	<b>Minimum standard for a 'Very Good' rating requires 1 credit to be met.</b> G&T have informed that the main contractor will be required to carry out air tightness testing and other tests to meet the requirements before refurbishment and after refurbishment. MEP engineers have advised the minimum ventilation requirements for background, purge and extract will be met.	G&T, Kaizenge
Hea 06	Safety	One Credit—implementation of appropriate fire and carbon monoxide detection and alarm systems.	1	1.55%	1	0	<b>Minimum standard for a 'Very Good' rating requires 1 credit to be met.</b> Architects have advised that the proposed design will comply with the BREEAM requirements.	Coffey Architects
<b>Energy</b>								
Ene 01	Improvement in energy efficiency rating	Up to 6 credits for the improvement to the dwellings Energy Efficiency Rating. This issue is assessed using the Energy calculator and SAP or RdSAP - credit allocation is based on exceeding EER improvement benchmarks, from the baseline EER.	6	9.21%	1	0	On the basis of the preliminary SAP outputs, the improvement in the EER is calculated to be 10 (difference in the SAP rating for the refurbishment and the baseline model) and therefore 1 credit can be targeted. Separate SAP outputs for each dwelling will be required when the design is detailed. An accredited energy specialist to be appointed for SAP modelling of detailed design.	G&T - Accredited Energy Specialist
Ene 02	Energy efficiency rating post refurbishment	Up to 4 credits available for the Energy Efficiency Rating post refurbishment. One exemplary credit available for a post refurbishment EER greater than 90 with two credits available for a post refurbishment EER of equal to or greater than 100.	4	6.14%	3.5	0	<b>Minimum standard for a 'Very Good' rating requires 2 credits to be met.</b> On the basis of the preliminary SAP outputs, the EER post refurbishment is more than 80 and therefore 3.5 credits can be targeted. Separate SAP outputs for each dwelling will be required when the design is detailed. An accredited energy specialist to be appointed for SAP modelling of detailed design.	G&T - Accredited Energy Specialist
Ene 03	Primary energy demand	Up to 7 credits available for the primary energy demand. This issue is assessed using the Energy calculator - credit allocation is based on exceeding refurbishment benchmarks.	7	10.75%	5.5	0	On the basis of the preliminary SAP outputs, the primary energy demand post refurbishment is less than 180 and therefore 5.5 credits can be targeted. Separate SAP outputs for each dwelling will be required when the design is detailed. An accredited energy specialist to be appointed for SAP modelling of detailed design.	G&T - Accredited Energy Specialist
Ene 04	Renewable technologies	Up to 2 credits awarded depending on the percentage of the dwellings primary energy demand being met by low or zero carbon technologies. Maximum Primary Energy Demand targets apply to ensure system and fabric efficiency is considered first.	1	1.54%	1	0	The preliminary SAP outputs supporting the energy statement at the time of planning indicate that at least 10% of the dwelling's primary energy demand per annum will be supplied by low or zero carbon technologies and the dwelling has reduced energy demand prior to specification of renewable technologies with a max primary demand less than 220kwh/m2/year.	G&T - Accredited Energy Specialist
Ene 05	Energy labelled white goods	First credit - provision of fridges, freezers and fridges/freezers with the appropriate label or information Second credit – provision of washing machines, dishwashers and washer-dryers with the appropriate label or information	2	3.07%	2	0	G&T have advised that the fridge, freezers, washing machines, dishwashers, washer-dryers will be specified to meet the BREEAM requirements of EU Energy Efficiency Labelling scheme.	G&T
Ene 06	Drying space	One credit – provision of adequate drying space – based on the number of bedrooms within the dwelling	1	1.54%	1	0	Architects have advised that the BREEAM compliant drying lines and space will be specified.	Coffey Architects
Ene 07	Lighting	First credit – energy efficient external space and security lighting. Second credit – internal lighting that does not exceed the maximum average wattage across the total floor area - 9 Watts/m2	2	3.07%	1	0	MEP engineers have advised that energy efficient space lighting of more than 45 lumens per circuit watt will be energy efficient security lighting will be specified. Second credit is not targeted.	Kaizenge
Ene 08	Display energy devices	One credit – energy display device displays either electricity consumption data or heating fuel consumption data. Two credits – energy display device displays both electricity and primary heating fuel consumption data. Exemplary credit –energy display device that is able to record consumption data	2	3.07%	0	0	This issue is not sought. Therefore no credit is targeted.	None
Ene 09	Cycle storage	Two credits available for providing compliant cycle spaces, with the number of spaces required depending on the number of bedrooms in the dwelling.	2	3.07%	1	0	The calculated number of cycle storage spaces required are 1 cycle storage for every 2 dwellings with 1 bed and 1 storage for each dwelling with 2 and 3 beds = 6 cycle spaces required for 1 credit. Architects have advised that 8 cycle storage spaces are provided for 7 residential units. This meets the criteria requirements for 1 credit.	Coffey Architects
Ene 10	Home office	One credit - provision of a compliant home office space.	1	1.54%	1	0	Architects have advised that the home office requirements will be specified for each dwelling to comply with the BREEAM requirements.	Coffey Architects

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### BREEAM Refurbishment Domestic 2014

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Ref	Title	BREEAM issue summary	Max Available	% Worth (in total for each BREEAM issue)	Targeted (Very Good BREEAM rating Strategy)	Additional Identified as potential	Comments	Indicative Responsibility
<p>To be confirmed Credit / BREEAM issue not sought Minimum standards required for Very Good</p>								
<b>Water</b>								
Wat 01	Internal water use	2 possible methods for assessment: — terminal fittings meet the equivalent terminal fitting consumption standards — the Wat 01 calculator – used as an alternative where the sanitary fittings specified do not have an exact match with the fittings standards Credit allocation based on the water consumption of terminal fittings	3	6.60%	2	0	<b>Minimum standard for a 'Very Good' rating requires 1 credit to be met.</b> Wat 01 calculator tool to be populated by the Architects and PH engineers. For 2 credits the calculated water consumption (litres/person/day) should be less than 118 litres. This could be evidenced by ensuring that all bathroom fittings, kitchen and utility fittings are specified to 'Good' (see email from WSP from 30.06.2015) Architect and MEP engineers to incorporate the requirements in the selection of sanitaryware.	Coffey Architects, Kaizenge
Wat 02	External water use	One credit – provision of a rainwater collection system that is compliant and meets the size requirements OR where there is no external space	1	2.20%	0	0	This issue is not sought. Therefore no credit is targeted.	None
Wat 03	Water meter	One credit- For the existence or installation of an appropriate water meter	1	2.20%	1	0	MEP engineers have advised that water meters for each dwelling will be specified and installed which meets the criteria requirements for 1 credit.	Kaizenge
<b>Materials</b>								
Mat 01	Environmental impact of materials	Up to 25 credits available for the embodied impact and the thermal performance of; roofs, external walls, internal walls, windows and upper and ground floors. This issue is assessed using the Mat 01 calculator , depending on the Green Guide rating of new materials and the impact of those materials on improving the thermal performance of the materials that make-up these elements.	25	4.17%	13	1	<b>Minimum standard for a 'Very Good' rating requires criterion 1 only to be met.</b> Architects have advised that the Mat 01 calculator tool will be populated as and when the design is detailed. 13 credits are targeted as a minimum subject to a detailed materials review.	Coffey Architects
Mat 02	Responsible sourcing of materials	Minimum standards - that all new timber is legally sourced. 3 credits are available to develop a sustainable procurement plan. Using the Mat 02 calculator - up to 12 credits are available depending on the responsible sourcing tier levels of the applicable new materials.	15	2.50%	8	1	G&T have advised that a Sustainable Procurement Plan will be developed for the project. Architects have advised that all new timber used in the project will be sourced in accordance with the UK Government's Timber Procurement policy. Architects to populate the Mat 02 calculator tool.	G&T, Coffey Architects
Mat 03	Insulation	Any new insulation in external walls, ground floors, roofs and building services is assessed as a minimum requirement. First four credits – embodied impact of new insulation –assessed using the Mat 03 calculator based on the insulation index. Second four credits – responsible sourcing of a minimum of 80% of insulation OR where no new insulation is specified and the dwelling achieves a minimum of 2.5 credits in issue Ene 02.	8	1.33%	8	0	Architects and MEP engineers to populate the Mat 03 calculator tool with details for all new insulation. The team has advised that all the new insulation will be procured to comply with the BREEAM requirements.	Coffey Architects, Kaizenge
<b>Waste</b>								
Was 01	Household waste	First credit – provision of recycling storage facilities Second credit – provision of composting facilities Within this issue there are different criteria depending on the collection scheme the dwelling is served by and if the dwelling has external space.	2	1.20%	1	0	G&T have advised there will be recycling facilities and the internal recycling storage requirements for BREEAM will be met. Second credit relating to composting facilities is not sought.	Coffey Architects, G&T
Was 02	Refurbishment site waste management	Credits are awarded for the implementation of a SWMP. The requirements of the SWMP differ depending on the value of the project. Exemplary credits are available for implementing a more comprehensive SWMP than required by the standard criteria.	3	1.80%	3	0	G&T have advised that the project is over £300k and the main contractor will be required to complete and maintain a site waste management plan. For all 3 credits, best practice waste benchmarks as per BREEAM criteria for Was 02 will be met on this project.	G&T, Coffey Architects
<b>Pollution</b>								
Pol 01	Nitrogen oxide emissions	Credit allocation is tiered and awarded based on the amount of NOx emissions arising from the operation of space heating and hot water systems.	3	2.25%	1	0	MEP engineers to populate the Pol 01 calculator tool regarding potential credits. At the time of the pre-assessment, it has been assumed that 1 of the 3 credits will be targeted.	Kaizenge
Pol 02	Surface water runoff	First credit – where the refurbishment has had a neutral impact on surface water from the site. Second credit – basic level of reducing run-off from site. Third credit – advanced level of reducing run-off from site including an allowance for climate change. Exemplary credits – eliminating all runoff from site and including an allowance for climate change	3	2.25%	1	0	G& T have informed that a flood risk assessment was carried out. Fluid structures advised that the building is on previously developed land (i.e. the building footprint remains the same) and the proposed design will have neutral impact on surface water. Therefore 1 credit can be targeted.	Fluid Structures
Pol 03	Flooding	Minimum standards – requirement of two or more credits under this issue to achieve an excellent or outstanding rating Criteria are based on the results of a flood risk assessment. Where the site is defined as medium or high flood risk there are additional requirements for flood resilience and resistance strategies.	2	1.50%	2	0	G&T have informed that a flood risk assessment was carried out and the site is in a low flood risk area. On the basis of the initial flood risk assessment, 2 credits are targeted. G&T to have this report updated to align with BREEAM criteria.	G&T - flood risk assessor
					<b>Sub-Total</b>	<b>62.87%</b>	<b>3.71%</b>	
<b>Innovation</b>								
Man 06	Project Management	Second exemplary credit – carrying out thermographic and airtightness surveys pre and post refurbishment.	1	1.00%	1	0		-

	Target	Target
Sub-total (from above)	62.87%	3.71%
Innovation	1.00%	0.00%
<b>Total</b>	<b>63.87%</b>	<b>3.71%</b>
	<b>63.87%</b>	<b>67.58%</b>
	<b>Very Good</b>	<b>Very Good</b>



