42 PHOENIX ROAD BREAAM PRELIMINARY ASSESSMENT





Eight Associates October 2015

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Preliminary Assessment BREEAM 2014 New Construction 42 Phoenix Road

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Executive Summary BREEAM 2014 New Construction 42 Phoenix Road

Introduction	Eight Associates have been appointed, as registered BREEAM assessors, to carry out an assessment of the proposed new development at 42 Phoenix Road, London. This assessment is under BREEAM 2014 New Construction (Multi-Residential) Methodology.
	This summary is a pre-assessment of the development and details the anticipated score following the information provided by the design team at a meeting held in February 2015 and subsequent discussions.
Planning Requirements	 The London Borough of Camden strongly encourage that the following standards are met for BREEAM: EXCELLENT BREEAM rating overall achieved; 60% of Energy credits achieved 60% of Water credits achieved 40% of Materials credits achieved
Score Summary	The site reviewed currently achieves a score of 73.7% , which equates to an EXCELLENT rating (70%).
	Eight Associates recommend a safety margin of at least 3-5% to safeguard any rating at formal assessment.

BREEAM Introduction BREEAM 2014 New Construction 42 Phoenix Road

The BREEAM Standard	BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's leading and most widely used environmental assessment method for buildings. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance. Building projects are assessed at design and post-construction stages using a system of environmental issues grouped within the following categories: • Management • Health and Wellbeing • Energy • Transport • Water • Land Use & Ecology • Pollution • Innovation
	 expressed as a BREEAM rating of PASS, GOOD, VERY GOOD, EXCELLENT or OUTSTANDING. BREEAM is developed, operated and maintained by BRE Global Ltd and the operation and direction of the method is overseen by an independent Sustainability Board, representing a wide cross-section of construction industry stakeholders. Further information about BREEAM, including copies of the BREEAM standards, can be found at www.breeam.org.
Aims of BREEAM	 To mitigate the impacts of buildings on the environment To enable buildings to be recognised according to their environmental benefits To provide a credible, environmental label for buildings To stimulate demand for sustainable buildings

BREEAM Introduction BREEAM 2014 New Construction 42 Phoenix Road

Process of the Assessment	BREEAM New Construction is a performance-based assessment method and certification scheme for new buildings. The primary aim of BREEAM New Construction is to mitigate the life cycle impacts of new buildings on the environment in a robust and cost effective manner. It attempts to quantify and reduce the environmental burdens of buildings by rewarding those designs that take positive steps to minimise their environmental impacts.					
	Under BREEAM New Construction : a. Design Stage: This is b the intentions of the de b. Post Construction Stag requires the BREEAM	ased on the sign team. e: This is bas	final des sed on t	sign for he built	the dev develoj	elopment an
	An interim certificate will be provide certification being awarded following					
Ratings	The assessment process results in a EXCELLENT and OUTSTANDING. T Rating Pass (P) Good (G) Very Good (VG) Excellent (E) Outstanding (O)		1% 1% 1% 1% 1%			
Mandatory Credits	Some credits within the above categ	jories are ma	indatory	, to achi	eve cer	tain ratings:
	BREEAM Issue	Р	G	VG	E	0
	Man 03: Responsible Construction Practices	-	-	-	1	2
	Man 04: Commissioning and Handover	-	-	-	Part	Part
	Man 05: Aftercare		-	-	1	1
	Ene 01: Reduction of CO ₂ emissions		-	-	5	8
	Ene 02: Energy Monitoring		-	1	1	1
	Wat 01: Water Consumption		1	1	1	2
	Wat 02: Water Monitoring		Part 1	Part 1	Part 1	Part 1
	Mat 03: Responsible Sourcing		Part 1	Part 1	Part 1	Part 1
	Wst 01: Construction Waste Management		-	-	-	1
	Wst 03: Operational Waste	-	-	-	1	1
	LE 03: Mitigating Ecological Impact	-	-	1	1	1

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Score Breakdown BREEAM 2014 New Construction 42 Phoenix Road

Rating Summary

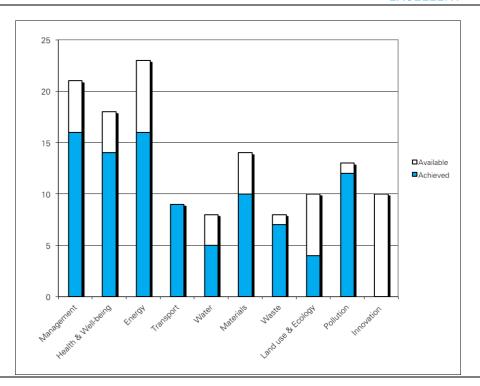
The following summary represents the scheme's preliminary score based on the assumptions in the following pages. Please contact the assessor if a score sheet is required.

		Credit allocation	% Achieved	Weighting	Score
Unclassified <30	0%	Management	81.0	0.120	9.7
Pass ≥30	0% - <45%	Health & Well-being	72.2	0.150	10.8
Good ≥45	5% - <55%	Energy	69.6	0.150	10.4
Very Good ≥55	% - <70%	Transport	100.0	0.090	9.0
Excellent ≥70)% - <85%	Water	62.5	0.070	4.4
Outstanding ≥85	5%	Materials	71.4	0.135	9.6
		Waste	87.5	0.085	7.4
		Land Use & Ecology	30.0	0.100	3.0
		Pollution	92.3	0.100	9.2
		Innovation	0.0	0.100	0.0
		Rating			73.7%

EXCELLENT

Graphical Breakdown of **Credits Awarded**





Management BREEAM 2014 New Construction 42 Phoenix Road

Man 01 – Project Brief and Design	Stakeholder Consultation The design team have met to identify roles and responsibilities, as well as contributions for each key phase of the project.	4 of 4		
	The design team have confirmed that consultation will be carried with all relevant stakeholders <i>Two of two credits are currently targeted.</i>			
	Sustainability Champion The design team has confirmed that a BREEAM Accredited Professional (AP) will be involved to monitor and report progress against the established BREEAM targets by attending key project team meetings during all stages of the design and construction. <i>Two of two credits are targeted</i> .			
	In total, four out of four credits are targeted.			
Man 02 – Life Cycle Cost and Service Life Planning	Elemental Life Cycle Cost (LCC) The design team have confirmed that at present, an elemental life cycle cost analysis will not be carried out at RIBA Stage 2 (based on the building's basic structure & envelope). Zero of two credits are currently targeted	1 of 4		
	Component Level LCC Plan The design team have confirmed that a component level LCC will not be developed (for envelope, services, finishes and external spaces) in accordance with the BREEAM requirements. <i>Zero of one credits are currently targeted</i>			
	Capital Cost Reporting The client will report the capital cost for the building (in £k/m ²). <i>One of one credit is currently targeted</i>			

In total, one of four credits are targeted.

Management BREEAM 2014 New Construction 42 Phoenix Road

Man 03 – Construction Site Impacts

Timber (Pre-requisite)

All timber is to be legally harvested and traded. The pre-requisite requirements for this issue will be met.

Environmental Management

The design team have confirmed they will appoint a principal contractor who operates an Environmental Management System, certified under ISO14001/ EMAS or an equivalent standard, covering their main operations. *One of one credit targeted.*

Sustainability Champion (Construction)

The contractor will be required to appoint a Sustainability Champion to ensure on-going compliance with the relevant sustainability performance on site. They will be based on site and undertake regular spot checks to ensure risks are minimised. *One of one credit targeted.*

Considerate Construction

The contractor will be required to register the scheme under the Considerate Constructors Scheme (CCS) and will be committed to achieve at least 35 points, with a minimum of 7 points in each section. *Two of two credits are targeted.*

Monitoring of Construction-site impacts

The design team has confirmed that the following will be implemented during the construction of the development:

- 1. Monitor and record data on energy consumption from the use of construction plant, equipment and site accommodation;
- 2. Monitor and record data on water consumption from the use of construction plant, equipment and site accommodation;
- The monitoring and recording of transport resulting from delivery of the majority of construction materials to site and construction waste from site will be carried out. *Two of two credits currently targeted*.

Six of six credits are currently targeted.

6 of 6

Management BREEAM 2014 New Construction 42 Phoenix Road

Man 04 – Commissioning and Handover

Commissioning

A member of the design team will be appointed to monitor commissioning in line with best practice (CIBSE, BSRIA and Building Regulations), with a specialist commissioning agent appointed for any complex systems. *Two of two credits currently targeted.*

Testing and inspecting building fabric

A thermographic survey will not be carried out for the completed building. *Credit not currently targeted.*

Handover

The production of a non-technical building user guide in line with the BREEAM requirements is planned. In addition, a training schedule will be prepared for building occupiers / facilities managers to aid handover. *One of one credit is targeted.*

In total, three of four credits are targeted.

Man 05 – Aftercare

Aftercare Support

3 of 3

3 of 4

There will be resources in place to provide aftercare support to the building occupier including:

- A handover meeting
- On site facilities management training
- Initial aftercare support for at least the first month of occupation
 - Longer aftercare support for the first year of occupation, should this be required.

In addition, the design team has confirmed that energy and water consumption data will be collected for at least 12 months after occupation, and aftercare support will be provided to all building occupiers. *One of one credit targeted.*

Seasonal Commissioning

Seasonal commissioning will be undertaken over the first 12 months of occupation in line with BREEAM requirements. *One of one credit targeted.*

Post Occupancy Evaluation

The design team have confirmed that the client will carry out a Post Occupancy Evaluation (POE) one year after building occupation. *One of one credit targeted.*

In total, three of three credits are currently targeted.

Hea 01 - Visual Comfort

Health & Well-being BREEAM 2014 New Construction 42 Phoenix Road

PRE REQUISITE MANDATORY FOR A VERY GOOD RATING

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Glare Control

The design team has confirmed that occupant controllable blinds will be provided in all relevant occupied areas. *One of one credit is targeted.*

Daylighting

It is likely that all occupied areas will achieve the BREEAM requirements in terms of internal daylight factors and uniformity ratio (or view of sky and room depth criterion). *Zero of one credit is targeted.*

View Out

Due to the basement space, this credit cannot be achieved. *Zero credits targeted.*

Internal and external lighting levels, Zoning and Controls

The design team has confirmed the following will be met for the scheme:

- Where specified, all fluorescent and compact fluorescent lamps will be fitted with high frequency ballasts
- All internal and external lighting will meet SLL Code for lighting, CIBSE lighting levels
- All external lighting will provide illuminance levels that enable users to perform outdoor visual tasks efficiently and accurately
- Internal lighting to be appropriately zoned to allow for occupant control within relevant building areas

One of one credit is targeted.

In total, two of four credits are targeted.

Health & Well-being BREEAM 2014 New Construction 42 Phoenix Road

Hea 02 – Indoor Air Quality

Indoor Air Quality Plan

3 of 5

The design team has confirmed that an indoor air quality plan will be provided in line with BREEAM requirements. *One of one credit targeted.*

Ventilation

Due to the buildings location next to the road, the building intakes on the ground floor will be less than 10m from sources of external pollution, therefore the ventilation credit cannot be achieved. *Credit not targeted.*

VOCs

The design team has confirmed that all key internal finishes will be specified with low VOC levels in line with BREEAM requirements. Testing to measure formaldehyde concentration levels is not likely to be undertaken. *One of two credits targeted.*

Adaptability - Potential for natural ventilation

The design team has confirmed that the openable window area will be equivalent to at least 5% of the gross internal floor area of the multi-residential floors, and there will be 20% openable windows or cross-ventilation within the basement space. *One of one credit targeted.*

In total, three of five credits are targeted.

Health & Well-being BREEAM 2014 New Construction 42 Phoenix Road

Hea 04 – Thermal Comfort	Thermal modelling, in line with CIBSE AM11 guidelines, will be undertaken for the development and will inform the thermal comfort strategy that outlines the heating/cooling zoning and control strategy. Thermal modelling will include requirements for a projected climate change environment and it will be demonstrated how the building has been designed to adapt for these using passive design solutions.	3 of 3
	Three of three credits are targeted.	
Hea 05 – Acoustic Performance	Acoustic performance standards The design team have confirmed that it is likely that airborne sound insulation values will be at least 5dB higher and impact sound insulation values will be at least 3dB lower than the performance standards in the relevant Building Regulations or Standards.	3 of 4
	Three of four credits are targeted.	
Hea 06 – Safety and Security	Safe Access The design team have confirmed that the building and cycle storage area can be accessed directly from the public pedestrian pathway in line with BREEAM requirements. <i>One of one credit is targeted.</i>	2 of 2
	Security of site and building The design team have confirmed that consultation with a suitably qualified security consultant from the local police will be carried out during the planning process and recommendations will be incorporated into the design. <i>One of one</i> <i>credit is targeted.</i>	
	Two of two credits currently targeted.	

Energy BREEAM 2014 New Construction 42 Phoenix Road

Ene 01 – Reduction of CO ₂ Emissions	An Energy Performance Certificate will be produced at design stage, based on Part L 2013 standards. Based on the building services and fabric specified, it is assumed that at least five of the available twelve credits under this issue will be achieved. Please note that the BREEAM guidance requests "A copy of the Building Regulations Output Document from the Part L Approved Documents check (BRUKL Output Document)" and an "As Built" copy of the document for the PCR stage.	5 of 12
Ene 02 – Energy Monitoring	Five out of twelve credits are targeted. ONE CREDIT MANDATORY FOR A VERY GOOD RATING	1 of 1
	 The design team have confirmed that pulsed sub-meters will be provided to ensure the following are met: 1. Energy metering systems are installed that enable at least 90% of the estimated annual energy consumption of each fuel to be assigned to the various end-use categories of energy consuming systems. 2. The energy consuming systems in buildings with a total useful floor area greater than 1,000m² are metered using an appropriate energy monitoring and management system. 3. The systems in smaller buildings are metered either with an energy monitoring and management system or with separate accessible energy sub-meters with pulsed or other open protocol communication outputs, to enable future connection to an energy monitoring and management system 4. The end energy consuming uses are identifiable to the building users, for example through labelling or data outputs. 	
	One of one credit is targeted.	
Ene 03 – External Lighting	The design team has confirmed that all external lighting will be designed in line with BREEAM requirements. One of one credit is targeted.	1 of 1

Energy BREEAM 2014 New Construction 42 Phoenix Road

Ene 06 - Energy Efficient Transportation Systems An analysis of the transport demand and usage patterns for the building will be carried out to determine the optimum number and size of lifts. 3 of 3 The energy consumption will be calculated in accordance with BS EN ISO 25745 Energy performance of lifts, escalators and moving walks, Part 2: Energy calculation and classification for lifts (elevators), for one of the following: a) At least two types of system (for each transportation type required); OR b) An arrangement of systems (e.g. for lifts, hydraulic, traction, machine room-less lift (MRL)); OR c) A system strategy, which is 'fit for purpose'. The use of regenerative drives will be considered. The transportation system with the lowest energy consumption is specified for the lifts. This may include low energy lighting, a stand-by mode during off-peak and idle periods, and a drive controller capable of variable speed, variable-voltage, and variable- frequency (VVVF) control of the drive motor.	Ene 04 – Low Carbon Design	 Passive Design The project team will carry out an analysis of the proposed building design/development to influence decisions made during Concept Design stage and identify opportunities for the implementation of passive design solutions that reduce demands for energy consuming building services. The building will use passive design measures to reduce the total heating, cooling, mechanical ventilation and lighting loads and energy consumption in line with the findings of the passive design analysis, and the analysis will demonstrate a meaningful reduction in the total energy demand. The passive design analysis carried out will include an analysis of free cooling and identifies opportunities for the implementation of free cooling solutions. The building will not require any form of cooling. Two of two credits are targeted. Low Carbon Technologies A feasibility study will be carried out by an independent energy specialist to establish the most appropriate local low or zero carbon energy source for the development, and an LZC technology specified in line with the recommendations of this report. One of one credit is targeted. Three of three credits are currently targeted.	3 of 3
		 carried out to determine the optimum number and size of lifts. The energy consumption will be calculated in accordance with BS EN ISO 25745 Energy performance of lifts, escalators and moving walks, Part 2: Energy calculation and classification for lifts (elevators), for one of the following: a) At least two types of system (for each transportation type required); OR b) An arrangement of systems (e.g. for lifts, hydraulic, traction, machine room-less lift (MRL)); OR c) A system strategy, which is 'fit for purpose'. The use of regenerative drives will be considered. The transportation system with the lowest energy consumption is specified. In addition, energy efficient features will be specified for the lifts. This may include low energy lighting, a stand-by mode during off-peak and idle periods, and a drive controller capable of variable speed, variable-voltage, and variable- 	3 of 3

Energy BREEAM 2014 New Construction 42 Phoenix Road

Ene 08 – Energy Efficient Equipment	 The design team have confirmed that domestic scale white goods will have the 2 of 2 following ratings under the EU Energy Efficiency Labelling Scheme: 1. Fridges, fridge-freezers: A+rating 2. Washing machines: A++ rating 3. Dishwashers: A+ rating 4. Washer-dryers and tumble dryers: A rating 			
Ene 09 – Drying Space	Two of two credits targeted. The design team have confirmed that at least 6m+ of drying line will be provided 1 of 1 within each apartment dwelling. They will be located in the bathroom which will be heated and adequately ventilated.			
	One of one credit targeted			

Transport BREEAM 2014 New Construction 42 Phoenix Road

Tra 01 – Public Transport Accessibility	The development is located within in central London within close proximity to Euston and Kings Cross stations and a large number of bus stops. The site achieves a PTAL rating of 6b (an Accessibility Index of 55.28).	3 of 3
	Three of Three credits are targeted.	
Tra 02 – Proximity to Amenities	The development is within close proximity to local shops, post box, cash machine, an outdoor open space, school, pharmacy and community facility.	2 of 2
	Two of two credits are targeted.	
Tra 03 – Cyclist Facilities	The design team has confirmed that the building will have cycle racks of one space per 2 residents and one per 10 staff.	1 of 1
	The cycle storage will be covered overhead to protect from the weather, secure in fixed racks, any lighting will comply with BREEAM criteria and be located within 100m of the development.	d
	One of one credits are targeted.	
Tra 05 – Travel Plan	A site-specific travel plan has been developed as part of the feasibility and design stages, which considers all types of travel relevant to the building type and users	
	One of one credit currently targeted.	

Water BREEAM 2014 New Construction 42 Phoenix Road

The design team has confirmed that they will aim for a 25% improvement in water consumption (litres/person/day) compared to BREEAM's notional paseline performance.	
Two of five credits are targeted.	
WATER METER MANDATORY FOR A VERY GOOD RATING	1 of 1
5	
One of one credit is targeted.	
development, and a sanitary supply shut off system will be specified to each	2 of 2
Two of two credits are targeted.	
	Two of five credits are targeted. WATER METER MANDATORY FOR A VERY GOOD RATING The design team has confirmed that a pulsed water meter will be installed on the mains water supply to the building. One of one credit is targeted. The design team is fitting a major leak detection system within the development, and a sanitary supply shut off system will be specified to each WC area/facility. Two of two credits are targeted.

Materials BREEAM 2014 New Construction 42 Phoenix Road

Mat 01 – Life Cycle Impacts	It is assumed that a number of the roof, internal walls, external walls, windows, 2 of 6 upper floors, and floor finishes will achieve at least an 'A' rating under the Green Guide to Specification. These credits will be reviewed once the materials specification has been confirmed.	
	Two of six credits are targeted.	
Mat 02 – Hard Landscaping and Boundary Protection	It is assumed that at least 80% of the hard landscpaing and boundary protection will achieve at least an 'A' rating under the Green Guide to Specification.	1 of 1
	One of one credit is targeted.	
Mat 03 – Responsible Sourcing of Materials	PRE-REQUISITE MANDATORY FOR A VERY GOOD RATING	4 of 4
	Pre-requisite The design team has confirmed that all timber used on the project will be sourced in accordance with the UK Government's Timber Procurement Policy. <i>The pre-requisite requirements for this issue will be met.</i>	
	Sustainable Procurement Plan The principle contractor will produce a sustainable procurement plan, which materials are sourced in line with. <i>One of one credit targeted</i>	
	Responsible Sourcing of Materials The design team has also confirmed that, where possible, key building elements will be responsibly sourced (e.g. all timber FSC certified, and any bricks, pavers, concrete, glass, metals, plaster etc. covered by BRE Global, BES60001 certification, or EMS certified for both the key process and supply chain extraction process).	
	Four of four credits are targeted.	
Mat 04 – Insulation	The design team has confirmed that any insulation specified and installed for the external walls, ground floor, roof and building services will be A or A+ rated under the Green Guide.	1 of 1
	One of one credit is currently targeted.	

Materials BREEAM 2014 New Construction 42 Phoenix Road

Mat 05 – Designing for Robustness	Protecting Vulnerable Parts of the Building from Damage Materials and features will be specified to protect vulnerable parts of both the internal and external areas of the building.	1 of 1	
	Protecting Exposed Parts of the Building from Material Degradation The relevant building elements incorporate appropriate design and specification measures to limit material degradation due to environmental factors.		
	One of one credit is currently targeted.		
Mat 06 – Material efficiency	The design team have confirmed that either a life cycle cost analysis or a materials efficiency report will be planned for the building design, procurement, construction, maintenance and end of life.	1 of 1	
	One of one credit is currently targeted.		

Waste BREEAM 2014 New Construction 42 Phoenix Road

Wst 01 – Construction Site Waste Management	Construction resource efficiency 3 The design team has confirmed that a BREEAM compliant Site Waste 3 Management Plan will be produced and will ensure the non-hazardous waste 3 generated by the building's design and construction (excluding demolition and excavation waste) is less than 7.5m ³ (or 6.5 tonnes) per 100m ² of gross internal floor area. In addition, a demolition audit will be undertaken for the existing building. <i>Two of three credits are targeted</i> .	
	Diversion of resources from landfill The design team have confirmed that the contractor will target at least 70% volume (80% tonnage) of non-hazardous waste and at least 80% volume (90% tonnage) of non-demolition waste to be diverted from landfill. <i>One of one credit targeted.</i>	
	In total, three of four credits are targeted.	
Wst 02 – Recycled Aggregates	The total amount of recycled and/or secondary aggregate specified will be greater than 25% (by weight or volume) of the total high-grade aggregate specified for the development.	1 of 1
	One of one credit is currently targeted.	
Wst 03 – Operational Waste	ONE CREDIT MANDATORY FOR A VERY GOOD RATING	1 of 1
	The design team have confirmed that a dedicated recyclable waste storage area is provided for the scheme. The space will be clearly labelled and accessible. If composting facilities are specified, a water outlet will be provided on the site. A compactor / baler is not required for the building function.	
	One of one credit is currently targeted.	
Wst 05 – Adaptation to Climate Change	The design team have confirmed that a climate change adaptation strategy will be carried out to cover the structural and fabric resilience for the development, in accordance with the BREEAM standards	1 of 1
	One of one credit is currently targeted.	
Wst 06 – Functional Adaptability	The design team have confirmed that a specific functional adaptation strategy for potential future adaptation will be undertaken for the development.	1 of 1
	One of one credit is currently targeted.	

Land Use and Ecology BREEAM 2014 New Construction 42 Phoenix Road

LE 01 – Site Selection	Previously developed land 1 c The new development footprint is to be constructed on previously developed land.	
	Contaminated land The site was not contaminated prior to development; therefore the criteria for the second credit cannot be met.	
	One of two credits are targeted.	
LE 02 – Ecological Value of Site and Protection of Ecological Features	The design team have confirmed that the current site is of a low ecological value. At present it is not known whether ecology within the wider construction zone will be unaffected.	0 of 2
	Credits not currently targeted.	
LE 03 – Minimising impact on existing site ecology	ONE CREDIT MANDATORY FOR AN EXCELLENT RATING	2 of 2
	The design team has confirmed that the change in ecological value of the site equal to or greater than zero will be targeted.	
	Two of two credits are targeted.	
LE 04 – Enhancing Site Ecology	The design team have confirmed that a suitably qualified ecologist has not been appointed for the project and no enhancement in ecology is currently proposed. It is therefore unlikely that the credits will be achieved.	0 of 2
	Credits not currently targeted.	
LE 05 – Long Term Impact on Biodiversity	The design team have confirmed that a suitably qualified ecologist has not been appointed for the project and no enhancement in ecology or increase in local biodiversity is currently proposed. It is therefore unlikely that the credits will be achieved.	0 of 2
	Credits not currently targeted.	

Pollution BREEAM 2014 New Construction 42 Phoenix Road

Pol 01 – Impact of Refrigerants	The design team have confirmed that there will be no refrigerants installed in the 3 c proposed development.		
	Three of three credits are targeted.		
Pol 02 – NO _x Emissions	The design team have confirmed the heating and hot water system(s) will produce NO $_{\rm x}$ emissions of \leq 40mg/kWh.	3 of 3	
	Three of three credits currently targeted.		
Pol 03 – Surface Water Run Off	Flood risk A site-specific Flood Risk Assessment will be undertaken for the site and it confirms that the site is in a low flood risk area. <i>Two of two credits are targeted</i> .	4 of 5	
	Surface water run-off The design team has confirmed that measures will be specified to ensure that the peak run off rate for the developed site is no greater than for the pre- developed site AND that the post development run-off volume, over the development lifetime, is no greater than it would have been prior to the site's development. It has also been confirmed that the attenuation specified will ensure that flooding of property will not occur in the event of local drainage system failure, and be designed in accordance with SuDS for the 100-year 6-hour event. <i>Two of two credits are targeted</i> .		
	Minimising water course pollution It is not yet known whether measures will be specified in accordance with SuDS to minimise watercourse pollution on site. <i>Credit not currently targeted.</i>		
	In total, four of five credits currently targeted.		
Pol 04 – Reduction of Night Time Light Pollution	The design team has confirmed that external lighting will be designed and installed in compliance with ILP Guidance.	1 of 1	
	One of one credit is targeted.		
Pol 05 – Noise Attenuation	A Suitably Qualified Acoustic Consultant will conduct a noise impact assessment in compliance with BS 7445:1991. Where noise sources from the development are greater than +5dB (during the day) and +3dB (during the night) compared to the background noise level, attenuation measures will be specified.	1 of 1	
	One of one credit is targeted.		

Action Plan BREEAM 2014 New Construction 42 Phoenix Road

	ollowing Action Plan outlines credits, which could be targeted to achieve a higher LLENT rating.		
Present Score	EXCELLENT (minimum 70%)	73.7%	
Additional Actions			
Man 02 – Life Cycle Cost and Service Lift Planning	An elemental Life Cycle Cost analysis will be carried out at RIBA Stage 2 to review options for the structure and envelope options at 20/50+ years and the fabric and servicing strategy options over a 15 year period.	1.14%	
Le 04 – Mitigating Ecological Impacts	A Suitably Qualified Ecologist will be appointed and their recommendations for enhancement of ecology must be implemented into the final design.	1.00%	
	A Suitably Qualified Ecologist will be appointed and their recommendations for enhancement of ecology must be implemented into the final design and an increase the ecological value by at least 6 species.	1.00%	
Le 05 – Enhancing Site Ecology	A Suitably Qualified Ecologist will be appointed and their recommendations for protection and enhancement of ecology implemented. The contractor will also ensure that actions are implemented in line with the SQEs recommendations during the programme of works.		
Pol 03 – Surface Water Run-Off	face Water Run-Off There will be no discharge from the developed site for rainfall up to 5mm and pollution prevention systems will be designed in accordance with SuDS and PPG3 where applicable.		
Score with all actions	EXCELLENT (minimum 70%). Mandatory requirements for EXCELLENT are met.	79.6%	

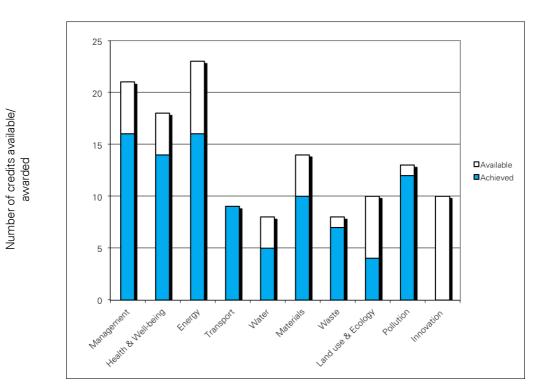
Rating Summary

The following summary represents the scheme's preliminary score including all actions.

		Credit allocation	% Achieved	Weighting	Score
Unclassified	<25%	Management	90.5%	0.12	10.9%
Pass	≥25% - <40%	Health & Well-being	77.8%	0.15	11.7%
Good	≥40% - <55%	Energy	69.6%	0.15	10.4%
Very Good	≥55 %- <70%	Transport	100.0%	0.09	9.0%
Excellent≥70%	- <85%	Water	62.5%	0.07	4.4%
Outstanding	≥85%	Materials	64.3%	0.135	8.7%
		Waste	87.5%	0.085	7.4%
		Land Use & Ecology	80.0%	0.1	8.0%
		Pollution	100.0%	0.1	10.0%
		Innovation	0.0%	0.1	0.0%
		Rating			79.6%

EXCELLENT

Graphical Breakdown of **Credits Awarded**



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