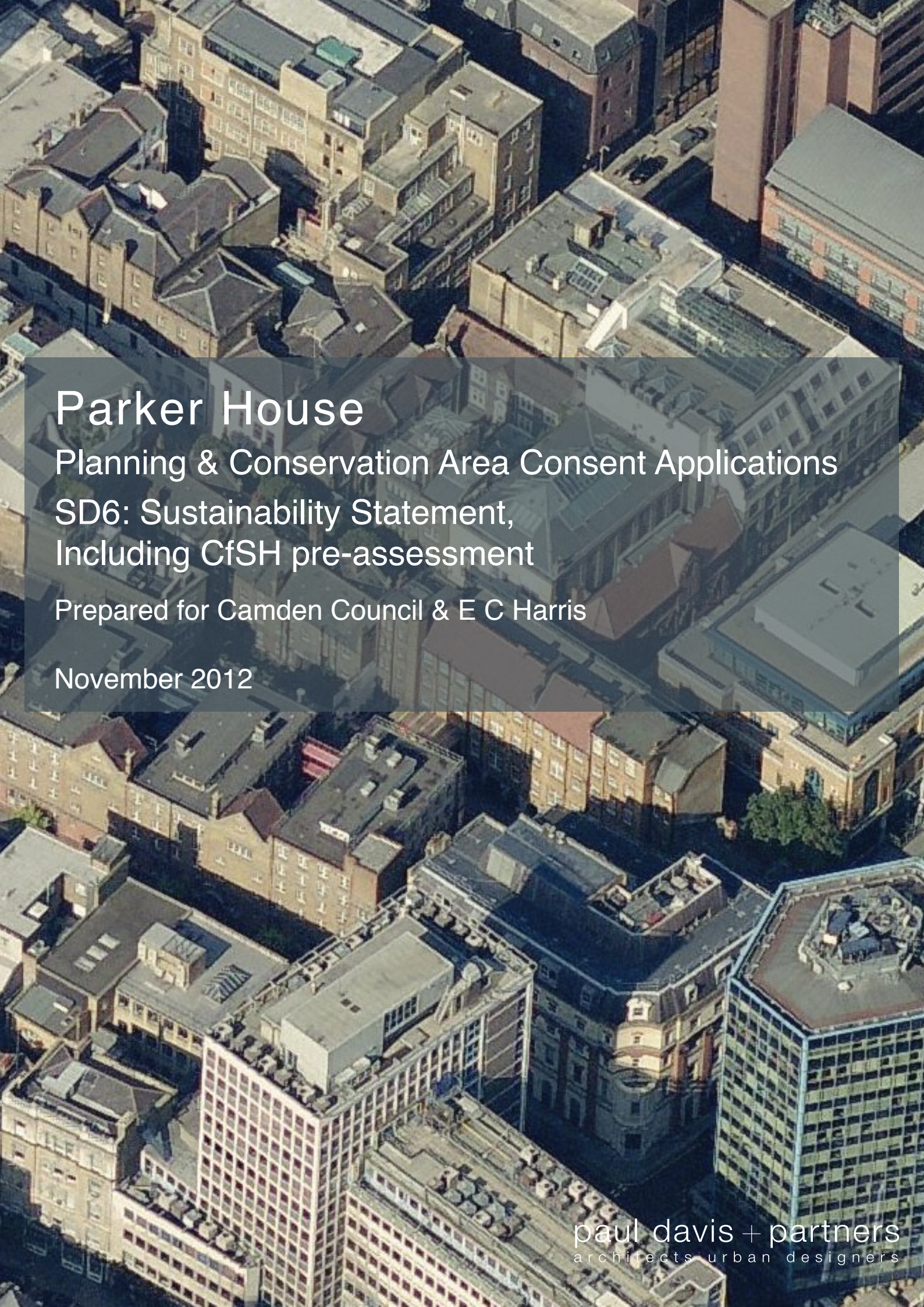


Parker House

Planning & Conservation Area Consent Applications

SD6: Sustainability Statement, Including CfSH pre-assessment

Prepared for Camden Council & E C Harris

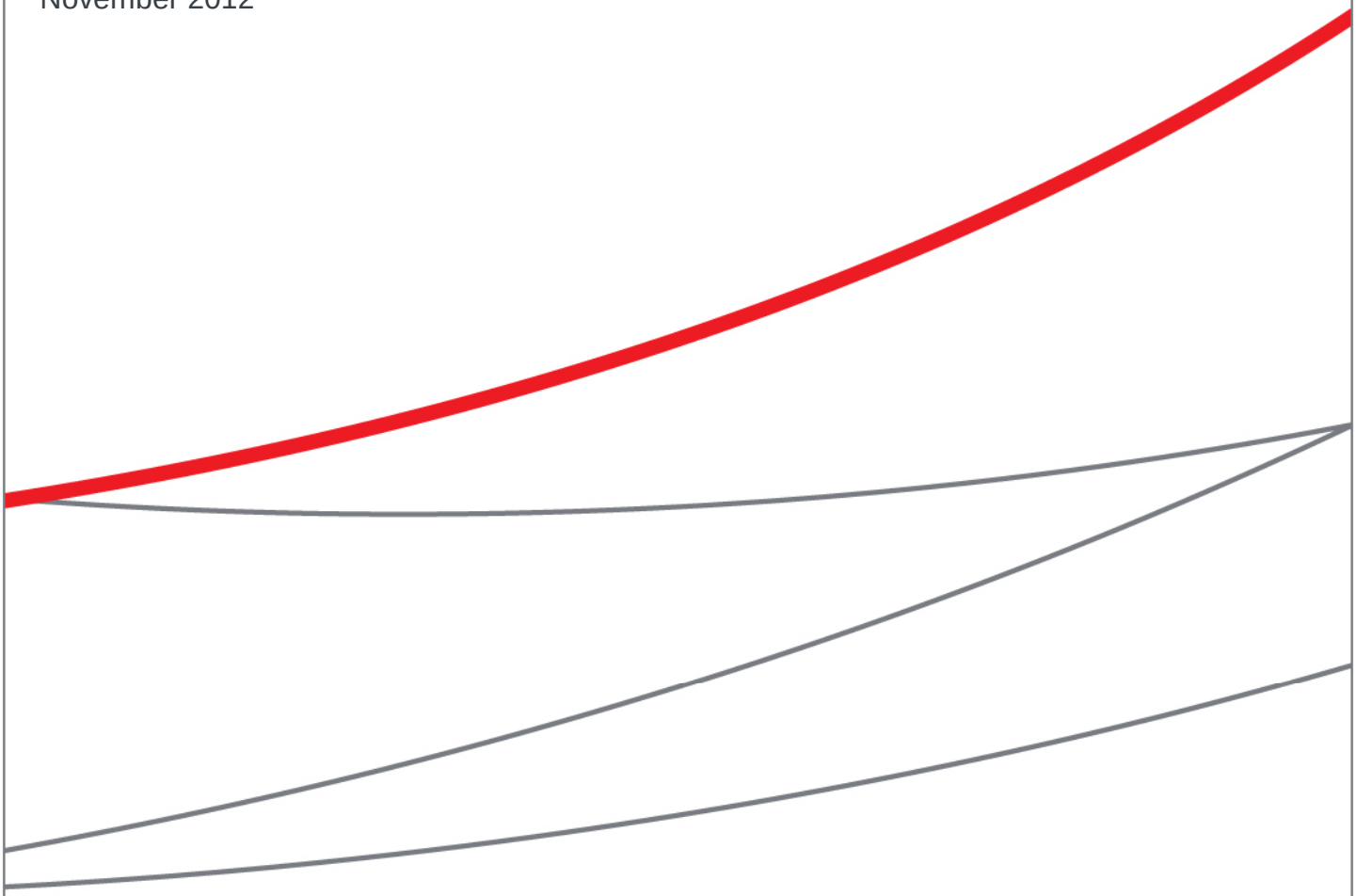
November 2012

paul davis + partners
architects urban designers

Parker House

Sustainability Statement covering requirements for Code for Sustainable Homes - Level 4

November 2012



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Version control

Issue	Revision No.	Date Issued	Description of Revision: Page No.	Description of Revision: Comment	Reviewed by:
1	1		N/A	N/A	

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Contents

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Code for Sustainable Homes November 2010 Pre-assessment

1.1 Introduction

A Code for Sustainable Homes Pre-Assessment for Parker House was undertaken with various members of the project team over the week commencing 24th September 2012. The project is the demolition and reconstruction of a hostel building on Covent Garden , London. The dwellings will include 1 and 2 bed social housing units in addition to 40 private dwellings. The Code for Sustainable Homes assessment is a planning requirement and all dwellings must meet a minimum of Code level 4. It must be noted that part of the planning requirements of Camden Council's Planning Guidance Document on Sustainability (CPG3), further requirements have been set. These are that a minimum of 50% of weighted credits must be achieved in the Energy, Water and Materials sections.

A score of 68% is required to achieve Code level 4, along with achieving the mandatory credits for this level. It is advisable to target additional credits at design stage, as there is potential for credits to be lost through the design and construction phases. As a result 77.96% is currently being targeted on this project, with 6.46% of contingency credits highlighted.

The pre-assessment was undertaken following the most recent version of the Code for Sustainable Homes November 2010 Technical Guide. The pre-assessment assesses the development using the design stage criteria.

Linked into the energy statement which contains the SAP calculations, Code level 4 can be achieved in ENE 1 with a percentage score of 36% improvement DER / TER. This is linked into a minimum of 24% reduction over the baseline (which includes non-regulated loads) as modelling has been generated on the worse case scenario dwelling within the development and the average improvement for the whole development will be 27% reduction over the baseline.

1.2 Scoring and Rating

The rating benchmarks for the Code for Sustainable Homes November 2010 are outlined below:

Code for Sustainable Homes Level	% Score
Level 1	36
Level 2	48
Level 3	57
Level 4	**68**
Level 5	84
Level 6	90

The Parker House development is aiming to achieve a Level 4 rating.

The Code for Sustainable Homes sections are weighted differently according to their importance within the scheme, as detailed below.

Within the Camden Planning Guidance Document on Sustainability (CPG3), further requirements are set out. A minimum of 50% of weighted credits must be achieved in the Energy, Water and Materials sections.

Section	Total Credits in each Category	% Weighting	Approximate Weighted Value of each Credit
Energy and CO_2 Emissions	31	36.4%	1.17
Water	6	9.0%	1.50
Materials	24	7.2%	0.30
Surface Water run-off	4	2.2%	0.55
Waste	8	6.4%	0.80
Pollution	4	2.8%	0.70

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Health and Wellbeing	12	14.0%	1.17
Management	9	10.0%	1.11
Ecology	9	12.0%	1.33

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1.3 Mandatory Credits

In addition to the minimum percentage score required to achieve a Code for Sustainable Homes rating, there are also mandatory credits that need to be achieved in order to achieve certification.

Mandatory Credit	Detail
Ene1 – Dwelling Emission rate	An improvement of at least 25% in the DER/TER value.
Wat1 – Indoor Water Use	Ensure that water consumption is less than 105 litres/person/day.
Mat1 – Environmental Impact of Materials	At least three of the following five key elements of the building envelope achieve a rating of A+ - D in the 2008 version of the Green Guide. - Roof - External Walls - Internal Walls (including separating walls - Upper and Ground Floors (including separating floors - Windows
Sur1 – Management of Surface Water Run-off from Developments	Ensure no detrimental changes are made to the pre-existing site drainage in relation to peak rate of run off, volume of run-off and risk of local drainage system failure.
Was1 – Storage of Non-Recyclable Waste and Recyclable Household Waste	An adequate space should be allocated for waste storage and sized to accommodate containers according to predetermined volumes.

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1.4 Surveys and Instructions

Please find a table below outlining the surveys and other work that either have, or may need to be undertaken in order to achieve credits. To ensure compliance with the Code for Sustainable Homes criteria this work must be undertaken when stated in the manual.

Credit	Survey Requirement	Instruction phase
Ene1 – Dwelling Emission Rate	Appoint an accredited energy assessor to undertake a full SAP (Standard Assessment procedure for Energy Rating of Dwellings) assessment. Assessment to show DER and TER values	Design Stage
Ene2 – Fabric Energy Efficiency	Appoint an accredited energy assessor to undertake a full SAP (Standard Assessment procedure for Energy Rating of Dwellings) assessment. Assessment to show DER and TER values	Design Stage
Ene7 – Low and Zero Carbon Technologies	Appoint an accredited energy assessor to undertake a full SAP (Standard Assessment procedure for Energy Rating of Dwellings) assessment. Assessment detail how low or zero carbon technologies meet any additional requirements defined in Directive 2009/28/EC and Certified under the Microgeneration Certification Scheme.	Design Stage
Sur1 – Management of Surface Water Run-off	Appoint an appropriately qualified professional to undertake an assessment of the surface water run-off, detailing methods to avoid, reduce and delay the discharge of rainfall run-off to water courses and public sewers using SuDS techniques. A Flood risk assessment must also be undertaken.	Design Stage
Sur 2 – Flood Risk	Appoint an appropriately qualified professional to undertake a Flood Risk Assessment	Design Stage
Was2 – Construction Site Waste Management	Instruct the undertaking of a Site Waste Management Plan	Design Stage
Pol2 – NOx Emissions	Appoint an Accredited energy assessor to undertake a full SAP assessment and calculate the NOx emissions levels.	Design Stage
Hea1 - Daylighting	An engineer can be appointed to undertake the daylighting calculations, if required.	Design Stage
Man2 – Considerate Constructors Scheme	Incorporate into specification the requirement for principal contractor to comply with the considerate constructor's scheme. Certification to be received prior to construction phase.	Construction Stage
Man4 - Security	Appoint an Architectural Liaison Officer and Crime Prevention Design Advisor to undertake a "Secured by Design" assessment.	Design Stage
Eco1 – ecological Value of Site	Appoint a suitably qualified ecologist to undertake a full ecological assessment.	Design Stage
Eco2 – Ecological Enhancement	Appoint a suitably qualified ecologist to undertake a full ecological assessment.	Design Stage

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Eco3 – Protection of Ecological Features	Appoint a suitably qualified ecologist to undertake a full ecological assessment.	Design Stage
Eco4 – Change in Ecological Value of Site	Appoint a suitably qualified ecologist to undertake a full ecological assessment.	Design Stage

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1.5 Pre-Assessment Results

The table below highlights the credits that are to be targeted throughout the design stage, as agreed by the project team. A score of 68% is required to achieve Code level 4, along with achieving the mandatory credits. It is advisable to target additional credits at design stage, as there is potential for credits to be lost through the design and construction phases. As a result 77.96% is currently being targeted on this project, with 6.46% of contingency credits highlighted.

		Available	Targeted	Contingency
Energy and Carbon Dioxide Emissions				
Ene 1	Dwelling Emission Rate	10	4	2
Ene 2	Building Fabric	9	7	0
Ene 3	Energy Display Devices	2	1	1
Ene 4	Drying Space	1	0	1
Ene 5	Energy Labelled White Goods	2	2	0
Ene 6	External Lighting	2	2	0
Ene 7	Low or Zero Carbon (LZC) Technologies	2	2	0
Ene 8	Cycle Storage	2	2	0
Ene 9	Home Office	1	1	0
	Energy and Carbon Dioxide Emissions Totals:	**31**	**21**	**4**
	Energy and Carbon Dioxide Emissions score totals:	**36.4**	**24.658**	**4.697**

Water				
Wat 1	Indoor Water Use	5	3	0
Wat 2	External Water Use	1	1	0
	Water Totals:	**6**	**4**	**0**
	Water score totals:	**9**	**6**	**0**

Materials				
Mat 1	Environmental Impact of Materials	15	10	2
Mat 2	Responsible Sourcing of Materials - Basic Building Elements	6	3	0
Mat 3	Responsible Sourcing of Materials - Finishing Elements	3	0	0
	Materials Totals:	**24**	**13**	**2**
	Materials score totals:	**7.2**	**3.9**	**0.6**

Surface Water Run-off				
Sur 1	Management of Surface Water Run-off from Developments	2	2	0
Sur 2	Flood Risk	2	2	0
	Surface Water Run-off Totals:	**4**	**4**	**0**
	Surface Water Run-off score totals:	**2.2**	**2.2**	**0**

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		Available	Targeted	Potential
Waste				
Was 1	Storage of Non-Recyclable Waste and Recyclable Household Waste	4	4	0
Was 2	Construction Site Waste Management	3	3	0
Was 3	Composting	1	0	0
	Waste Totals:	**8**	**7**	**0**
	Waste score totals:	**6.4**	**5.6**	**0**

Pollution				
Pol 1	Global Warming Potential (GWP) of Insulants	1	1	0
Pol 2	NO_x Emissions	3	2	0
	Pollution Totals:	**4**	**3**	**0**
	Pollution score totals:	**2.8**	**2.1**	**0**

Health & Wellbeing				
Hea 1	Daylighting	3	3	0
Hea 2	Sound Insulation	4	4	1
Hea 3	Private Space	1	0	0
Hea 4	Lifetime Homes	4	4	0
	Health & Wellbeing Totals:	**12**	**11**	**1**
	Health & Wellbeing score totals:	**14**	**12.833**	**1.167**

Management				
Man 1	Home User Guide	3	3	0
Man 2	Considerate Constructors Scheme	2	2	0
Man 3	Construction Site Impacts	2	2	0
Man 4	Security	2	2	0
	Management Totals:	**9**	**9**	**0**
	Management score totals:	**10**	**10**	**0**

Ecology				
Eco 1	Ecological Value of Site	1	1	0
Eco 2	Ecological Enhancement	1	1	0
Eco 3	Protection of Ecological Features	1	1	0
Eco 4	Change in Ecological Value of Site	4	3	0
Eco 5	Building Footprint	2	2	0
	Ecology Totals:	**9**	**8**	**0**
	Ecology score totals:	**12**	**10.667**	**0**

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OVERALL SCORE TOTALS:	**100**	**77.96**	**6.464**

1.5.1 Summary table

	Credits targeted	Targeted percentage
Energy	21	24.65
Water	4	6
Materials	13	3.9
Surface Water Run-Off	4	2.2
Waste	7	5.6
Pollution	3	2.1
Health and Wellbeing	11	12.8
Management	9	10
Ecology	8	10.6
Totals	**80**	**77.96**

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