

Doherty Design & Planning Limited



EcoHomes 2006 – The environmental rating for homes

Report for the Development at 65 Hemstal Road, London, NW6 2AE

Issue 00



EcoHomes 2006 – Report for the Development at 65 Hemstal Road

Issue Status

Date	Issue	Reason	Rating	Ву
09/06/2011	00	Initial Assessment		J Doherty

This document is designed to be printed double sided. Please try to do this, preferably using recycled paper.



ddp

Contents

Develop	per and Assessor Details	1
Certifica	ate Request Form	2
Develop	oment Summary	3
	oment Rating	
Develop	oment Potential Improvements	5
Ene 1	Dwelling Emission Rate	6
Ene 2	Building Fabric	8
Ene 3	Drying Space	9
Ene 4	EcoLabelled Goods	10
Ene 5	Internal Lighting	11
Ene 6	External Lighting	12
Tra 1	Public Transport	14
Tra 2	Cycle Storage	15
Tra 3	Local Amenities	16
Tra 4	Home Office	17
Pol 1	Insulant GWP	18
Pol 2	NO _x Emissions	19
Pol 3	Reduction of Surface Runoff	20
Pol 4	Renewable and Low Emission Energy Source	
Pol 5	Flood Risk	
Mat 1	Environmental Impact of Materials	
Mat 2	Responsible Sourcing of Materials: Basic Building Elements	
Mat 3	Responsible Sourcing of Materials: Finishing Elements	
Mat 4	Recycling Facilities	27
Wat 1	Internal Potable Water Use	29
Wat 2	External Potable Water Use	
Eco 1	Ecological Value of Site	
Eco 2	Ecological Enhancement	32
Eco 3	Protection of Ecological Features	33
Eco 4	Change of Ecological Value of Site	34
Eco 5	Building Footprint	35
Hea 1	Daylighting	
Hea 2	Sound Insulation	
Hea 3	Private Space	
Man 1	Home User Guide	
Man 2	Considerate Constructors	
Man 3	Construction Site Impacts	42
Man 4	Security	43
Informa	tion about EcoHomes	44
Append	ix 1: Summary Score Sheet	46



Developer and Assessor Details

Assessor	
Company name:	Doherty Design and Planning Limited
Assessment carried out by:	Jason Doherty
Signature:	
Alter	
Assessor report reference no:	E152-HR-EcoH00
Address:	22 Station Road, Manea Cambridgeshire, PE15 0JL
Tel:	01354 688 413
Email:	jason@dohertydesignandplanning.co.uk
Developer	
Company name:	
Contact person:	Mr D Graham
Address:	Sunderleigh Farm, Bampton, Tiverton, Devon EX16 9DT
Tel:	
Fax:	
Email:	
Development Details	
Site Name:	65 Hemstal Road
Site Reference Number:	E152
Address:	65 Hemstal Road, London, NW6 2AE
Number of units assessed:	1
Number of house/ flat types:	1
Other information:	The Developer shall be undertaking all works in the change of use and redevelopment of the office building.
Architect	
Company name:	WS Planning and Architecture
Address:	Reigate Place, 43 London Road, Reigate, Surrey RH2 9PW
Tel:	01737 225 711
Email:	david@wsplanning.co.uk





Certificate Request Form

Assessment Report Details				
BRE reference number (provided on registratio	n):			
Date:	EcoHomes version (eg. 2006):			
Assessment Details Required to Appear on	the Certificate.			
Name of Development: 65 Hemstal Road				
Where on street i.e. house number (or plot num Flat 1, No. 65	nbers if no other details known):			
Street: Hemstal Road				
Town and postcode (including at least the first s London, NW6 2AE	set of post code numbers):			
Region: London				
Assessor organisation: Doherty Design and Pla	anning Limited			
Assessor name: Jason Doherty				
Developer: Mr D Graham				
Architect: David Synge				
Client: Mr D Graham				
Other parties (please note that a maximum of 4 including the name of the assessor):	names can be put on the certificate			
Certificates to be sent to:				
Assessor X	Client X			
Number of certificates required (a photocopy of the original certificate will always be sent to the assessor):				
If sent to the client, please also provide below details:				
Company name:				
Contact person: Mr D Graham				
Address: Sunderleigh Farm, Bampton, Tiverton, Devon EX16 9DT				
Tel:				
Fax:				
Email:				



Development Summary

This development is for the conversion of former office space into flat split over the basement and ground floor of 65 Hemstal Road, London.

65 Hemstal Road consists of office space on the basement and ground floor, with existing flats on the first and second floors. As part of this redevelopment, a new flat is being constructed on the roof to create a new third floor.



Figure 1 - 65 Hemstal Road

It is intended that the new dwelling will exceed the current building regulations in terms of its environmental performance, with a target of achieving a high sustainability rating against EcoHomes 2006. This will be achieved by the implementation of appropriate design solutions considering embedded carbon, lifecycle emissions and water usage. Additionally, it is intended to employ renewable and/or sustainable energy solutions which include solar photovoltaic system installed on the roof.

The whole development will be designed and constructed to retain the existing residential ambience and character of the area and to stay in keeping with the presentation of the neighbouring properties.



Development Rating

The Development is currently achieving a score of 63.31 which is a **VERY GOOD** rating.

Category	Score	% Achieved in Category
Energy	16.50	75.0%
Transport	6.00	75.0%
Pollution	8.18	81.8%
Materials	2.71	19.4%
Water	6.67	66.7%
Land Use & Ecology	8.00	66.7%
Health & Well Being	5.25	37.5%
Management	10.00	100%
Total Weighted Score	63.31	

The table above provides a summary of the categories and were the points were obtained. A more detailed analysis of the credit breakdown can be found in the Summary Score Sheet in Appendix 1 in this report.

In order to achieve a rating of Excellent, the total weighted score should be greater or equal to 70. This could be achievable by targeting credits that have been highlighted through this report as being achievable and are summarised below.



Development Potential Improvements

The eight EcoHomes categories are weighted so are some are worth more than others. As a principle, to improve the overall score, the heavier weighted categories should be targeted first.

The table below highlights the weighting factor and the percentage of credits that have been achieved.

Category	Weighting Factor	% Achieved in Category
Energy	0.22	75.0%
Transport	0.08	75.0%
Pollution	0.1	81.8%
Materials	0.14	19.4%
Water	0.1	66.7%
Land Use & Ecology	0.12	66.7%
Health & Well Being	0.14	37.5%
Management	0.1	100%
Total Weighted Score	63.31	VERY GOOD

Whilst the Energy credits are the heaviest weighted and 75.0% of the credits have been achieved, it is felt that as this is a conversion of an existing building, it may be difficult to improve this score. However, more insulation could be incorporated to improve the SAP rating and the credits in Ene1.

The Health & Well Being section has scored the lowest number of credits, which is not good because it is the second heaviest weighted. As the windows in the kitchen are existing it would be difficult to increase the daylighting score. However, extra credits could be gained by increasing the performance of the sound insulation.

In the Materials section, if the majority of the fabric elements could be specified from the Green Guide and ensuring that all the basic and finishing building elements are responsibly sourced, and additional 10.84 credits could be achieved.

If a suitably qualified ecologist was appointed, then in Land Use and Ecology, it maybe possible to increase the ecological value of the site by the incorporation of a green roof.

If the above credits were targeted, it maybe possible to improve the score change the rating from VERY GOOD to EXCELLENT.

This would be a reasonable margin that should allow for slippage during construction.



Ene 1 Dwelling Emission Rate

Credit	s Award	led								
0	1	2	3	4	5	6	7	8	9	10
11	12	13	14	15						

Aim

To minimise emissions of carbon dioxide (CO₂) to the atmosphere arising from the operation of a home and its services.

Credit Requirements

Credits are awarded on the basis of SAP 2005 related average CO_2 emissions in accordance with the following criteria.

Credits	CO ₂ emissions/ DER (kg/m²/yr)	
1	≤ 40	
2	≤ 35	
3	≤ 32	
4	≤ 30	
5	≤ 28	
6	≤ 26	
7	≤ 24	
8	≤ 22	
9	≤ 20	
10	≤ 18	
11	≤ 15	
12	≤ 10	
13	≤ 5	
14	≤ 0	
15	≤ - 10	

Note: Dwellings using gas will normally score better than those using other fossil fuels, as the CO_2 emissions from gas are the lowest of all fossil fuels.

Development Features Relating to Credit

The CO_2 emissions / DER for the proposed dwellings has been calculated as 17.68 kg CO_2 / m^2/yr .

These figures have been provided from the SAP Assessment Calculations provided by the Authorised SAP Assessor.

EcoHomes (1) ddp Section: Ene

Explanation of Assessment

The Authorised SAP Assessor has undertaken SAP calculations based on the information provided by the Client.

10-No. credits have been awarded because the DER for the dwelling has been calculated as 17.68 kg CO₂ / m²/yr, which is less than or equal to 18 kg CO₂ / m²/yr.

Information Provided by the Developer

Ref	Document
Ene1-01	Full SAP Calculation Printout - dated 6 th June 2011



Ene 2 Building Fabric

Credits Awarded				
0	1	2		

Aim

To future proof the efficiency of dwellings over their whole life, and to encourage refurbished dwellings to improve their insulation standards through good fabric performance.

Credit Requirements

Credits are awarded (see table) on the basis of the average heat loss across the whole site .

	Average heat loss parameter (HLI across the whole site		
Credits	New build	Refurbishment	
1	≤ 1.3	≤ 2.2	
2	≤ 1.1	≤ 1.75	

Development Features Relating to Credit

The Heat Loss Parameter (HLP) for the dwelling has been calculated as 1.04.

These figures have been provided from the SAP Assessment Calculations provided by the Authorised SAP Assessor.

Explanation of Assessment

The Authorised SAP Assessor has undertaken SAP calculations based on the information provided by the Client.

2 credits can be awarded because the average HLP for the dwelling is less than 1.75 for the refurbishment.

Information Provided by the Developer

Ref	Document
Ene2-01	Full SAP Calculation Printout – 6 th June 2010





Section: Ene

Ene 3 Drying Space

Credits Awar	ded
0	1

Aim

To minimise the amount of energy used to dry clothes.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
	For providing space and posts, footings and fixings for drying clothes in a secure environment for each unit on the site. This may be external or internal.

Development Features Relating to Credit

The Client has confirmed that the flat shall have a retractable clothes line in the bathroom with a minimum of 6m clothes line.

The drying space shall be in a location that does not prevent the use of the bathroom.

The bathroom has adequate ventilation and heating.

Explanation of Assessment

The credit can be awarded if adequate space is to be provided in the bathroom on the ground floor.

The Client has confirmed that a suitable internal drying space shall be provided.

The following requirements set out in Ene3 have been met:

- Internal space:
- A heated space with adequate, controlled ventilation, i.e. extract fan with humidistat or passive vent. A standard trickle vent and extract fans connected to the light switch do not comply.
- The heating devices that are sized and installed for space heating purposes only, i.e they must not be supplied with additional heating for the purposes of drying clothes.
- Fixings to hold a minimum of 6m of clothes line.
- Spaces used for drying should not prevent the intended use of that area.

Information Provided by the Developer

Ref	Document
Ene3-01	To Follow



Ene 4 EcoLabelled Goods

Credits Awarded		
0	1	2

Aim

To encourage the provision or purchase of energy efficient white goods, thus reducing the CO₂ emissions from the dwelling.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	Where the following appliances have an A+ rating under the EU Energy Efficiency Labelling Scheme:
	Fridges, freezers and fridge/freezers.
1	Where the following appliances have an A rating under the EU Energy Efficiency Labelling Scheme:
	Washing machines and dishwashers,
	And the following have an B rating:
	Washer dryers and tumble dryers.
OR	
1	if no white goods are provided , but information on purchasing energy efficient white goods is provided.

Development Features Relating to Credit

The Client has confirmed that only information on purchasing energy efficient white goods shall be provided.

No white goods shall be provided.

Information on energy efficient white goods shall be given to the occupants

Explanation of Assessment

Information on energy efficient white goods shall be given to the occupants.

It appears that the information will be inserted into Appendix B of the specification, although it has not been provided yet.

The developer is required to provide this information if the credit is to be retained.

Information Provided by the Developer

Ref	Document
Ene4-01	To Follow

Section: Ene

Ene 5 Internal Lighting

Credits Awarded		
0	1	2

Aim

To encourage the provision of energy efficient internal lighting, thus reducing the CO₂ emissions from the dwelling.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	40% of fixed internal light fittings are dedicated energy efficient fittings
2	75% of fixed internal light fittings are dedicated energy efficient fittings

Development Features Relating to Credit

The Client has confirmed that more than 75% if the fixed internal light fittings are dedicated energy efficient fittings.

Explanation of Assessment

The Client has stated that the internal lighting shall use dedicated energy efficient luminaires throughout the dwelling and that this will be at least 75% of the luminaires installed in the dwelling.

The dedicated energy efficient luminaires shall comprise of the entire fitting, including the lamp, control gear, and an appropriate housing, reflector, shade or diffuser.

The fitting shall be capable of only accepting lamps having a luminous efficacy greater than 40 lumens per circuit Watt, for example tubular fluorescent and compact fluorescent lighting fittings.

Information Provided by the Developer

Ref	Document
Ene5-01	To Follow



Ene 6 External Lighting

Credits Awarded		
0	1	2

Aim

The purpose of this credit is to encourage the provision of energy efficient external lighting.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	Space lighting
	Where all space lighting is specifically designed to accommodate only compact fluorescent lamps (CFL) luminaires or strip lights.
1	Security lighting
	Where all security light fittings are designed for energy efficiency and are adequately controlled such that:
	all burglar security lights have:
	a maximum wattage of 150W,
	AND are fitted with:
	movement detecting shut-off devices (PIR)
	 AND daylight cut-off devices
	all other security lighting is:
	 specially designed to only accommodate CFL luminaires or strip lights
	 AND be fitted with dawn-to-dusk sensors OR timers.

Development Features Relating to Credit

The Client has confirmed that all shall use energy efficient lighting for space lighting.

All space lighting fittings shall only accept lamps with an efficacy greater than 40 lumens per circuit watt.

No security lighting is to be provided so the security lighting credit can be awarded by default.

Explanation of Assessment

The Credit is assessed on 2 points, Space Lighting and Security Lighting.

The Client has confirmed that the external lighting shall be intended to use energy efficient light fittings for the external lighting.

With regard to the space lighting, all luminaires shall only accept lamps with an efficacy greater than 40 lumens per circuit watt and that the use of GLS tungsten





Section: Ene

lamps with bayonet cap or Edison screw bases, or tungsten halogen lamps will not be used.

It has been confirmed that the above shall be applied to all light fittings providing space lighting to the external door, garage, and communal corridor and staircases.

No security lighting is to be provided so the security lighting credit can be awarded by default.

Information Provided by the Developer

Ref	Document
Ene6-01	To Follow





Tra 1 Public Transport

Credits Awarded		
0	1	2

Aim

To encourage developers to provide a choice of transport modes for residents, with the aim of reducing the level of car use.

Credit Requirements

Urban and suburban locations

Credits	
1	If 80% of the development is within 1000m (via a safe walking route) of a transport node providing a service to a local centre, town, city or a major transport node, at the following frequency levels:
	07:30 – 10:00 and 17:00 – 19:00 Monday to Friday – half hourly
	All other times between 07:00 and 22:00 Monday to Saturday - hourly
2	If 80% of the development is within 500m (via a safe walking route) of a transport node providing a service to a local centre, town, city or a major transport node, at the following frequency levels:
	07:30 - 10:00 and 17:00 - 19:00 Monday to Friday - every 15 min
	 All other times between 07:00 and 22:00 Monday to Saturday – half hourly

Development Features Relating to Credit

Brondesbury overground station is 0.26 of a mile (416m) and West Hampstead underground station on the Jubilee Line is 0.31 miles away.

There are main bus routes on Kilburn High Road which is 0.21 miles (336m) away.

All of the above offer a number of services which exceed the minimum frequency levels.

Information Provided by the Developer

Ref	Document
Tra1-01	To Follow



Section: Tra

Tra 2 Cycle Storage

Credits Awarded		
0	1	2

Aim

To encourage the wider use of bicycles as transport, and thus reduce the need for short car journeys, by providing adequate and secure cycle storage facilities.

Credit Requirements

Dwellings in the development must meet the following criteria.

Credits	
1	If 50% of dwellings have provision for the adequate storage of cycles. The provision is determined by the number of bedrooms within a dwelling:
	1 and 2 bedroom flat/house – storage for 1 cycle
	3 bedroom flats/houses – storage for 2 cycles
	4 bedrooms and above – storage for 4 cycles.
	The storage provision should be safe and weather-proof.
2	If 95% of dwellings have provision for the adequate storage of cycles, and the criteria above are met.

Development Features Relating to Credit

The development is for a single dwelling with 4 bedrooms, which would mean that the cycle storage required would be for 4 cycles.

The Client has confirmed that adequate provision for the storage of cycles is not provided on the site.



Tra 3 Local Amenities

Credits Award	ded		
0	1	2	3

Aim

To encourage developers to plan new housing developments that are close to, or include, local shops and amenities. This will help to reduce the reliance of local residents on their cars.

Credit Requirements

80% of the development is to be within walking distance of local amenities, and credits are awarded on the following criteria.

Credits	
1	For proximity to a food shop and a post box within 500m.
1	For proximity to 5 of the following amenities within 1000m: postal facility, food shop*, bank/ cash point, pharmacy, primary school, medical centre, leisure centre, community centre, place of worship, public house, children's play area, outdoor open access public area
1	For providing safe pedestrian routes to the local amenities where one/both of above criteria has been achieved.

^{*} Note: a food shop only qualifies for this credit, where it is greater than 500m from the development and has not been used to justify for the 1st credit.

Development Features Relating to Credit

Hemstal Food and Wine Store is 20m away on Hemstal Road.

A post box is located 465m away on Kilburn High Road.

Kingsgate Primary School is 101m away on Kingsgate Road.

There is a childrens play area 115m away in the Kilburn Grange Park.

The Universal Church of the kingdom of god is 336m away.

The Black Lion public house is 290m away on Kilburn High Road.

Outdoor access public area is 50m away in Kilburn Grange Park.

Safe pedestrian routes to all the local amenities are provided.





Section: Tra

Tra 4 Home Office

Credits Awarded		
0	1	

Aim

To reduce the need to commute to work by providing residents with the necessary space and services to be able to work from home.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	For the provision of a space which allows the occupants to set up a
	home office in a quiet room.

Development Features Relating to Credit

The Client has confirmed that sufficient wall space, natural lighting, telephone points and electrical services will be provided in the study to be used as a home office.

Explanation of Assessment

The Client has stated that the required space and services shall be provided for this credit within the Living room shown on the Ground Floor Plan drawing.

The Client has confirmed that the services shall be, as a minimum:

- two double sockets; sockets should be positioned to avoid the use of extension leads
- two telephone points or equivalent (in the case of access to broadband, cable network, etc).
- windows
- adequate ventilation through an openable windows
- in excess of the minimum wall length to allow a desk and filing cabinet/ bookshelf to be installed, with space to move around and open the door

Information Provided by the Developer

Ref	Document
Tra4-01	To Follow
Tra4-02	Drawing L/CAM/593/PL04 - Proposed Floor Plans



Pol 1 Insulant GWP

Credits Awarded		
0	1	

Aim

The purpose of this credit is to reduce the amount of ozone depleting substances released into the atmosphere.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	Specifying insulating materials, that avoid the use of ozone depleting substances that have a global warming potential (GWP) of less than 5 (and a ODP of zero), in either manufacture or composition, for the following elements: roof (including loft access) wall – internal and external (including doors, lintels and all acoustic insulation) floor (including foundations). Hot water cylinder, pipe insulation and other thermal store

Development Features Relating to Credit

The Client has confirmed that only insulation with an ozone depletion factor of zero and a global warming potential of less than five shall be used in this development.

Explanation of Assessment

The Client has stated they will use insulating materials, that avoid the use of substances that have a global warming potential (GWP) of 5 or more (and a ODP of zero), in either manufacture or composition, for the following elements:

- roof (including loft access)
- wall internal and external (including doors, lintels and all acoustic insulation)
- floor (including foundations).
- Hot water cylinder, pipe insulation and other thermal store

The Client is seeking all manufacturers to provide confirmation that the materials comply.

Information Provided by the Developer

Ref	Document
Pol1-01	To Follow



Section: Pol

Pol 2 NO_x Emissions

Credits Awarded				
0	1	2	3	

Aim

To reduce the nitrous oxides (NO_x) emitted into the atmosphere.

Credit Requirements

Credits are awarded on the basis of NO_x emission arising from the operation of all space heating and hot water systems across the development in accordance with the following criteria.

Credits	Dry NO _x level (mg/kWh)	Boiler class (BS EN 297: 1994)
1	≤100	4
2	≤70	5
3	≤40	above

Development Features Relating to Credit

The Client has confirmed that the boiler shall be specified to have less than 40 mg/kWh of dry NO_x emissions.

Information Provided by the Developer

Ref	Document
Pol2-01	To Follow



Pol 3 Reduction of Surface Runoff

Credits Awarded			
0	1	2	

Aim

To reduce and delay water runoff from the hard surfaces of a housing development to public sewers and watercourses, thus reducing the risk of localised flooding, pollution and other environmental damage.

Credit Requirements

The development must meet the following criteria.

Credits	
	Where rainwater holding facilities and/ or sustainable drainage techniques are used to provide attenuation of water run-off to either natural watercourses and/or municipal drainage systems, by 50%* in areas of low probability of flooding, 75%* in areas of medium flood risk and 100%* in areas of high flood risk, at peak times from:
1	Hard Surfaces
1	Roofs

^{*} Where a statutory body requires a greater attenuation then the higher requirement should be met in order to achieve these credits.

Development Features Relating to Credit

The rainwater is discharged into the storm water drainage. This is to reuse the existing services connection.

Information Provided by the Developer

Ref	Document
Pol3-01	To Follow



Section: Pol

Pol 4 Renewable and Low Emission Energy Source

Credits Awarded			
0	1	2	3

Aim

To reduce atmospheric pollution by encouraging locally generated renewable and low emission energy to supply a significant proportion of the development's energy demand.

Credit Requirements

The development should meet the following criteria.

Credits	
1	Where evidence provided demonstrates that a feasibility study considering renewable and low emission energy has been carried out and the results implemented.
2	Where evidence provided demonstrates that the first credit has been achieved and 10% of total energy demand for the development is supplied from local renewable, or low emission energy, sources*
3	Where evidence provided demonstrates that the first credit has been achieved and 15% of total energy demand for the development is supplied from local renewable, or low emission energy, sources*.

Development Features Relating to Credit

A feasibility study has been carried out and recommends that the use of photovoltaic panels installed on the roof in order to achieve the carbon emission reductions.

The report states that a 20.39% reduction in energy demands shall be achieved.

Explanation of Assessment

The feasibility study will be updated during detailed design to ensure the most appropriate renewable or low emission energy source for the building/development.

This study covers the following sections:

- Payback
- Land use
- Local planning requirements
- Noise
- Whole life cost/ life cycle impact of the potential specification in terms of carbon emissions
- Any available grants
- All technologies appropriate to the site and energy demand of the development.
- Reasons for excluding other technologies.



The Client confirmed that a renewable and/or low emission energy technology has been specified for the development in line with the recommendations of the above feasibility study.

Information Provided by the Developer

Ref	Document
Pol4-01	Renewable Energy Report



Section: Pol

Pol 5 Flood Risk

Credits Awarded				
0	1	2		

Aim

To encourage developments in areas with low risk of flooding or if developments are to be situated in areas with a medium risk of flooding, that appropriate measures are taken to reduce the impact in an eventual case of flooding.

Credit Requirements

The development must meet the following criteria.

Credits	
2	Where evidence provided demonstrates that the assessed development is located in a zone defined as having a low annual probability of flooding. OR
1	Where evidence provided demonstrates that the assessed development is located in a zone defined as having a medium annual probability of flooding and the ground level of the building, car parking and access is above the design flood level for the site's location.

Development Features Relating to Credit

The development site has been identified as being in an area of low annual probability of flooding

Explanation of Assessment

The Environment Agency flood map shows that the development site is within a having a low annual probability of flooding.

Information Provided by the Developer

Ref	Document
Pol5-01	To Follow

Mat 1 Environmental Impact of Materials

Credits Awarded										
0	1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16					

Aim

To encourage the use of materials that have less impact on the environment, taking account of the full life-cycle.

Credit Requirements

Credits are achieved by obtaining an 'A' rating from the Green Guide for Housing Specification, for 80% by area of the element, for each of the following elements.

Credits	Element
3	Roof
3	External walls
3	Internal walls – party walls and internal partitions
3	Floors – upper and ground floor
2	Windows
1	External surfacing – driveways, paths and patios
1	Boundary protection

Development Features Relating to Credit

AS this is a reburbishment, it is not clear at this stage if any credits can be achieved in this category.

However, the Client has confirmed that every effort shall be made to try to specify all the materials to minimise their impact on the environment and use the Green Guide for Housing.



Mat 2 Responsible Sourcing of Materials: Basic Building Elements

Credits Awarded							
0	1	2	3	4	5	6	

Aim

To recognise and encourage the specification of timber from responsible forest sources for secondary building and finishing elements.

Credit Requirements

All dwellings in the development must meet one of the following criteria.

Credits	
1-6	Where materials used in key building elements are responsibly sourced.

Development Features Relating to Credit

This Credit is not being sought.



Mat 3 Responsible Sourcing of Materials: Finishing Elements

Credits Awarded					
0	1	2	3		

Aim

To recognise and encourage the specification of timber from responsible forest sources for secondary building and finishing elements.

Credit Requirements

All dwellings in the development must meet one of the following criteria.

Credits	
1-3	Where materials used in secondary building and finishing elements are responsibly sourced.

Development Features Relating to Credit

This credit is not being sought.



Section: Mat

Recycling Facilities Mat 4

Credits Awarded						
0	1	2	3	4	5	6

Aim

To encourage developers to provide homeowners with the opportunity and facilities to recycle household waste.

Credit Requirements

All dwellings in the development must meet the following criteria for the storage of recyclable household waste.

Credits							
2	Providing one of the following recycling facilities.						
	Three internal storage bins with:						
	 minimum total capacity of 60 litres 						
	 no individual bin smaller than 15 litres 						
	 all bins in a dedicated position. 						
	OR						
	Three external bins with:						
	 minimum total capacity of 180 litres* 						
	 no individual bin smaller than 40 litres 						
	 all bins in a dedicated position (within 2m of the external door). 						
	OR						
	A local authority collection scheme for recyclable material*.						
6	Provide full recycling facilities of:						
	Three internal storage bins with:						
	 minimum total capacity of 30 litres 						
	 no individual bin smaller than 7 litres 						
	 all bins in a dedicated position. 						
	AND EITHER						
	Three external bins with:						
	 minimum total capacity of 180 litres* 						
	– no individual bin smaller than 40 litres						
	 all bins in a dedicated position (within 10m of the external door). 						
	OR						
	A local authority collection scheme for recyclable material*.						

^{*} Special requirements apply for block of flats. See *Guidance* for flats.



Development Features Relating to Credit

Three internal recycling bins shall be provided either in the kitchen under the sink for storage of recyclable materials. The bins shall be in addition to the normal waste bin, clearly labelled for recycling and be at least 7 litres in capacity each.

In addition, three colour coded external storage bins shall be provided for the emptying by the local council recyclable material collection scheme.

The external storage bins shall have a total combined capacity of not less than 180 litres and no individual bin shall have a capacity of less than 40 litres.

External bins are to be on suitable hard standing place within 10 metres of an external door.

Explanation of Assessment

The Client has confirmed that full recycling facilities with the required recyclable material bins as per the requirements of this credit shall be provided.

Information Provided by the Developer

Ref	Document
Mat4-01	To Follow



Section: Wat

Wat 1 Internal Potable Water Use

Credits Awarded						
0	1	2	3	4	5	

Aim

To reduce consumption of water in the home.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	Water consumption (m³/bedspace/year)
1	< 52
2	≤ 47
3	≤ 42
4	≤ 37
5	≤ 32

Development Features Relating to Credit

The Client has confirmed that the specification for the fittings and appliances shall ensure that the water consumption shall be less than 42m³/bedspace/year.

Information Provided by the Developer

Ref	Document
Wat1-01	To Follow



Wat 2 External Potable Water Use

Credits Available	
0	1

Aim

To encourage the recycling of rainwater, and reduce the amount of water taken from the mains, for use in landscape/garden watering.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	For specifying a system that will collect rain water for use in external irrigation/ watering, e.g. water butts, central rainwater collection systems, etc.

Development Features Relating to Credit

No individual or communal outdoor spaces are provided so the credit will be awarded by default.

Information Provided by the Developer

Ref	Document
Wat2-01	To Follow



ddp Section: Eco

Ecological Value of Site Eco 1

Credits Awarded	
0	1

Aim

To encourage, wherever possible, development on land that already has a limited value to wildlife and discourage the development of ecologically valuable sites.

Credit Requirements

The development must meet the following criteria.

Credits		
1	For developing land of inherently low ecological value and demonstrating this by either: meeting the defined criteria for low ecological value (using the EcoHomes checklist)	
	OR	
	providing an ecological report of the site prepared by a Suitably Qualified Ecologist, which should state that the land being developed:	
	- is of low or insignificant ecological value	
	OR	
	 will remain undisturbed by the construction works in areas of ecological value. 	

Development Features Relating to Credit

The site has been defined as having a low ecological value as defined by the EcoHomes checklist.



Eco 2 Ecological Enhancement

Credits Awarded	
0	1

Aim

To enhance the ecological value of a site.

Credit Requirements

The development must meet the following criteria.

Credits	
1	Where ecological features have been designed-in for positive enhancement of the site ecology in accordance with advice from a 'Suitably Qualified Ecologist'.

Development Features Relating to Credit

This Credit is not being sought.



ddp Section: Eco

Eco 3 **Protection of Ecological Features**

Credits Awarded	
0	1

Aim

To protect existing ecological features from substantial damage during the clearing of the site and the completion of construction works.

Credit Requirements

The development must meet the following criteria.

Credits	
1	All existing features of ecological value are maintained and adequately protected from damage during site preparation and construction works.

Development Features Relating to Credit

The site has been defined as having a low ecological value as defined by the EcoHomes checklist, therefore the credit can be awarded by default.



Eco 4 Change of Ecological Value of Site

Credits Awar	rded			
0	1	2	3	4

Aim

The aim of this credit is to reward steps taken to minimise reductions in ecological value and to encourage an improvement.

Credit Requirements

The development must meet the following criteria.

Credits	
1	For a change of ecological value of between –9 and –3 natural species.
2	For a change of ecological value of between -3 and +3 natural species.
3	For a change of ecological value of between +3 and +9 natural species.
4	For a change of ecological value of greater than +9 natural species.

Development Features Relating to Credit

There will be no change in ecological value of the site therefore 2 credits can be awarded.



Section: Eco

Eco 5 Building Footprint

Credits Awarded		
0	1	2

Aim

To promote the most efficient use of a building's footprint by ensuring land and material use is maximised for every dwelling on a development.

Credit Requirements

Credits	
1	Where the total combined Floor Area: Footprint ratio for all houses on the site is greater than 2.5:1. AND Where the total combined Floor Area: Footprint ratio for all flats on the site is greater than 3.5:1.
2	Where the total combined Floor Area: Footprint ratio for all dwellings on the site is greater than 3.5:1.

Development Features Relating to Credit

The development site consists of basement, ground, first, second and third floors. The total combined Floor Area: Footprint ratio for all dwellings on the site is greater than 3.5:1.



Hea 1 Daylighting

0	1	2	3

Aim

To improve the quality of life in homes through good daylighting, and to reduce the need for energy to light a home.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	Kitchen to achieve a minimum average daylight factor of at least 2%*.
1	Living rooms, dining rooms and studies to achieve a minimum average daylight factor of at least 1.5%*.
1	Kitchens, living rooms, dining rooms and studies to be designed to have a view of the sky*.
	* calculated according to the method set out below. Targets based on British Standard BS 8206: Part 2 recommendations.

Development Features Relating to Credit

As the kitchen is recessed at the back of the dining room, the kitchen daylighting factor cannot be achieved.

The daylighting factor for the living room, dining room and the study can be achieved.

As this site is in a built up area surrounded by tall buildings and the flat is on the basement and ground floor, the credit for the view of sky in close proximity to the windows in the living room or kitchen windows is not achieved.

Information Provided by the Developer

Ref	Document
Hea1-01	To Follow



Section: Hea

Hea 2 **Sound Insulation**

Credits Award	ded			
0	1	2	3	4

Aim

To ensure the provision of sound insulation and reduce the likelihood of noise complaints.

Credit Requirements

Credits	
1	A commitment to carry out a programme of pre-completion testing based on the frequency listed in <i>Table 2, column A</i> (Supplementary Guidance A: Frequency of Testing Required) for every group or sub-group of houses or flats* AND
	 A commitment to achieve the performance standards set out in the Building Regulations for England and Wales, Approved Document E (2003 Edition).
2	• A commitment to carry out a programme of pre-completion testing based on the frequency listed in <i>Table 2, column B</i> (Supplementary Guidance A: Frequency of Testing Required) for every group or sub-group of houses or flats*
	AND
	 A commitment to achieve the performance standards set out in the Building Regulations for England and Wales, Approved Document E (2003 Edition)
3	A commitment to carry out a programme of pre-completion testing based on the frequency listed in <i>Table 2, column B</i> (Supplementary Guidance A: Frequency of Testing Required) for every group or sub-group of houses or flats* AND
	 A commitment to achieve airborne sound insulation values that are at least 3dB higher, and impact sound insulation values that are at least 3dB lower, than the performance standards set out in the Building Regulations for England and Wales, Approved Document E (2003 Edition).
4	A commitment to carry out a programme of pre-completion testing based on the frequency listed in <i>Table 2, column B</i> (Supplementary Guidance A: Frequency of Testing Required) for every group or sub-group of houses or flats*
	AND
	A commitment to achieve airborne sound insulation values that are at least 5dB higher, and impact sound insulation values that are at least 5dB lower, than the performance standards set out in the Building Regulations for England and Wales, Approved Document E (2003 Edition).
	and trained, rippiered became to (2000 Edition).

^{*} For the definition of groups and sub-groups, see Section 1 in Approved Document E (2003 Edition) of the Building Regulations.



Development Features Relating to Credit

The dwelling is a flat on the basement and ground floors.

The Client has made a commitment to carry out a programme of pre-completion testing based on the frequency listed in Table 2, column B (Supplementary Guidance A: Frequency of Testing Required) for every group or sub-group of houses or flats.

In addition, there is a commitment to achieve the performance standards set out in the Building Regulations for England and Wales, Approved Document E.

Information Provided by the Developer

Ref	Document
Hea2-01	To Follow

EcoHomes (1) ddp Section: Hea

Private Space Hea 3

Credits Awarded				
0 1				

Aim

To improve the occupiers' quality of life by providing a private outdoor space.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	For the provision of outside space that is at least partially private.

Development Features Relating to Credit

Credit not sought.



Man 1 Home User Guide

Credits Awarded			
0	1	2	3

Aim

To recognise and encourage the provision of guidance to enable home owners/occupiers to understand and operate their home efficiently, in line with current good practice and in the manner envisaged by the developer, and to make best use of local facilities

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
2	Where evidence can be provided to demonstrate that there is provision, in each home, of a simple guide that covers information relevant to the 'non-technical' tenant/occupant on the operation and environmental performance of their home.
1	Where evidence can be provided to demonstrate that the guide also covers information relating to the site and its surroundings.

Development Features Relating to Credit

The Client has confirmed that a simple guide will be produced for the dwelling and this shall be produced in accordance with the requirements of EcoHomes 2006 and the Building Regulations.

This will cover information relevant to the 'non-technical' occupier on the operation and environmental performance of the home and information relating to the site and the home surroundings.

Explanation of Assessment

The Clients confirmation includes a list of the contents that will be included in the Home User Guide and these comply with the requirements of this credit for both the site and the surrounding area.

Information Provided by the Developer

Ref	Document
Man1-01	To Follow



Man 2 Considerate Constructors

Credits Awarded			
0	1	2	

Aim

To recognise and encourage construction sites managed in an environmentally and socially considerate and accountable manner.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	Where evidence can be provided to demonstrate that there is a commitment to comply with best practice site management principles.
2	Where evidence provided demonstrates that there is a commitment to go significantly beyond best practice site management principles.

Development Features Relating to Credit

The Client will employ a Contractor for the construction works and ensure that the Contractor goes beyond best practise for site management principles.

Information Provided by the Developer

Ref	Document
Man2-01	To Follow



Man 3 Construction Site Impacts

Credits Awarded			
0	1	2	3

Aim

To recognise and encourage construction sites managed in an environmentally sound manner in terms of resource use, energy consumption, waste management and pollution.

Credit Requirements

All dwellings in the development must meet the following criteria.

Credits	
1	Where evidence provided demonstrates that there is a commitment and a strategy to monitor, sort and recycle construction waste on site. AND
1	Where evidence provided demonstrates that 2 or more of items a-f, listed below are achieved. OR
2	Where evidence provided demonstrates that 4 or more of items a-f, listed below are achieved.
	monitor and report CO ₂ or energy arising from site activities; monitor and report CO ₂ or energy arising from transport to and from site; monitor and report on water consumption from site activities; adopt best practice policies in respect of air (dust) pollution arising from the site; adopt best practice policies in respect of water (ground and surface) pollution occurring on the site. 80% of site timber is reclaimed, reused or responsibly sourced.

Development Features Relating to Credit

The Client will ensure that Contractor used for the construction works will make a commitment and put a strategy in place to monitor, sort and recycle construction waste on site and to demonstrate that 4 of the items in a-f above are achieved.

Information Provided by the Developer

Ref	Document
Man3-01	To Follow



Man 4 Security

Credits Awarded			
0	1	2	

Aim

To encourage the design of developments where people feel safe and secure; where crime and disorder, or the fear of crime, does not undermine quality of life or community cohesion.

Credit Requirements

Credits	
1	A commitment to work with an Architectural Liaison Officer and to achieve the Secured by Design award.
1	Security standards for external doors and windows to achieve a minimum of either: • LPS1175 SR1 (All doors and windows)

Development Features Relating to Credit

An Architectural Liaison Officer will be appointed to advise on security issues and to ensure that the development will achieve the 'Secure by Design' Award.

The design features will include all external doors and windows will be in line with LPS1175 SR1.

Explanation of Assessment

The Client states a commitment to work with an Architectural Liaison Officer and achieve the Secured by Design Award.

The Client has confirmed that the external doors and windows shall comply with the requirements for this credit

Information Provided by the Developer

Ref	Document
Man4-01	To Follow



Information about EcoHomes

Background

EcoHomes was developed and launched in April 2000 by the Centre for Sustainable Construction at BRE with support from NHBC (National House Builders Council). Its development was steered by a committee of industry representatives and environmental experts.

EcoHomes is an independent, transparent, environmental labelling scheme for housing. The scheme covers houses and apartments, either at the design stage or as part of major refurbishment.

EcoHomes assesses the environmental quality of a development by considering the broad concerns of climate change, use of resources, pollution, and impacts on biodiversity. These concerns are balanced against the need for a high quality internal environment.

Issues

The issues assessed by EcoHomes are grouped into the seven category areas listed below:

- Energy: Operational energy and CO₂
- **Transport**: Location issues related to transport
- **Pollution:** Air and water pollution (excluding CO₂)
- Materials: Environmental implications of materials selection, recyclable materials
- Water: Consumption issues
- Ecology and Land Use: Ecological value of the site, planting and landscaping
- Health and Well-Being: Internal and external issues relating to health and comfort
- **Management**: Construction site impacts and home security issues.

Scoring System

Credits are available for each issue meeting the specified levels of performance. The number of credits available in each category does not necessarily reflect the relative importance of the issues being assessed. Before the final score is calculated each of the scores in the eight category areas have a weighting factor applied before the final score is calculated. This is shown in Appendix 1.

The EcoHomes Scale runs from 'PASS' to 'EXCELLENT' as depicted below.

The final rating is determined by the EcoHomes assessor and quality assured and certified by BRE.

PASS	Most developments should be able to achieve this with minor design/ specification changes at a minimal additional cost.
GOOD	The developer has been able to demonstrate good practice in most areas.
VERY GOOD	Developments pushing forward the boundaries of environmental performance will achieve this.
EXCELLENT	Developments demonstrating exemplary environmental performance across the full range of issues will achieve this.



DISCLAIMER AND COPYRIGHT STATEMENTS

Disclaimer

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.

Copyright

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





Appendix 1: Summary Score Sheet

EcoHomes 2006 Summary Score sheet

Site: 65 Hemstal Road

						Score assessment				
			Score	Credits available	Sub-total	Credits available	% achieved	Weighting factor	Credits Score	
Energy	Ene 1	Dwelling Emission Rate	10	15	18	24	75.0	0.22	16.50	
	Ene 2	Building fabric	2	2						
	Ene 3	Drying space	1	1						
	Ene 4	EcoLabelled goods	1	2						
	Ene 5	Internal Lighting	2	2						
	Ene 6	External lighting	2	2						
Transport	Tra 1	Public transport	2	2	6	8	75.0	0.08	6.00	
	Tra 2	Cycle storage	0	2						
	Tra 3	Local amenities	3	3						
	Tra 4	Home office	1	1						
Polution	Pol 1	Insulant GWP	1	1	9	11	81.8	0.1	8.18	
	Pol 2	NO _x Emissions	3	3						
	Pol 3	Reduction of Surface Runoff	0	2						
	Pol 4	Renewable and Low Emission	3	3						
	Pol 5	Flood Risk	2	2						
Materials	Mat 1	Environmental Impact of Mater	0	16	6	31	19.4	0.14	2.71	
		Roof	0	3						
		External Walls	0	3						
		Internal Walls	0	3						
		Floors - upper and ground	0	3						
		Windows	0	2						
		External surfacing	0	1						
		Boundary Protection	0	1						
	Mat 2	Responsible Sourcing of Mater	0	6						
	Mat 3	Responsible Sourcing of Mater	0	3						
	Mat 4	Recycling Facilities	6	6						
Water	Wat 1	Internal Potable Water	3	5	4	6	66.7	0.1	6.67	
	Wat 2	External Potable Water	1	1						
	Eco 1	Ecological Value of Site	1	1	6	9	66.7	0.12	8.00	
Land Use and Ecology	Eco 2	Ecological Enhancement	0	1						
0,	Eco 3	Protection of Ecolgoical Featur	1	1						
	Eco 4	Change of Ecological Value of	2	4						
	Eco 5	Building footprint	2	2						
	Hea 1	Daylighting	1	3	3	8	37.5	0.14	5.25	
Health and Wellbeing	Hea 2	Sound Insulation	2	4						
	Hea 3	Private space	0	1						
Management	Man 1	Home User Guide	3	3	10	10	100.0	0.1	10.00	
	Man 2	Considerate Constructors	2	2						
	Man 3	Construction Site Impacts	3	3						
	Man 4	Security	2	2						
		,			Total Available	107		Score:	63.31 Very Goo	

	Haling	Score
Based on: EcoHomes 2006	Pass	36
Sheet Version: 1.2	Good	48
Version Date: 16/10/2006	Very Good	58
	Excellent	70