

Doherty Design & Planning Limited



REPORT ON THE CODE FOR SUSTAINABLE HOMES PRE-ASSESSMENT

Site
15A PARLIAMENT HILL, LONDON NW4 2SY

Proposal

ERECTION OF ONE RESIDENTIAL DWELLING

Applicant
WOOLLACOTT GILMARTIN ARCHITECTS

Ref. E217 - CSHPA - 00

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1.0 INTRODUCTION

- a) Doherty Design and Planning Limited have been instructed by Woollacott Gilmartin Architects to undertake the Code for Sustainable Homes Pre-Assessment for the proposed development of a single new dwelling at 15A Parliament Hill, London, NW3 2SY.
- b) The aim of this review is to give a brief description of the Code for Sustainable Homes Assessment, assess the current specification for the construction of the dwelling and highlight areas of improvement to enable Code Level 3 to be achieved.
- c) In order to carry out the review, an initial review was held with Woollacott Gilmartin Architects to gain an understanding of the current specification. In some areas where the specification has not yet been defined, it is necessary to make assumptions that will need to be confirmed prior to the Code Assessment being submitted to the BRE. These assumptions, together with the required specification, have been clearly stated in Appendix A.
- d) There is a planning obligation through the Section 106 agreement that at least 50% of the available credits in each of the Energy, Water and Materials sections are obtained.

2.0 INTRODUCTION TO CODE FOR SUSTAINABLE HOMES

- a) The Code for Sustainable Homes (the Code) is an environmental assessment method for rating and certifying the performance of new homes. It is a national standard for use in the design and construction of new homes with a view to encouraging continuous improvements in sustainable home building.
- b) The Code is based on EcoHomes and was launched in December 2006 and became operational in England in April 2007.
- c) From 1st May 2008 it is mandatory for a Code Sustainability Certificate or nil rated Certificate (where an assessments has not taken place) to be included in the information provided to prospective purchasers of properties in England. The Code has been revised in November 2010 and this report is based on the November 2010 version.
- d) The Code covers nine categories of sustainable design which are as follows:
 - Energy and CO₂ emissions
 - Water
 - Materials
 - Surface Water Run-off
 - Waste
 - Pollution
 - Health and Wellbeing
 - Management
 - Ecology
- e) Each category includes a number of environmental issues, which are assessed against performance targets for which credits are awarded. The performance targets are more demanding than the minimum standard needed to satisfy Building Regulations or other legislation. They represent good or best practise, are technically feasible and can be delivered by the building industry.



- f) There are mandatory minimum performance standards set for some of the above issues. Four of these have a single mandatory requirement, whatever Code level is sought, however credits are not awarded for these issues.
- g) If the mandatory minimum performance standard is met for these four issues, three further mandatory issues need to be considered. For two of these, credits are awarded for every level of achievement recognised within the Code, and minimum mandatory standards increase with increasing rating levels.
- h) Tables 1.2 and 1.3 below, taken from the Code Technical Guide, illustrate how, for the creditable mandatory issues, the minimum mandatory standards increase with increasing rating levels.

For CO2 emissions there are increased mandatory minimum standards for each increase in Code Level.

Table 1.2: Code Levels for Mandatory Minimum Standards in CO ₂ Emissions (Ene 1)					
Code Level	Minimum Percentage Improvement in Dwelling Emission Rate over Target Emission Rate				
Level 1 (★)	0% (Compliance with Part L 2010 only is required)				
Level 2 (★★)	0% (Compliance with Part L 2010 only is required)				
Level 3 (★★★)	0% (Compliance with Part L 2010 only is required)				
Level 4 (★★★★)	25%				
Level 5 (★★★★)	100%				
Level 6 (★★★★★)	Net Zero CO ₂ Emissions				

For Indoor water use there are increased mandatory minimum standards at Code levels 1, 3 and 5.

Table 1.3: Code Levels for Mandatory Maximum Standards in Indoor Water Consumption				
Code Level	Maximum Indoor Water Consumption in Litres per Person per Day			
Level 1 (★)	120			
Level 2 (★★)	120			
Level 3 (★★★)	105			
Level 4 (★★★★)	105			
Level 5 (★★★★)	80			
Level 6 (★★★★★)	80			

- i) In addition to the mandatory standards, each design category scores a number of percentage points. Weighting factors are applied to each category. These have been derived from extensive studies involving a wide range of stakeholders who were asked to rank a range of environmental impacts. The weighting factor is applied to the percentage points which results in the credit for that issue.
- j) Table 1.4 shows how weightings are applied across all Code categories of environmental impact to adjust the relative values of credits within different categories. Within each category, credits are awarded for achieving specified degrees of performance. The weighting factors show the contribution made by each category to the total performance recognised and rewarded by the Code. The total available contribution is expressed as 100 per cent. The weighting of each category is expressed as a fraction of this, such that the sum of all the category contributions equals 100 per cent.

Table 1.4: Total Credits Available, Weighting Factors and Points						
Categories of Environmental Impact	Total Credits in each Category	Weighting Factor (% points contribution)	Approximate Weighted Value of each Credit			
Category 1 Energy and CO ₂ Emissions	31	36.4%	1.17			
Category 2 Water	6	9.0%	1.50			
Category 3 Materials	24	7.2%	0.30			
Category 4 Surface Water Run-off	4	2.2%	0.55			
Category 5 Waste	8	6.4%	0.80			
Category 6 Pollution	4	2.8%	0.70			
Category 7 Health and Well-being	12	14.0%	1.17			
Category 8 Management	9	10.0%	1.11			
Category 9 Ecology	9	12.0%	1.33			
Total	-	100.0%	=			



- K) The total number of credits establishes the Level or Rating for the dwelling. The certificate illustrates the rating achieved with a row of blue stars, one for each level. Where an assessment has taken place and no rating is achieved, the certificate states that no blue stars have been awarded.
- I) Table 1.6 below, taken from the Code Technical Guide, shows the relationship between the Total percentage points score and the Code Level.

Table 1.6: Relationship Between Total Percentage Points Score and Code Level						
Total Percentage Points Score (equal to or greater than)	Code Levels					
36 Points	Level 1 (★)					
48 Points	Level 2 (★★)					
57 Points	Level 3 (★★★)					
68 Points	Level 4 (★★★)					
84 Points	Level 5 (★★★★)					
90 Points	Level 6 (★★★★★)					

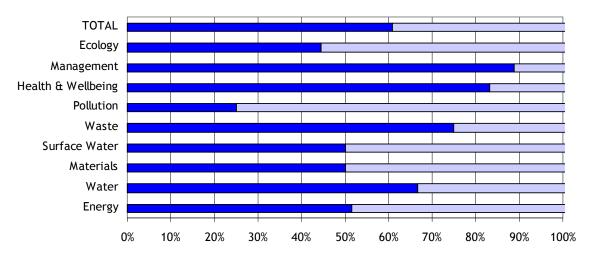
Disclaimer - The assessor (for itself and as agent for its staff) and its staff shall not be liable whether in Contract or in Tort or otherwise for any loss or damage sustained as a result of using or relying on the information contained in this report or the final certificate from BRE that it is based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

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Tables used in this document are taken from The Code for Sustainable Homes Technical Guide Nov 2010.

3.0 IMPROVEMENTS

- a) A Pre Assessment has been carried out for the proposed dwelling and this demonstrates that a Code Level 3 can be achieved if the requirements set out in Appendix A and B are implemented and all the evidence identified in Appendix C is gathered.
- b) The Assessment shows that the dwelling achieves approximate 60.85% of the Credits. However, during detailed design and construction, care must be taken as it is very easy to lose credits, especially by not gathering and maintaining the evidence. During the project, a natural slippage may occur and it is likely to be in the region of 3-6 credits, therefore, the current of 3.85 credit margin may not be adequate.
- c) This report will try to identify any improvements that can be incorporated into all the dwelling to improve their score. Graph 1 shows a break down of the credits for each category and highlights the predicted percentage of their maximum.



Graph 1 - Predicted Percentage of credits achievable - Total and by Category

- d) It must also be remembered that the category's are weighted, as shown in Table 1.4 above and therefore it is not just a simple matter of targeting the lower scored categories, for example materials only achieves 0.3 of a credit.
- e) In order to improve the rating, the more heavily weighted categories should be targeted first, e.g. Energy, Ecology, Water and Health & Well Being.



f) The dwelling currently has a score of 60.85. The table below shows some possible examples that could be incorporated, together with the revised Credit score if only the individual item is incorporated.

Category	Title	Improvement	New Score
Ema 4	Dwelling Emission	Improve the Insulation, Air tightness etc to achieve a greater reduction in CO2 emissions	
Ene 1	Rate	8% improvement – 1 Credits 16% improvement – 2 Credits 25% improvement – 3 Credits 36% improvement – 4 Credits	Current 62.03 63.20 64.37
Ene 2	Fabric Energy	Improve the fabric energy efficiency performance thus future proofing reduction in CO2 for the life of the dwelling	
	Efficiency	≤ 60 – 3 Credits ≤ 55 – 4 Credits ≤ 52 – 5 Credits	Current 62.03 63.20
Wat 1	Indoor Water Use	Reduce the consumption of potable water in the home by specifying lower water use fittings/appliances or use rainwater harvesting	
		≤ 105 l/p/ day – 3 Credits ≤ 90 l/p/ day – 4 Credits	Current 62.35
Sur`	Management of Surface Water	Ensure no surface water run-off for the first 5mm of rainfall – 1 credit	61.40
Our	Run-off	Ensure the run-off from hard surfaces receive appropriate treatment – 2 credits	61.95
Was 2	Construction Site Waste	A Site Waste Management Plan is currently being provided, However, if this included procedures to divert waste from landfill, extra credits can be awarded	
	Management	50% – 1 Credit 85% – 2 Credits	61.65 62.45
Hea 2	Sound Insulation	Improve the Airborne sound insulation to 8dB higher than building regulations and the Impact sound insulation to 8dB lower than building regulations	62.02
Man 2	Considerate Constructors Scheme	Go beyond best practice site management principles using Considerate Constructors Scheme and achieve a score over 32 and gain an extra Credit	61.97
Eco 4	Change in Ecological Value of	Increase the number of species per hectare to create a Minor enhancement (between +3 and +9 new species per hectare)	62.18
ECU 4	Site	Increase the number of species per hectare to create a Major enhancement (greater than 9 new species per hectare)	63.52

4.0 CONCLUSION

- a) The report has given a brief description of the Code for Sustainable Homes, assessed the current specification that is to be used for the construction of the new dwelling at 15A Parliament Hill, London, NW3 2SY and highlighted areas of improvement to ensure Code Level 3 to be achieved.
- b) Assumptions have been made when the current specification failed to provide adequate information. These assumptions have been clearly stated in Appendix A. With regard to Ene1 and Ene2, the SAP assessments have not been undertaken at this stage as there is insufficient detailed design, however, once the working drawings are produced, these will need to be revisited.
- c) The Code for Sustainable Homes has a number of mandatory elements that must be achieved to successfully acquire a code rating. During this review, it is assumed that the mandatory elements will be achieved. If any of the mandatory elements are not achieved, a nil rating is all that can be provided.
- d) The assessment has highlighted areas where improvements can be made in order to achieve Code Level 3. If the current specification is incorporated and the current credits achieved, the Pre Assessment shows that a rating of for the dwelling is 60.85 or Level 3 can be possible. However, during detailed design and construction, care must be taken as it is very easy to lose credits, especially by not gathering and maintaining the evidence.
- e) In order to satisfy the planning obligation that at least 50% of the credits in each of the Energy, Water and Materials sections are obtained, care was taken in assessing these categories. Graph 1 above demonstrates that at least 50% of the available credits in each of these categories are achieved.
- f) It is important that the Client and Contractor understand the principles of the Code Assessment and they assist in gathering and recording the evidence.
- g) Specialist consultants are be required in order to achieve some the credits targeted and these include an ecologist and hydrological engineer. These must be suitably qualified to the requirements set out by the BRE.

Appendix A – Assessment Comments

	Description	Mandatory	Assumptions to Achieve Level 4	Credits Awarded	Comments	Max Credits
Categor	1: Energy and Carbon D Dwelling Emission Rate		The DER is 8% better than	1 1	The U Values of the various constructions could be improved by adding	10
	Dwelling Emission Hate	163	TER		extra insulation and changing the construction	10
					More efficient heating system or better controls	
					Improved Air Permeability	
					Incorporate renewable technology	
					Incorporate secondary heating source	
ne 2	Fabric Energy	Yes	The FEE better than	3	This should be provided by SAP Assessor. 4 Credits are awarded if	9
	Efficiency		60kWhr/m ² /yr		FEE is less than or equal to 55 and 5 Credits are awarded if FEE is less than or equal to 52 and follows a sliding scale	
					than or equal to 32 and follows a shaling scale	
ne 3	Energy Display Devices	No	Electric and primary fuel	2	For 1 Credit, primary heating fuel displayed or electricity displayed and 2	2
	3, 1, 1,		monitors are provided		Credits can be awarded if both are displayed. If primary heating is feuled	
					by electricty and the electrity is displayed, 2 credits can be awarded.	
Ene 4	Drying Space	No	Rotary dryer to be provided in	1	For 3+ bed dwelllings, 6+m of drying line are required. Permenant	1
			the garden		posts/fixingg required.	
					Note - Rotary dryer has approximately 30m of line	
ne 5	Energy Labelled White	No	A+, A and B rated appliances	2	1 Credit if Fridge & Freezer or Fridge Freezer - A+ rated	2
	goods		and EU Energy Efficiency		1 Credit if Washing Machine & Dishwasher - A rated	
			Information is being provided		AND EITHER washer dryer or tumbler dryer - B rated OR washer dryer or tumble dryer is not provided but information the EU	
					Labelling Scheme is provided	
ne 6	External Lighting	No	Space lighting meets	1	Space Lighting - 1 Credit where all external space lighting is provided by	2
			specification		dedicated energy efficient fittings	
			L	1		
			Compliant security lighting is	1	Security Lighting - 1 Credit where security light fittings are design for	
			provided	1	energy efficiency and are adequately controlled. All burglar security lights must have a maximum wattage of 150W,	
				1	Movement detecting controls devices and daylight cut off sensors	
					,	
					All other security lighting to be dedicated energy efficient fittings and	
					fitted with daylight cut off sensors.	
				1	It No Security lighting provided, security lighting credit can be awarded	
no 7	Low or Zoro Corbon	Ne	Air Course Heat numer to	_	by default	2
ne 7	Low or Zero Carbon Technology	No	Air Source Heat pump to provide heating and hot water	2	Detailed calculations to demonstrate a 10% reduction for 1 credit and 15% reduction for 2 Credits	2
	,		p			
ne 8	Cycle Storage	No	Secure storage is being	2	1 Credit - 2/3 bed - 1 cycle & 4+ bed - 2 cycles. 2	2
			provided provided for 4 cycles		Credits - 2/3 bed - 2 cycles & 4+ bed - 4 cycles.	
			and the other criteria is met		Adequately sized - 2 cycles 2m long x 1.5m wide. Cycles must be able	
					to be removed independently. If in a shed, 1m2 is also required for	
					garden tools and must have concrete base and secure fixings. If in	
					garage, car must fit as well as cycles.	
			Storage could be provided at		Convenient access - Easy and direct access from/to dwelling and public	
			entrance level		right of way, not through dwelling	
					Secure entrance lock - Permanent lock (not padlock) that conforms to	
					BS3621:2004	
					Secure fixing - a steel fixing set in concrete which allows both wheel and frame to be locked securely, e.g. Sheffield type frame.	
					Secure storage - In dwellings - for fully enclosed solid structures - secure	
					entrance lock or secure fixing; and for non solid enclosed structure -	1
					secure entrance lock and secure fixing: for non fully enclosed structures	
					(three walls and roof) - secure fixings required.	
				1	Wastharasaf adaquata avalentias formalismost and a second	
				1	Weatherproof = adequate protection from elements - normally at least three walls and a roof	
ne 9	Home Office	No	Study shall be adequately	1	This space must have at least 1.8m wall length, 2 double sockets, two	1
-	*		sized to accommodate	1	telephone lines (1 phone and broadband), window (daylight factor 1.5%)	
			bedroom and office and	1	and adequate ventilation (openable window minimum 0.5m2 opening.	
			include all necessary requirements			
atencr	/ 2: Water				<u>I</u>	<u> </u>
Vat 1	Indoor Water Use	Yes	Calculations to show a flow	3	Water Calculator tool (Wat 1) is used to calculate the water	5
		-	rate of less than 105l/p/day		consumption for the dwelling.	
			In order to achieve this level.	1	If appliance as fitting is excelled the	
			In order to achieve this level, Assume that -		If appliance or fitting is specified the water consumption is used. If not, default figures are used, for example	
			4/2 I dual flush WCs	1	- Regular taps for sink or basin - 12l/min	
			5 I/min taps WHB	1	- Hegular taps for sink or basin - 12//min - High flow shower - 14 l/min	
			6 I/min sink	ı	- Standard bath - 225 I capacity to overflow	
			7 I/min shower	1	- Washing machine - 49 l/use	
			110 I bath	ı	- Dishwasher - 13 I/use	
			35 l/cycle WM	1	- WC - 6 I cistern	
			9 l/cycle dishwasher	1	The calculator tool uses standard usage patterns to estimate daily	
				1	consumption. If all default figures are used, the daily consumption	
					To achieve the flow rates stated, flow restrictors would need to be fitted.	
				1	L	
				1	No grey water or rain water is assumed to be used within the dwellings	
Nat 2	External Water Use	No	A correctly specificed water	1	The water butt needs to be on a base, connected to downpipe with	1
rrai 2	LACTION WATER USE	140	butt shall be provided	l '	overflow and removable for cleaning.	l '
			onan bo provided	1	g.	1

Support 2. Milestrate Will Environmental Impact Vision Guide, 19 Search of Modernial Olivery County Count		Description	Mandatory	Assumptions to Achieve Level 4	Credits Awarded	Comments	Max Credits
State of the forces (sport of Manurals o	Category	v 3: Materiale		<u> </u>	Awarded		Orcuita
Max 2 Perportable Students Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on marker also required Not Targeted at the time. Putther information on time		Environmental Impact	Yes	Guide, three elements have been given a rating Windows - A Roof - A Ext Wall - A	12	between A- and D for at least three of the five elements in the building envelope, those being Roof External walls Internal walls (inc separating walls) Upper and ground floors (inc separating walls) Windows Then to achieve between 1 and 15 credits, the Mat 1 Calculator Tools	15
Category 4. Surface Water Run-off Surf 2 Management of Surface Water Run-off Category 4. Surface Water Run-off Surf 2 Management of Surface Water Run-off Surface Water Run-off Surface Water Run-off Water R		of Material - Basic Building Elements		Further information on materials required		Points are awarded where materials used in the key basic building elements are sourced according to the following criteria - Where 80% of the assessed materials in the following building elements are responsibly sourced: - Frame - Ground floor - Upper floors (inc separating floors) - Roof - External walls - Internal walls (inc separating walls) - Foundations/substructures (exc sub base) - Staircase - Additionally 100% of timer in these elements must be sourced legally.	
Sur 1 Surface Water Run-off from development of the met of the surface of the sur		of Material - Finishing Elements		Further information on	0	elements are sourced according to the following criteria - Where 80% of the assessed materials in the following finishing elements are responsibly sourced: - Stair - Window - Upper floors (inc separating floors) - External & internal doors - Skirting - Panelling - Furniture - Fascias	3
Surface Water Run-off from development in the firm dev	- 0 /			Accume Mandatory element is	М	The sim is to decign housing developments which avoid reduce and	
Was1 Storage of non-recyclable waste Yes Mandatory element is met Mandatory element element Mandatory element element Mandatory element elemen		Flood Risk	No	credits Site is in Zone 1 - Low risk of		The mandatory element is to ensure that the Peak Rate of Runoff is no greater for the developed site than it was for the pre-developed site. An allowance for climate change as per PPS25 should be allowed. The Volume of Runoff caused by the development for a 1 in 100 year event of 6 hours, should be reduced using infiltration and/or made available for use in the dwelling as a replacement for potable water use in non-potable applications 2 credits are available for using SUDS to improve the rainwater discharged or for protecting the quality of the receiving waters by ensuring no discharge to the watercourse for rainfall depths of up to 5mm 2 Credits are available for developments situated in Zone 1 - low annual probability of flooding, whilst 1 credit is available for developments situated in Zone 2 and 3 (medium to high annual probability and where mitigation has been incorporated, i.e. finished ground floor of habitable rooms and access routes to ground floor are at least 600nm above	2
recyclable waste & recyclable waste A Local Authority Collection scheme, at least fortnightly, will be provided The recyclable waste is sorted after collection A combination of internal storage capacity provided in an adequate internal space with a Local Authority scheme. A single 30 litre storage bin with adequate internal space is provided and the external storage has a min total capacity of 170 I, within 30m of the door. Was 2 Construction Site Was 2 Mandatory element is met Waste Management Waste Management Waste Management Waste Management Waste Management No targets are being set to sort and divert waste from landfill waste from landfill Was 3 Compositing No Home Composting bin to be I Either individual or communal composting facilities can be provided. All			Vaa	Mandatan, alament is mot		The anges ellegated for mosts staying should be able to accommodate	M
Waste Management SWMP is being developed and implemented SWMP is being developed and implemented No targets are being set to sort and divert waste from landfill and divert waste from landfill The SWMP must include procedures and commitments for reducing waste generated on site in accordance with best practise and the defined waste groups The SWMP must include procedures and commitments to sort and divert waste from landfill (reuse, recycle, compost or otherwise recover) according to the defined waste groups. This must be preformed either on site or through a licensed external contractor. Procedure to divert and sort 50% of waster get 1 Credits and 85% of waste for 2 Credits Was 3 Composting No Home Composting bin to be 1 Either individual or communal composting facilities can be provided. All		recyclable waste &		A Local Authority	.41	containers with at least the minimum volume recommended by BS5906 based on a maximum collection of once per week. This is 100 litres for a single bedroom, with a further 70 litres for each	191
SWMP is being developed and implemented No targets are being set to sort and divert waste from landfill and divert waste from landfill according to the defined waste groups. The SWMP must include procedures and commitments to sort and divert waste from landfill (reuse, recycle, compost or otherwise recover) according to the defined waste groups. This must be preformed either on site or through a licensed external contractor. Procedure to divert and sort 50% of waster get 1 Credits and 85% of waste for 2 Credits Was 3 Composting No Home Composting bin to be 1 Either individual or communal composting facilities can be provided. All				fortnightly, will be provided The recyclable waste is sorted after collection A combination of internal storage capacity provided in an adequate internal space with a Local Authority scheme. A single 30 litre storage bin with adequate internal space is provided and the external storage has a min total capacity of 170 I, within 30m of		All containers must be accessible to disabled people and sited on hard, level surface A local Authority recycling scheme offering containers equal or greater than this volume would meet the requirement, providing outdoor space	4
	Was 2		Yes	fortnightly, will be provided The recyclable waste is sorted after collection A combination of internal storage capacity provided in an adequate internal space with a Local Authority scheme. A single 30 litre storage bin with adequate internal space is provided and the external storage has a min total capacity of 170 l, within 30m of the door.		All containers must be accessible to disabled people and sited on hard, level surface A local Authority recycling scheme offering containers equal or greater than this volume would meet the requirement, providing outdoor space is allocated to them. A Site Waste Management Plan must be developed and implemented,	4 M
have an information leaflet		Waste Management		fortnightly, will be provided The recyclable waste is sorted after collection A combination of internal storage capacity provided in an adequate internal space with a Local Authority scheme. A single 30 litre storage bin with adequate internal space is provided and the external storage has a min total capacity of 170 I, within 30m of the door. Mandatory element is met SWMP is being developed and implemented No targets are being set to sort and divert waste from landfill	M 1	All containers must be accessible to disabled people and sited on hard, level surface A local Authority recycling scheme offering containers equal or greater than this volume would meet the requirement, providing outdoor space is allocated to them. A Site Waste Management Plan must be developed and implemented, including monitoring and reporting the waste generated. The SWMP must include procedures and commitments for reducing waste generated on site in accordance with best practise and the defined waste groups. The SWMP must include procedures and commitments to sort and divert waste from landfill (reuse, recycle, compost or otherwise recover) according to the defined waste groups. This must be preformed either on site or through a licensed external contractor. Procedure to divert and sort 50% of waster get 1 Credits and 85% of waste for 2 Credits	M 1 1 1

	Description	Mandatory	Assumptions to Achieve Level 4	Credits Awarded	Comments	Max Credits
Category Pol 1	6: Pollution	No	IAll ineculation or -t1-1-1-		Including years (including left access) will find years and and	-
P01 1	Global Warming Potential of Insulants	No	All insulating materials in elements have a GWP less than 5	1	Including roofs (including loft access), walls (internal and external, including acoustic insulation and lintels), all ground and upper floors, hot water cylinders, pipe, cold water tanks and external doors	1
Pol 2	NOx Emissions	No	Air Source Heat pump to provide heating and hot water, therefore mains electricity is being used, with Nox emissions of approximately 1200mg/kWh	0	A boiler with less than 100mg/kWh would get 1 credit, under 70mg/kWh gets 2 credits and less than 40mg/kWh gets 3 credits.	3
	7: Health & Wellbeing					
Hea 1	Daylighting	No	Kitchen achieves daylight factor of at least 2% Living room and Home Office achieves daylight factor of at least 1.5% Calculations are required to show that view of sky is achieved for all assessed rooms	1	The average daylight factor, position of no-sky line and the percentage of working plane that receives direct sun light calculations need to be carried out 1 Credit if kitchen achieves a minimum average daylight factor of at least 2% - Calculations are required to prove this. 1 Credit all living and dining rooms and studies achieve a daylight factor of at least 1.5% - Calculations are required to prove this. 1 Credit if 80% of the working plane in each kitchen, living room ,dinning room and study receive direct light from the sky - Calculations are required to prove this.	3
Hea 2	Sound Insulation Private Space	No No	Detached properties will achieve 4 credits Assume airbourne sound insulation is 5dB better & impact sound insulation is 5db lower Ample private space is being provided	3	1 Credit where the airbourne sound insulation values are at least 3dB higher and the impact sound insulation values are at least 3dB lower than the performance standards of the Bldg Regs 3 Credit where the airbourne sound insulation values are at least 5dB higher and the impact sound insulation values are at least 5dB lower than the performance standards of the Bdg Regs 4 Credit where the airbourne sound insulation values are at least 8dB higher and the impact sound insulation values are at least 8dB lower than the performance standards of the Bdg Regs Where outdoor space has been provided that is a minimum size that allows all occupants to sit outside, allows easy access to all occupants, including wheelchairs and accessible only to occupants to the	1
Hea 4	Lifetime Homes	Yes (Level 6)	Dwelling has been designed in accordance with the	4	designated dwellings (minimum size 1.5m2/bedroom) All principles of Lifetime Homes have to be compiled with to achieve 4 Credits. A completed Lifetime Homes Checklist Hea4 indicating	4
			requirements of Lifetimes Homes		compliance with all applicable points from 1-16, signed by the developer	
Category Man 1	8: Management Home User Guide	No	Home user guide will be	2	2 Credits for a home user guide, complied using Checklist Man 1 Part 1	3
Man 2	Considerate	No	provided and include operational issues This will include site and surroundings information Contractor to achieve a score	1	together with information that the guide is available in alternative accessible formats. Checklist Man 1 Part 1 includes - Environmental strategy/design features - Energy - Water Use - Recycling and Waste - Sustainable DIY - Emergency Information - Links, References and Further Information - Provision of Information in Alternative Formats 1 Credit where the guide also covers information relating to the site and its surroundings, compiled using Checklist Man 1 Part 2 - Checklist Man 1 Part 2 includes - Recycling and Waste - Sustainable (Urban) Drainage Systems - Public Transport - Local amenities - Responsible Purchasing - Emergency Information - Links, References and Further Information - Where there is a commitment to meet Best Practice under the	2
	Constructors Scheme		between 24 and 31.5		Considerate Constructors Scheme there is 1 Credit, but 2 Credits are given where the commitment is to go significantly beyond Best Practice	
Man 3	Construction Site Impacts	No	Assume 2 of the procedures are implemented, probably the following ones: Monitor, report and set targets for the energy use arising from site activities air (dust) pollution arising from site activities water consumption from site activities 80% of site timber is reclaimed, re-used or responsibly sourced.		When procedures that cover the following items are put in place: - Monitor, report and set targets for the CO2 production or energy use arising from site activities - Monitor and report CO2 or energy use arising from commercial transport to and from site - Monitor, report and set targets for water consumption from site activities - Adopt best practise policies in respect of air (dust) pollution arising from site activities - Adopt best practise policies in respect of water (ground and surface) pollution occurring on the site - 80% of site timber is reclaimed, re-used or responsibly sourced. 1 Credit if 2 or more procedures are adopted and 2 Credits if 4 or more	2
Man 4	Security	No	Police are to be consulted and advice implemented	2	are adopted Where an Architectural Liaison Officer or Crime Prevention Design Advisor from the local police is consulted at the design stage and their recommendations incorporated into the design of the dwellings	2

ddp

Issue ID	Description	Mandatory	Assumptions to Achieve Level 4	Credits Awarded	Comments	Max Credits
Category	9: Ecology					
Eco 1	Ecological Value of Site	No	The site is believed to have an ecological value.	0	Where the development site is confirmed as land of inherently low ecological value, EITHER By meeting the criteria for low ecological value using Checklist Eco 1, OR By being confirmed by a Suitably Qualified Ecologist, OR Where an independent ecological report of the site, prepared by a Suitably Qualified Ecologist, confirms that the construction zone is of low ecological value AND Any land of ecological value outside the construction zone but within the development site remain undisturbed by the construction works	1
Eco 2	Ecological Enhancement	No	Commitment to enhance the ecological value of the site	1	Where a Suitably Qualified Ecologist has been appointed to recommend appropriate ecological features that will positively enhance the ecology of the site, AND Where the developer adopts all key recommendations and 30% of additional recommendations.	1
Eco 3	Protection of Ecological Features	No	Existing ecological features shall be protected	1	Where all existing features of ecological value on the developments site potentially affected by the works are maintained and adequately protected during site clearance, preparation and construction works.	1
Eco 4	Change in Ecological Value of Site		The dwelling will retain the garden spaces and nt is intended to enhance these. However, at this stage it is assumed that there will be a neutral change in ecological value	2	The ecological value before and after development is measured, and the overall change in species per hectare is: - 1 Credit - Minor negative change between -9 and less than or equal to 3 - 2 Credits - Neutral change greater than -3 and less than or equal to +3 - 3 Credits - Minor enhancement greater than 3 and less than or equal to 9 - 4 Credits - Major Enhancement greater than +9	4
Eco 5	Building Footprint	No	The ratio of combined floor area of the dwelling is 2.3, which is not greater than 2.5:1	0	Credit where the Net Internal Floor Area:Net Ground Floor Area ratio is greater than or equal to 3:1 or 2 Credits where the Net Internal Floor Area:Net Ground Floor Area ratio is greater than or equal to 3:1 or 2 Credits where the Net Internal Floor Area:Net Ground Floor Area ratio is greater than or equal to 4:1	2

Appendix B – Pre-Assessment Estimator

Results

Development Name: 15a Parliement Hil

Dwelling Description: 4 Bed Detached Dwelling

Name of Company: W G Architects

Code Assessor's Name: Jason Doherty

Company Address:

Doherty Design and Planning Limited

22 Station Road Manea, Cambridgeshire

Notes/Comments:

Pre-Assessment to Support Planning Application (20th January 2012)

PREDICTED RATING - CODE LEVEL: 3

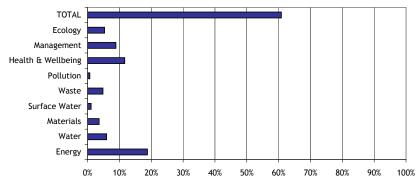
Mandatory Requirements: All Levels

 % Points:
 60.85%
 - Code Level: 3

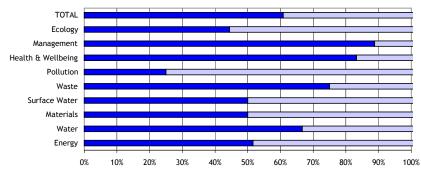
 Breakdown:
 Energy
 - Code Level: 4

 Water
 - Code Level: 4

Graph 1: Predicted contribution of individual sections to the total score and percentage of total achievable score



Graph 2: Predicted percentage of credits achievable: Total and by Category



NOTE: The rating obtained by using this Pre Assessment Estimator is for guidance only. Predicted ratings may differ from those obtained through a formal assessment, which must be carried out by a licensed Code assessor.

CATEGORY	' 1 ENERGY Overall Level: 3		Overall Score	60.85
% of Section	on Credits Predicted: 51.61		Credits	Level
Contributi	on to Overall % Score: 18.78 points		16.0 of 31 Credits	Level 4
Ene 1 Dwelling Emission Rate	Credits are awarded based on the percentage improvement Dwelling Emission Rate (DER) over the Target Emission Rate (calculated using SAP 2009. Minimum standards for each Cocapply. The Code energy calculator can be used to calc predicted score.	(TER) as de level		
	What is the predicted number of credits? OR Are zero net CO ₂ emissions achieved?	o l	1.0 of 10 Credits	Level 3
Ene 2 Fabric Energy Efficiency	Credits are awarded based on the Fabric Energy Ef $(kWh/m^2/yr)$ of the dwelling. Minimum standards apply a levels 5 and 6. The Code energy calculator can be used to calculated score.	at Code		
	Apartments, Mid-terrace OR End terrace, Semi and Detached OR Staggered Mid terrace What is the predicted number of credits? OR Staggered Mid terrace OR Staggered Mid terrace	0	3.0 of 9 Credits	No Level
Ene 3 Energy Display Devices	Credits are awarded where a correctly specified Energy Device is installed monitoring electricity and/or primary heat consumption. Select whether the EDD monitors electricity and/or fuel			
	None Specified Primary Heating only OR Electricity only OR Electricity and primary heating fuel		2 of 2 Credits	-
Issue			Credits	Level
Ene 4 Drying Space	One credit is awarded for the provision of either internal or esecure drying space with posts and footings or fixings cap holding 4m+ of drying line for 1-2 bed dwellings and 6 dwellings with 3 bedrooms or greater. Will drying space meeting the criteria be provided?	able of		
	Yes OR No		1 of 1 Credits	-
Ene 5 Energy Labelled White Goods	Credits are awarded where each dwelling is provided with information about the EU Energy Labelling Scheme, White God ratings ranging from A+ to B or a combination of the paccording to the technical guide.	ods with		
	EU Energy labelling information only A+ rated appliances A+, A and B rated appliances Combination of compliant rated white goods with EU Energy Labelling Scheme		2 of 2 Credits	-

Ene 6 External Lighting	Credits are awarded based on the provision of space lightidedicated energy efficient fittings and security lighting fitting appropriate control gear			
	Space Lighting None provided OR Non Code compliant lighting OR Code compliant lighting ●			
	Security Lighting None provided OR Non Code compliant lighting OR Code compliant lighting and controls		2 of 2 Credits	-
	Dual lamp luminaires Compliant with both above criteria			
	* Statutory safety lighting is not covered by this requirement			<u> </u>
Issue Ene 7	Credits are awarded where there is a 10% or 15% reduction	a in CO	Credits	Level
Low or Zero Carbon Technologies	emissions resulting from the use of low or zero carbon technology	-	2	
	Select % contribution made by low or zero carbon technologies			
	Less than 10% of demand			
	OR 10% of demand or greater		2 of 2 Credits	-
	OR 15% of demand or greater			
Ene 8 Cycle Storage	Credits are awarded where adequate, safe, secure and weath cycle storage is provided according to the Code requirements	-	f	
	Fill in the development details below	\neg		
	Number of bedrooms:			
	Number of cycles stored per dwelling*	0	2 of 2 Credits	-
	* if you have storage for 1 cycle per two dwellings insert 0.5 in numbe stored per dwelling	of cycles	5	
Ene 9 Home Office	A credit is awarded for the provision of a home office. The space and services provided must meet the Code requiremen	,		
	☐ Will there be provision for a Home Office?	_		
	Yes		1 of 1 Credits	_
	OR No			
	1 1	1	1	l

CATEGORY	' 2 WATER Overall Level	: 3	Overall Score	60.85
% of Section	on Credits Predicted: 66.66		Credits	Level
Contributi	on to Overall Score: 6.00 points		4 of 6 Credits	Level 4
Wat 1 Indoor Water Use	Credits are awarded based on the predicted average water consumption, calculated using the Code Water Tool. Minimum standards for each code level apply. Select the predicted water use / Mandatory Requirement greater than 120 litres/ person/ day OR ≤ less than 120 litres/ person/ day OR ≤ less than 110 litres/ person/ day OR ≤ less than 105 litres/ person/ day OR ≤ less than 90 litres/ person/ day OR ≤ less than 80 litres/ person/ day		3 of 5 Credits	Level 3 AND Level 4
Wat 2 External Water Use	A credit is awarded where a compliant system is speculecting rainwater for external irrigation purposes outdoor space is provided the credit can be achieved by the Select the scenario that applies No internal or communal outdoor space OR Outdoor space with collection system OR Outdoor space without collection system	Where no		-

CATEGORY	3 MATERIALS Overall Level: 3	Overall Score	60.85
% of Section	on Credits Predicted: 50.00	Credits	Level
Contributi	on to Overall Score: 3.60 points	12 of 24 Credits	All Levels
Mat 1 Environm- ental Impact of Materials	Mandatory Requirement: At least three of the five key buildid elements must achieve a Green Guide 2008 Rating of A+ to Tradable Credits: Points are awarded on a scale based on the Green Guide Rating of the specifications. The Code Materia Calculator can be used to predict a potential score. Mandatory Requirement Will the mandatory requirement be met? Enter the predicted score What is the predicted number of credits?	D. he	All Levels
Mat 2	Credits are awarded where materials used in the basic buildi	ng	
Responsible Sourcing of	elements are responsibly sourced. The Code Materials Calculate	or .	
Materials -	can be used to predict a potential score.		
Basic Building	Enter the predicted Score		
Elements	What is the predicted number of credits?	0 of 6 Credits	-
Mat 3 Responsible Sourcing of Materials - Finishing	Credits are awarded where materials used in the finishi elements are responsibly sourced. The Code Materials Calculat can be used to predict a potential score. — Enter the predicted Score	9	
Elements	What is the predicted number of credits?	0 of 3 Credits	-

CATEGORY	4 SURFACE WATER RUN-OFF Overall Level: 3	Overall Score	60.85
% of Section	n Credits Predicted: 50.00%	Credits	Level
Contributio	n to Overall Score: 1.10 points	2 of 4 Credits	All Levels
Sur 1 Management of Surface Water Run-off from developments	Mandatory Requirement: Peak rate of run-off into watercourses is no greater for the developed site than it was for the predevelopment site and that the additional predicted volume of rainwater discharge caused by the new development is entirely reduced as far as possible in accordance with the assessment criteria. Desiging the drainage system to be able to cope with local drainage system failure. Tradable Credits: Where SUDS are used to improve water quality of the rainwater discharged or for protecting the quality of the receiving waters.		
	Mandatory Requirement Will the mandatory requirement be met? Select the appropriate option No SUDS No runoff into watercourses for the first 5 mm of rainfall Runoff from hard surfaces will receive an appropriate level of treatment	0 of 2 Credits	All Levels
Sur 2 Flood Risk	Credits are awarded where developments are located in areas of low flood risk or where in areas of medium or high flood risk appropriate measures are taken to prevent damage to the property and its contents in accordance with the Code criteria in the technical guide. Select the annual probability of flooding (from PPS25*) Zone 1 - Low OR Zone 2 - Medium OR Zone 3 - High Select the apropriate option(s) Low risk of flooding from FRA** All measures of protection are demonstrated in FRA Ground floor level and access routes are 600 mm above design flood level	2 of 2 Credits	
	* Planning Policy Statement 25 - Planning and Flood Risk ** FRA - Flood Risk Assessment		

CATEGORY	5 WASTE Overall Level: 3	Overall Score	60.85
% of Section	Credits Predicted: 75.00%	Credits	Level
Contribution	to Overall Score: 4.80 points	6 of 8 Credits	All Levels
recyclable waste and recyclable household	<u>Mandatory</u> <u>Requirement:</u> The space provided for waste storage should be sized to hold the larger of either all external containers provided by the Local Authority or the min capacity calculated from BS 5906. <u>Tradable Credits</u> are awarded for adequate internal and/ or external recycling facilities.		
waste	Mandatory Requirement		
	Will the minimum space be provided and		
	be accessible to disabled people?		
	Internal Recyclable household waste storage		
	Where there is no external recyclable waste		
	storage and no Local Authority collection		
	scheme		
	Internal storage (capacity 60 litres)	0 of 2 Credits	
	Local Authority collection Scheme		
	Post Collection sorting		
	Internal storage (capacity 30 litres)	4 of 4 Credits	All Levels
	Pre-collection sorting		
	Internal storage (3 separate bins, capacity 30 litres)		
	External Storage, no Local Authority collection scheme		
	3 separate internal storage bins		
	(capacity 30 litres)		
	AND		
	Houses External Storage(capacity 180 litres)	0 of 4 Credits	
	Flats	0 01 4 Credits	
	Private recycling operator		
	3 or greater types of waste collected		
Issue		Credits	Level
Was 2 Construction Site Waste Management	A credit is awarded where a compliant SWMP is provided with targets and procedures to minimise construction waste. Credits are available where the SWMP include procedures and commitments for diverting either 50% or 85% of waste generated from landfill. SWMP details Does the SWMP include: + No SWMP + SWMP with targets and procedures to minimise waste?		
	+ SWMP with procedures to divert 50% of waste + SWMP with procedures to divert 85% of waste	1 of 3 Credits	
Was 3 Composting	A credit is awarded where individual home composting facilities are provided, or where a community/ communal composting service, either run by the Local Authority or overseen by a management plan is in operation. Select the facilities available No composting facilities Individual composting facilities OR Communal/ community composting*?		
	Local Authority OR Private with management plan * including if an automated waste collection system is in place	1 of 1 Credit	-

CATEGORY	6 POLLU	ΓΙΟΝ		Overall	Level: 3	Overall Score	60.85
% of Section	on Credits	Predicted:	25.00%			Credits	Level
Contributi	on to Over	rall Score:	0.70 poin	ts		1 of 4 Credits	All Levels
Pol 1 Global Warming Potential (GWP) of Insulants	substance less than !	s (in manuf 5. the most appro All insulan Some insul	opriate option ts have a G	IL insulating man installation) tha SWP less than 5 a GWP of less than SWP of less than 5	t have a GWP	1 of 1 Credits	-
Pol 2 NOx Emissions	the opera	the most appro Greater th Less than Less than Class 4 boo Class 5 boo All space	space and water option than 100 mg/kWh	/kWh /h hot water e et by systems w	energy	0 of 3 Credits	-

	7 HEALTH & WELLBEING Overall Level: 3	Overall Score	60.85
% of Section	n Credits Predicted: 83.00%	Credits	Level
Contributi	on to Overall Score: 11.66 points	10 of 12 Credits	No level
Hea 1 Daylighting	Credits are awarded for ensuring key rooms in the dwelling have high daylight factors (DF) and a view of the sky. Select the compliant areas Room Kitchen: Avg DF of at least 2% Living Room*: Avg DF of at least 1.5% Dining Room*: Avg DF of at least 1.5% Study*: Avg DF of at least 1.5% V 80% of working plane in all above rooms receive direct light from the sky? Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.	2 of 3 Credits	-
Hea 2 Sound Insulation	Credits are awarded where performance standards exceed those required in Building Regulations Part E. This can be demonstrated by carrying out pre-completion testing or through the use of Robust Details Limited. Select a type of property Detached Property Attached Properties: Separating walls and floors only exist between non habitable spaces Separating walls and floors exist between habitable spaces Select a performance standard Performance standard Ore Airborne: 3db higher; Impact: 3dB lower OR Airborne: 8db higher; Impact: 8dB lower OR Airborne: 8db higher; Impact: 8dB lower	3 of 4 Credits	-
		C	Lavat
Hea 3 Private Space	A credit is awarded for the provision of an outdoor space that is at least partially private. The space must allow easy access to all occupants. Will a private/ semi-private space be provided? Yes, private/semi-private space will be provided OR No private/semi-private space	Credits 1 of 1 Credits	Level -
Hea 4 Lifetime Homes	Mandatory Requirement: Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6. Tradable credits: Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme. Mandatory Requirement Dwelling to achieve Code Level 6? Lifetime Homes Compliance All Lifetime Homes criteria will be met OR Exemption from LTH criteria 2/3 applied Credit not sought	4 of 4 Credits	No level

CATEGORY	8 MANAGEMENT	Overall Leve	l: 3	Overall Score	60.85
% of Section	on Credits Predicted:	88.00%		Credits	Level
Contributi	on to Overall Score:	8.88 points		8 of 9 Credits	All Levels
Man 1 Home User Guide	dwelling covering info occupier, in accordan	where a simple guide is provious ormation relevant to the 'non-teck ce with the Code requirements. d by the Home User Guide			
		al Issues? urroundings? e in alternative formats?	7	3 of 3 Credits	1
Man 2 Considerate Constructors Scheme	best practice site mai Considerate Constructionally recognised Select the appropriate No scheme Considerational No Scheme Consideration No Scheme Consideration No Scheme Consideration Not Consideration Not Construction Not Con	e used e Constructors ice: Score between 24 and 31.5 ice+: Score between 32 and 40 e Scheme* + 50% optional requirements + 80% optional requirements ontact a Code Service Provider if you	ethe ally/	1 of 2 Credits	-
	_				
Man 3 Construction Site Impacts	operate site managen Tick the impacts that Monitor, applicable CO ₂ / ener CO ₂ / ener water con Adopt bes air (dust) water (gro	report and set targets, y, for: gy use from site activities gy use from site related transport sumption from site activities to practice policies in respect of: collution from site activities und and surface) pollution on site to timber is reclaimed, re-used of	where y y y y y y y y e	2 of 2 Credits	-
Issue				Credits	Level
Man 4 Security	Security from Secure Liaison Officer (ALO),	for complying with Section 2 d by Design - New Homes. An A or alternative, needs to be app and their recommendations incor	rchitectural ointed early		
	Credit not OR Secured by	sought	○ ●	2 of 2 Credits	-

CATEGORY	' 9 E	COLOG	GY Overall Level: 3	Overall Score	60.85
% of Section	n Cı	redits F	Predicted: 44.00%	Credits	Level
Contributi	on to	o Overa	all Score: 5.33 points	4 of 9 Credits	All Levels
Eco 1	One	credit	is awarded for developing land of inherently low		
Ecological	valu	ie.			
Value of Site	г	Select th	ne appropriate option		
			Credit not sought		
			5	0 - 6 4 6	
				0 of 1 Credits	-
		UK	Land has low/ insignificant ecological value*		
		_	cal value is determined either a) by using Checklist Eco 1 across the		
			pment site; or b) where an suitably qualified ecologist is appointed rm or c) produces an independent ecological report of the site, that		
			tion zone is of low/ insignificant value; AND the rest of the		
	deve	lopment	site will remain undisturbed by the works.		
Eco 2			awarded where there is a commitment to enhance the		
Ecological Enhancement	ecol	logical	value of the development site.		
Limancement	Г	Tick the	appropriate boxes		
			Will a Suitably Qualified Ecologist be		
			appointed to recommend appropriate		
			ecological features?	1 of 1 Credits	-
		AND	Will all key recommendations be adopted?		
		AND	30% of other recommendations be adopted?		
	L				
Eco 3			awarded where there is a commitment to maintain		
Protection of Ecological	and	adequa	ately protect features of ecological value.		
Features	Г	Type an	d protection of existing features		
			Site with features of ecological value?		
		OR	Site of low ecological value (as Eco 1)?		
				1 of 1 Credits	-
	Α	ND	All* existing features potentially affected		
			by site works are maintained and		
			adequately protected?		
			qualified ecologist has confirmed that a feature can be removed due nt ecological value or poor health conditions, as long all the rest		
		-	otected, then this box can be ticked.		
Issue				Credits	Level
Eco 4	Cred	dits are	awarded where the change in ecological value has	Credits	Level
Change of	bee	n calcu	lated in accordance with the Code requirements and		
Ecological	is ca	alculate	ed to be:		
Value of Site	-	Change	in Ecological Value		
			Major negative change: fewer than -9		
			Minor negative change: between -9 and -3		
		OR	Neutral: between -3 and +3	2 of 4 Credits	_
			Minor enhancement: between +3 and +9	2 or 1 credits	
			Major enhancement: greater than 9		
	L		major ciniancement greater than 7		
Eco 5	Cred	dits are	awarded where the ratio of combined floor area of		
Building	all c	dwelling	gs on the site to their footprint is:		
Footprint	Г	Ratio of	Net Internal Floor Area: Net Internal Ground Floor Area		
			Credit Not Sought		
		OR	Houses: 2.5:1 OR Flats: 3:1		
		OR	Houses: 3:1 OR Flats: 4:1	0 of 2 Credits	
		OR	Houses & Flats Weighted (2.5:1 & 3:1)		
		OR	Houses & Flats Weighted (3:1 & 4:1)		
	L				

Appendix C – Evidence Requirements

- Energy Category -

	Design Stage		Post Construction Stage			
Issue	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Ene 1	Design Stage - SAP 2009 Worksheets	✓	Аррпоавто	As Built Stage – SAP 2009 Worksheet		Applicable ✓
	Plans and elevations showing construction			Evidence confirming build form as		
	details	✓		described in As Built SAP Worksheets		✓
	Specification text confirming intention where		,	Code Assessar Site Inspection Depart		√
	SAP cannot be produced at design stage Copy of Design Stage Part L1A Building		✓	Code Assessor Site Inspection Report Confirmation of construction details for		•
	Regulations Compliance Checklist	✓		each Energy Type		√
	riegulations compilance offectilist	· · ·		Copy of As Built Part L1A Building		•
	Copy of outputs from Ene1/Ene7 tool	✓		Regulations Compliance Checklist	✓	
				Documentary evidence from Building		
	Utility location maps		✓	Control Officer		✓
	Copy of outputs from SAP input tool		✓	Copy of outputs from SAP input tool		✓
				Copy of outputs from Ene1/Ene7 tool	✓	
				Utility location maps		✓
Ene 2	Design Stage - SAP 2009 Worksheets	√		As Built Stage – SAP 2009 Worksheet		✓
	Copy of Design Stage Part L1A Building			Evidence of final construction materials,		
	Regulations Compliance Checklist	✓		built form and specifications	✓	
	Written confirmation from the Environmental					
	Agency where under protection of existing	,		Copy of As Built Part L1A Building		
	flood defences	✓		Regulations Compliance Checklist	✓	
	Specification text confirming intention where SAP cannot be produced at design stage		✓	Letter of conformity to specification		1
	SAF carriot be produced at design stage		•	Assessor Site Inspection Report		· ·
				Documentary evidence from Building		
				Control Officer		✓
Ene 3	Drawings/specification text detailing the type of	,				
	Energy Display device to be used Specification text confirming intention to install	✓		As Built drawings and specifications		✓
	just an electric or to include primary heating			Manufacturer's details of the Energy		
	supply		✓	Diplay Devices	✓	
	Letter of instruction to contractor/supplier		√	Assessor Site Inspection Report		√
	Letter from developer to assessor giving the			Purchase orders/receipts for energy		
	specific undertaking		✓	display devices		✓
				T		
				Photographic evidence for each spec ID		✓
Ene 4	Text describing location and length of drying			Text describing location and length of		•
	line	✓		drying line	✓	
	Drawings showing location and details of			Drawings showing location and details of		
	internal drying space and ventilation		✓	internal drying space and ventilation		✓
	Danis de la companya del companya de la companya del companya de la companya de l			Danie and a land and a series of		
	Drawings showing location of fixtures/footings of external drying space		✓	Drawings showing location of fixtures/footings of external drying space		1
	Specification text confirming intention where		•	Specification text confirming intention		•
	drying space specification is not known at			where drying space specification is not		
	design stage		✓	known at design stage		✓
	Letter of instruction to contractor/supplier		✓	Letter of instruction to contractor/supplier		✓
	Letter from developer to assessor giving the			Letter from developer to assessor giving		✓
	specific undertaking		✓	the specific undertaking Purchase orders/receipts of drying		· ·
				devices		✓
				407.000		
				Photographic evidence for each spec ID		✓
				Assessor Site Inspection Report		✓
Ene 5	Specification text confirming make and model			Manufacturer's literature for any white		,
	of white goods provided Confirmation of energy rating for all white		✓	goods installed		✓
	goods provided		✓	Assessor Site Inspection Report		✓
	Copy of EU Energy Efficiency Labelling		,	Purchase orders/receipts for all white		,
	Scheme leaflet		✓	goods provided		✓
	Specification text/drawings confirming intention			Copy of EU Energy Efficiency Labelling		
	to provide leaflets or white goods		✓	Scheme leaflet		✓

	Design Stage		Post Construction Stage			
Issue	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
			Аррпоавіс	Specification text/drawings confirming		Аррпсавіс
	Letter of instruction to contractor/supplier		✓	leaflets will be provided to all dwellings		✓
	Letter from developer to assessor giving the specific undertaking		✓	Letter of instruction to contractor/supplier		√
	specific undertaking		•	Letter from developer to assessor giving		•
				the specific undertaking		✓
				Written confirmation of information		
				provided to dwellings		✓
Ene 6				As Built drawings/specifications		
	Drawings showing location of all external light			confirming construction in accordance		
	fittings	✓		with design stage	✓	
	Text confirming location and type of all external	✓		Manufacturar'a literatura	√	
	light fittings Specification text confirming intention where	· ·		Manufacturer's literature	V	
	external lighting specification is not known at					
	design stage		✓	Purchase orders/receipts		✓
	Letter of instruction to contractor/supplier		✓	Photographic evidence		✓
	Letter from developer to assessor giving the specific undertaking		√	Assessar Sita Inancetion Depart		,
	specific undertaking		V	Assessor Site Inspection Report		V
Ene 7				Confirmation that design has been		
	Confirmation that feasibility study has been			carried out by an independent energy		
	completed by an independent energy specialist	✓		specialist	✓	
				Design Stage CAR 2000 Weeksheets		
	Design Stage – SAP 2009 Worksheet	✓		Design Stage – SAP 2009 Worksheets and supporting information		√
	Drawings showing location of LZC			As Built – SAP 2009 Worksheets for		
	technologies	✓		each Energy Type		✓
	Specification text detailing type, location and	,		Drawings showing location of LZC		
	use of LZC equipment in dwellings Manufacturer's details for LZC technologies	✓	√	technologies Assessor Site Inspection Report	√	✓
	Mariuracturer's details for EZC technologies		V	Assessor Site inspection neport		V
	Specification text confirming intention where					
	details of LZCs are not known at design stage		✓	Photographic evidence		✓
				Manufacturer's details for LZC		√
				technologies		V
Ene 8	Drawings showing location, size, security and					
	access to cycle storage	✓		Assessor Site Inspection Report		✓
	Specification text detailing location, size,	,				,
	security and access to cycle storage Drawings/specification text detailing any	✓		Purchase orders/receipts		✓
	proprietary system		✓	Photographic evidence		√
	Confirmation of bedrooms served by cycle			. Hotographic ovidence		
	storage and relevant calculations	✓				
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		√			
	Jopeonio unucitaning	1	ı <u>'</u>	<u> </u>	1	1
Ene 9	Drawings/specification text detailing location,					
	size and services to the home office	✓		Assessor Site Inspection Report		✓
	Drawings/specification text confirming			As Built drawings showing location and		
	adequate ventilation to home office Text confirming broadband availability to each	✓		services		✓
	dwelling		√	Photographic evidence		✓
	Specification text confirming intention where					
	details of home office are not known at design					
	stage		✓			
	Average Daylight Factor calculations Letter of instruction to contractor/supplier	✓	√			
	Letter from developer to assessor giving the		· ·			



- Water Category -

	Design Stage			Post Construc	ction Stage	
Issue	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Wat 1				As Built drawings/specification		
				detailing internal, rainwater and		
	Specification text detailing water fittings	✓		greywater systems		✓
	Drawings showing the location of internal water			Letter from developer confirming		
	fittings	✓		installed fittings and equipment		✓
	Manufacturers literature for water fittings and			Manufacturer's literature for		
	appliances confirming flow rates of any water			internal water fittings, and any		
	reduction equipment		✓	greywater or rainwater systems	✓	
	Specification text detailing rainwater and greywater					
	collection systems		✓	Assessor Site Inspection Report		✓
	Manufacturer's literature for rainwater and greywater					
	appliances		✓	Photographic evidence		✓
				Completed Code Water Calculator		
	Drawings showing any rainwater and greywater			Tool, showing internal potable		
	systems		✓	water use for each Spec ID	✓	
	Completed Code Water Calculator Tool, showing					
	internal potable water use for each Spec ID	✓				
	Specification text confirming intention where details					
	of water fittings are not known at design stage		√			
	Letter of instruction to contractor/supplier		· /			
	Letter from developer to assessor giving the specific		v			
	undertaking		/			
	undertaking		,			
Wat 2	Drawings showing location of any rainwater			Letter from developer confirming		
	collection systems	✓		installed systems		✓
	Written confirmation from the Environmental Agency					
	where under protection of existing flood defences	✓		As built drawings/specifications		✓
	Specification text confirming intention where details					
	of external water collection systems are not known at			Manufacturer's details of installed		
	design stage		✓	systems	✓	
	Letter of instruction to contractor/supplier		✓	Assessor Site Inspection Report		✓
	Letter from developer to assessor giving the specific					
	undertaking		✓	Photographic evidence		✓



- Materials Category -

	Design Stage		Post Construction Stage			
Issue	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Mat 1			Applicable	Letter from developer confirming		Applicable
	Drawings showing location, areas and			dwellings were constructed as at		
	specification of elements	✓		design stage		✓
	Specification text confirming element					
	specification details	✓		As Built drawings/specifications		✓
	Completed Code Mat 1 Calculator Tool	✓		Assessor Site Inspection Report		✓
			,			,
	Confirmation of Bespoke Ratings		✓	Documentary evidence for materials		√
				Completed Code Mat 1 Calculator	,	
	Letter of instruction to contractor/supplier		✓	Tool showing elements As Built	✓	
	Letter from developer to assessor giving the		✓	Confirmation of Bespoke Ratings		,
Mat 2	specific undertaking		v	Letter from developer confirming		v
wat 2	Drawings or specification text detailing			dwellings were constructed as at		
	location, areas and details of materials	✓		design stage		✓
	Completed Code Mat 2 Calculator Tool or	<u> </u>		design stage		,
	relevant calculations	✓		As Built drawings/specifications		✓
	1 or o rain caroanations			As Built drawings/specifications Purchase orders, receipts or		
				certificates/letters confirming		
	Confirmation to use specific timber schemes	✓		materials	✓	
	Confirmation to use EMS suppliers certified			Completed Code Mat 2 Calculator		
	for key process and for extraction stage		✓	Tool or relevant calculations		✓
	Confirmation of any elements being			Documentary details for re-used		
	recycled/reused		✓	materials		✓
	Written confirmation from the Environmental					
	Agency where under protection of existing			Documentary details for recycled		
	flood defences		✓	materials		√
	I attaca of instruction to another transfer		✓	Documentary evidence for materials		✓
	Letter of instruction to contractor/supplier Letter from developer to assessor giving the		· ·	certified through EMS CoC certificate for certified timber		· ·
	specific undertaking		✓	materials		√
	specific dridertaking		,	Written confirmation from suppliers		,
				confirming status of non-certified		
				timber materials		✓
			I.	imber materiale	l	l
Mat 3				Letter from developer confirming		
	Drawings or specification text detailing			dwellings were constructed as at		
	location, areas and details of materials	✓		design stage		✓
	Completed Code Mat 3 Calculator Tool or					
	relevant calculations	✓		As Built drawings/specifications		✓
				Purchase orders, receipts or		
				certificates/letters confirming		
	Confirmation to use specific timber schemes	✓		materials	✓	
	F. 10 F. 10 11 11 11 11 11 11 11					
	Confirmation to use EMS suppliers certified		,	Completed Code Mat 3 Calculator		,
	for key process and for extraction stage		√	Tool or relevant calculations		√
	Confirmation of any elements being			Documentary details for re-used		✓
	recycled/reused		✓	materials		· ·
	Confirmation to use suppliers who provide EMS certification (recycled materials)		✓	Documentary details for recycled materials		✓
	Livio certification (recycled materials)		· ·	Documentary evidence for materials		·
	Letter of instruction to contractor/supplier		✓	certified through EMS		✓
	Letter for instruction to contractor/supplier Letter from developer to assessor giving the		*	CoC certificate for certified timber		·
	specific undertaking		✓	materials		√
	specific undertaking		*	Written confirmation from suppliers		l v
				confirming status of non-certified		
				timber materials		✓
			1	timosi matemais	l	· •



- Surface Water Runoff Category -

Issue	Design Stage	Post Construction Stage				
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Sur 1	To achieve Mandatory Elements					
	Confirmation of appropriate consultant appointment	✓		Written confirmation that solutions designed have been implemented		✓
	Consultants report	✓		As Built drawings/specifications and calculations		√
	Flood Risk Assessment	√		Confirmation that Flood Risk Assessment still up to date	✓	
	Drawings and Text specifications necessary to confirm claims	✓				
	To achieve tradable credits					
	Consultants report with design specifications, calculations and drawings to support	✓		Confirmation from hydrological consultant	√	
	awarding credits Proposed operation and maintenance plans.		-	that system meets credit requirements As Built drawings and calculations	V	
	Proposed operation and maintenance plans.	· ·		Manufacturers' data for all devices	/	· ·
				Copies of SUDs agreements	· ·	
Sur 2	Flood Risk Assessment confirming the zone of the development	✓		Confirmation that Flood Risk Assessment still up to date		√
	Written confirmation from the Environmental	· · ·		Written confirmation from the		· ·
	Agency where under protection of existing			Environmental Agency where under		
	flood defences		✓	protection of existing flood defences		✓
	Manufacturers details for flood protection			Manufacturers details for flood protection		
	measures for the dwelling		✓	measures for the dwelling		✓
	Site plans		✓	Site plans		✓
	Drawings showing location of flood protection			Drawings showing location of flood		
	measures		✓	protection measures		✓
		•		Confirmation that specifications same as		
				design stage		✓
				As Built plans/specifications		✓



- Waste Category -

Issue	Design Stage	е		Post Construction Stage			
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable	
Was 1	To achieve Mandatory Elements						
	Completed Supplementary Information						
	Sheet	✓		Completed Supplementary Information Sheet	✓		
	Completed Checklist Was 1	✓		Completed Checklist Was 1	✓		
	To achieve tradable credits						
	Drawings or specification text confirming number of bedrooms & specifications of external storage	√		As Built drawings/specifications		✓	
	Confirmation from LA detailing container			3			
	specifications/frequency and waste streams			Written confirmation dwellings were			
	of collection		✓	constructed as at design stage		✓	
	Confirmation of intention to use a private			Written justification for bins further than 30m			
	operator and details of the scheme		✓	from external door		✓	
				Confirmation of LA or similar private scheme			
	Letter of instruction to contractor/supplier		✓	details	✓		
	Letter from developer to assessor giving the		•	details	<u> </u>		
	specific undertaking		✓	Assessor Cita Ingrestion Depart		√	
	specific undertaking		•	Assessor Site Inspection Report Photographic Evidence		V /	
				Priotographic Evidence		V	
Was 2	To achieve Mandatory Elements					1	
was z	Written confirmation from the Environmental			Copy of the Site Waste Management Plan		1	
	Documentary Legal evidence confirming		•	Copy of the Site Waste Management Flam		•	
	agreed cost of development		✓	Completed Checklist Was 2a		√	
	Letter of instruction to contractor/supplier		√	Completed Checklist Was 2d		· ·	
	Letter from developer to assessor giving the		•	Records confirming monitoring of site waste		•	
	specific undertaking		✓	throughout construction		√	
	specific undertaking		•	Documentary Legal evidence confirming		•	
				agreed cost of development		√	
	To achieve tradable credits			agreed cost of development		*	
	Completed checklist Was 2b		√	Completed checklist Was 2b		√	
	Completed checklist Was 2b		√	Completed checklist Was 2b		./	
						-/	
	Completed checklist Was 2d		•	Completed checklist Was 2d		V	
				Summary Report outlining overall waste performance	✓		
W 0	Completed convert Charlett 4 Was 4	√			•	1	
Was 3	Completed copy of Checklist 1 – Was 1 Drawings or specification text confirming	•		Letter from developer to assessor		v	
	location, size and access to storage	√		Assessor Cita Ingrestion Depart		√	
	Specification text confirming that an	· ·		Assessor Site Inspection Report		· ·	
	information booklet will be supplied to			Descriptor abouting language size and access			
	residents	✓		Drawings showing location, size and access route		,	
		V	/	Photographic evidence		· ·	
	Letter of instruction to contractor/supplier Letter from developer to assessor giving the		•	Priotographic evidence		· ·	
			✓				
	specific undertaking Manufacturer's information for proposed		· ·				
	composting facilities		✓				
	Details of communal/community composting						
	scheme		✓				
	Details of Local Authority kitchen waste collection scheme		✓				
	Details of the automated waste collection						
	system		✓				



- Pollution Category -

	Design Stage			Post Construction Stage		
Issue	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Pol 1						
	Completed Chaptilist Del 4	✓		Manufacturer's/installer's literature	√	
	Completed Checklist Pol 1	V		for any foamed or blown insulation	· ·	
	Drawings or specification text showing type	✓		Written confirmation that Checklist		
	and location of insulation materials	V		6.1 Pol 1 is unchanged		✓
	Manufacturer's/installer's literature for any					
	foamed or blown insulation		✓	Purchase order/receipts		✓
	Letter of intent to meet requirements for a			As built drawings/specification text		
	Design and Build contract		✓	showing type and location of		✓
	Letter of instruction to contractor/supplier		✓	Assessor Site Inspection Report		✓
	Letter from developer to assessor giving			·		
	the specific undertaking		✓			
Pol 2	,			Manufacturer's literature		
	Drawings or specification text detailing			confirming dry NOx levels/boiler		
	heating systems	✓		class of all heating systems		✓
	Specification text confirming Dry NOx			Letter/email from manufacturer		
	levels and/or boiler class	✓		confirming dry NOx levels		✓
	Manufacturer's literature details of heating					
	system		✓	Purchase order/receipts		✓
	Calculation Procedures of dry NOx or			·		
	weighted average NOx in accordance with					
	the Guidance		✓	Assessor Site Inspection Report		✓
	Design Stage - SAP 2005 Worksheets		✓	Calculation of dry or ave NOx		✓
	Written confirmation from the					
	Environmental Agency where under			As Built Stage - SAP 2005		
	protection of existing flood defences		✓	Worksheet		✓
				Evidence of contractual		
				commitment to activate heating		
	Letter from developer to assessor giving			system within 18 months of		
	the specific undertaking		✓	completion		✓



- Health & Wellbeing Category -

	Design Stage			Post Construction Stage		
Issue	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Hea 1	Average Daylight Factor calculations	✓	P.P	Calculations for all dwelling As Built	✓	
	No-sky line calculations	✓		Confirmation that inputs are accurate		✓
	Details of angle of visible sky, window glazing and room surface areas	✓		On-site measurements		✓
	Plans indicating room heights, glazed areas, and external buildings	✓				
	Manufacturer's details confirming specs where default values are not used		√			
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		✓			
Hea 2	1			Specification text committing to meet		1
1.00.2	Specification text committing to meet relevant sound insulation performance levels	√		relevant sound insulation performance levels	√	
	Details of pre-completion testing		✓	Details of pre-completion testing		✓
	Details of separating walls		✓	Details of separating walls		✓
	Confirmation of commitment to carry out remedial work where necessary		✓	Confirmation of commitment to carry out remedial work where necessary		√
	Written confirmation from the Environmental					
	Agency where under protection of existing flood defences		√	Compliant Test Body accreditation details		_
	Confirmation that Robust Details will achieve			Confirmation that Robust Details will		
	necessary standards		✓	achieve necessary standards		✓
	Confirmation that site is registered by RDL		✓	Confirmation that site is registered by RDL		✓
	Letter of instruction to contractor		√	Letter of instruction to contractor		✓
	Letter from developer to assessor giving the specific undertaking		<i></i>	Letter of intent from developer to assessor giving the specific undertaking		./
	Specific undertaking		· ·	Confirmation of sound insulation results		· ·
				Completed Robust Details Ltd Checklist		√
Hee 2	Plan(s)/specification text showing the		1	As-Built drawing/specification		1
Hea 3	number of bedrooms served	✓		confirmation		✓
	Plan(s)/specification text showing location and size of private space(s)	✓		Confirmation that dwellings constructed in accordance with design stage spec		√
	Details of accessibility in accordance with BS8300	✓				
	Details of control arrangements for shared private spaces		√			
	Letter of instruction to contractor/supplier		√			
	Letter from developer to assessor giving the specific undertaking		✓			
Hea 4	Completed and signed Checklist Hea 4 –		1	Completed As Built Lifetime Homes		
1100 4	Lifetime Homes	✓		Checklist Hea 4	✓	
				Assessor Site Inspection Report		√
			J	As Built Drawings		✓



- Management Category -

	Design Stage			Post Construction Stage		
Issue	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Man 1	Confirmation that Homes User Guide will			Copy of the Home User Guide for		
	be supplied to all dwellings	✓		each type of dwelling	✓	
				Confirmation that Home User		
				Guide has been supplied to all		
	Checklist Man 1 Part 1		✓	dwellings		✓
	Checklist Man 1 Part 1 AND Checklist			Copy of letter to occupants and		
	Man 1 Part 2		✓	hard copy of contents page		✓
	Summary of Home User Guide contents	✓				
	Letter from developer to assessor giving					
	the specific undertaking		✓			
Man 2	Confirmation on/from		I	1		1
	contractor/developer to achieve a specific					
	CCS score		✓	Copy of CCS certificate		✓
	Completed Checklist Man 2 where an			Copy of CCS monitored report		
	alternative scheme is to be used		✓	with scorings		✓
	Letter of instruction/intent from developer			Copy of alternative schemes		
	to contractor or assessr giving specific			certificate or equivalent		
	undertaking		✓	documentary evidence		✓
Man 3			I	Documentary evidence that design		1
Maii 3	Commitment to meet either, two or more,			stage items from Man 3 have been		
	or four or more items in Checklist Man 3	✓		adhered to		./
	Completed Checklist Man 3 if available at	•		Documentary evidence of target		•
	design stage		✓	records		_
	Written confirmation from the		•	records		<u>'</u>
	Environmental Agency where under			Graphs comparing consumption		
	protection of existing flood defences		✓	with targets		_
	protection of existing flood defences		,	Delivery records		· /
				Documentary evidence of site		
				procedures for minimising pollution		✓
				Coc certificates for site timber		✓
				Purchase orders confirming re-		
				used/reclaimed timber		✓
Man 4				Confirmation that ALO/CPDA		
	Letter of appointment/letter from			recommendations have been		1
	ALO/CPDA confirming appointment	✓		implemented in design	✓	
	Confirmation of commitment to meet			Confirmation that site meets		
	Section 2 of Secured By Design	✓		Section 2 of Secured by Design	✓	1
	Confirmation of commitment to follow			Copy of Secured by Design		
	advice of the ALO/CPDA	✓		certificate		✓
	Letter of instruction to contractor		✓	Assessor Site Inspection Report		✓
	Letter from developer to assessor giving	·			·	
	the specific undertaking		✓	As-built drawings		✓



- Ecology Category -

	Design Stage			Post Construction Stage		
Issue	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Eco 1	Plans of site and surrounding area prior to			Plans of site and surrounding area		
	development		<u>√</u>	prior to development		√
	Site visit report Completed Checklist Eco 1			Site visit report Completed Checklist Eco 1		✓ ✓
	Ecologists report using CSH Ecology Report		· · · · · ·	Ecologists report using CSH		· ·
	Template		✓	Ecology Report Template		√
	Plans defining the construction site	✓		Plans defining construction site		· ·
	and the same grant control of the same grant			Confirmation that ecologist's		
	Confirmation that ecologist's qualifications			qualifications meet the		
	meet the requirements		✓	requirements		✓
				As Built plans identifying features		
	Letter of instruction to contractor/supplier		✓	present		✓
	Letter from developer to assessor giving the		✓			,
Eco 2	specific undertaking		v	Assessor Site Inspection Report		v
ECO 2	Completed Ecologists Report using the CSH Ecology Report Template	√		Plans showing both proposed and implemented recommendations		√
	Specification text/illustrations detailing	•		Implemented recommendations		•
	implementation of recommendations	√		Photographic evidence		√
	Confirmation that Ecologist qualifications	•		Thotograpine evidence		·
	meet the requirements	✓		Assessor Site Inspection Report		✓
	Written confirmation from the Environmental			Confirmation of contract or letter		
	Agency where under protection of existing			confirming planting will be		
	flood defences	✓		completed within 18 months		✓
	Confirmation ecologist made site visit prior to					
	commencement of initial site preparation					
	works Confirmation detailing how ecologists	✓				
	recommendations will be implemented	√				
	Drawings/letter of instruction to	•				
	contractor/supplier		✓			
	Letter from developer to assessor giving the					
	specific undertaking		✓	Photographic evidence of		
Eco 3	Site Visit Report from design team	✓		protection measures		✓
	Drawings/specification text detailing how			Photographic evidence of		
	ecological features will be protected Plans of site and boundary highlighting	✓		protected features		✓
	ecological features prior to development		✓	Assessor Site Inspection Report		✓
	Evidence of any requirement to remove a		<u> </u>	Assessor Site inspection report		,
	feature		✓			
	Confirmation that all EU and UK laws to					
	protect species have been adhered to		✓			
	Completed Ecologist's report using the CSH					
	Ecology Report template		<u>√</u>			
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		✓			
Eco 4	Plans of the site pre-development showing		*	Completed Eco 4 Calculator Tool		
200 4	areas, landscape and plot types	✓		or similar calculations		✓
	Copy of calculations (from assessor) of			Letter/certificate of conformity from		
	proposed change in ecological value	✓		the developer		✓
	Completed Ecologist's report using the CSH			Confirmation of contract or letter		
	Ecology Report template		✓	confirming completion date		✓
	Specification text/illustrations showing					
	implementation of Ecologist's		✓			
	recommendations Planting Schedule		<u> </u>			
	Letter of instruction to contractor/supplier					
	Letter from developer to assessor giving the		•			
	specific undertaking		✓			
Eco 5	Plans showing the Net Internal Floor and					
	Ground Floor areas of all buildings	✓		As Built drawings/specifications		✓
	Elevations showing the number of storeys for			Letter from developer confirming		
	each building	√		construction as at design stage		✓
	Building Footprint Ratio Calculations	✓				