

CODE FOR SUSTAINABLE HOMES - NOV 2010

THE ENVIRONMENTAL RATING FOR HOMES



PRELIMINARY ASSESSMENT

INCLUDING ANY ASSUMPTIONS AND BASIS FOR DATA

FAMILY HOUSE, 28 KINGS MEWS, LONDON WC1N 2JB

FOR **Mr & Mrs MacDonagh**



Issue Date : 28/02/2013
Code Registration Number : BRE-00018854-DS-001-00

Abba Energy Ltd

FF10 BASE STATION, SAGA CENTRE, 326 KENSAL ROAD, LONDON W10 5BZ

INTRODUCTION

This document was commissioned by Louise Turley of FT Architects and written by Julian Williams of Abba Energy Ltd. There is one unit being assessed on this site.

This report reviews the current standing of this scheme, employing verbal and available design information. Sufficient evidence is not yet available to enable an Interim Stage assessment to be undertaken.

Following this report (and where issued by Abba Energy), it will be the project team's responsibility to ensure that the drawings and specifications follow and clearly state the requirements for the relevant Code for Sustainable Homes issues. Information should then be submitted to the Assessor for the Final report to be made. Please note that without the evidence the assessor cannot award the credits. Reference should be made to Code November 2010 Technical Guide.

Project name	FAMILY HOUSE, 28 KINGS MEWS, LONDON WC1N 2JB	Code Version	Nov-10
Client	Mr & Mrs MacDonagh	Target Rating	Level 4
Assessment Type	PRELIMINARY	Preliminary Rating Achieved	Level 4

PLANNING REQUIREMENTS

There is a Planning requirement to achieve a rating of Level 3. In detail this requirement, under Camden's Policy CPG3 Sustainability, states that at least 50% of the available marks under each Category must be achieved for EACH of the following Categories: Energy, Water, Materials.

CODE CATEGORY	AVAILABLE MAXIMUM CREDITS	PROPOSED CREDITS	50% COMPLIANCE ?
ENERGY	31	18	YES
WATER	6	5	YES
MATERIALS	24	12	YES

PRELIMINARY ASSESSMENT

The following table includes the basis of data input, sources and assumptions. Each issue is 'weighted' differently, to reflect considered importance, according to the following equivalent percentage scores per credit point: Energy & CO2 Emissions (Ene) – 1.17%; Water (Wat) – 1.50%; Materials (Mat) – 0.30%; Surface Water Runoff (Sur) – 0.55%; Waste (Was) – 0.80%; Pollution (Pol) – 0.70%; Health & Wellbeing (Hea) – 1.17%; Management (Man) - 1.11%; Ecology (Eco) – 1.33%. Where credits have been awarded, it is assumed that the criteria (detailed within the relevant version of the Code Technical Guide) will be met.

Please note – Architect = FT Architects, Code Consultant = Abba Energy.

References to 'dwelling' mean a unit of accommodation, house or flat.

ESTIMATED TOTAL CREDITS BEFORE 'WEIGHTING' FOR 'CATEGORY ISSUES'	75
TARGET PERCENTAGE REQUIRED	68.00%
ESTIMATED TOTAL PERCENTAGE	73.52%
ESTIMATED CODE RATING	Level 4



Results

Development Name:	Family House 28 KINGS MEWS, WC1N 2JB
Dwelling Description:	Single Family House in terrace on 5 floors
Name of Company:	Abba Energy Ltd
Code Assessor's Name:	Julian Williams
Company Address:	326 Kensal Road, London, W10 5BZ
Notes/Comments:	For Planning 28/02/2013.

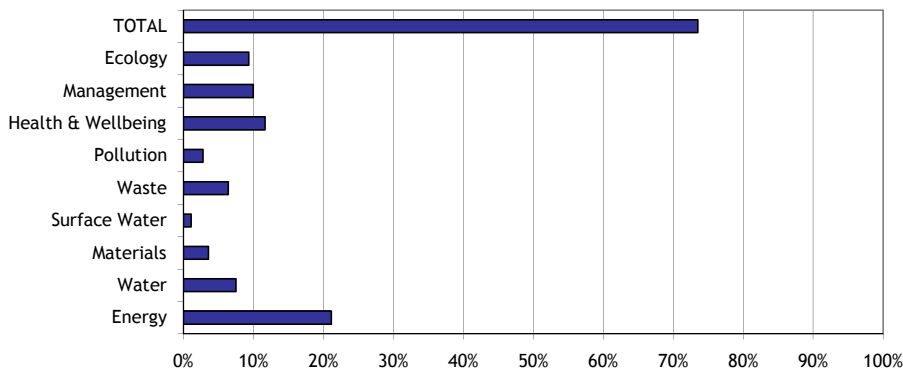
PREDICTED RATING - CODE LEVEL: 4

Mandatory Requirements: All Levels

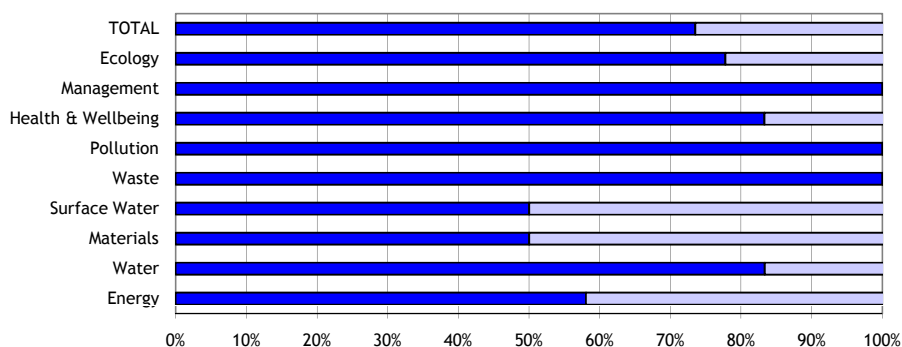
% Points: 73.52% - Code Level: 4

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: 4	Overall Score	73.52	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 58.06		Credits	Level			
Contribution to Overall % Score: 21.13 points		18.0 of 31 Credits	Level 4			
Ene 1 Dwelling Emission Rate	<p>Credits are awarded based on the percentage improvement of the Dwelling Emission Rate (DER) over the Target Emission Rate (TER) as calculated using SAP 2009. Minimum standards for each Code level apply. The Code energy calculator can be used to calculate a predicted score.</p> <div><div>Enter the predicted score _____</div><div><div>What is the predicted number of credits?</div><div>4.0</div></div><div>OR</div><div>Are zero net CO₂ emissions achieved?</div><div><input type="checkbox"/></div></div>	4.0 of 10 Credits	Level 4	Code 4 compliance will be exceeded.		
Ene 2 Fabric Energy Efficiency	<p>Credits are awarded based on the Fabric Energy Efficiency (kWh/m²/yr) of the dwelling. Minimum standards apply at Code levels 5 and 6. The Code energy calculator can be used to calculate a predicted score.</p> <div><div>Enter the predicted score _____</div><div><div>Apartments, Mid-terrace</div><div><input checked="" type="radio"/></div></div><div>OR</div><div>End terrace, Semi and Detached</div><div><input type="radio"/></div><div>OR</div><div>Staggered Mid terrace</div><div><input type="radio"/></div><div>What is the predicted number of credits?</div><div>5.0</div></div>	5.0 of 9 Credits	-	A good energy efficiency strategy will ensure compliance above average for the FEE.		
Ene 3 Energy Display Devices	<p>Credits are awarded where a correctly specified Energy Display Device is installed monitoring electricity and/or primary heating fuel consumption.</p> <div><div>Select whether the EDD monitors electricity and/or fuel _____</div><div><div>None Specified</div><div><input type="radio"/></div></div><div>Primary Heating only</div><div><input type="radio"/></div><div>OR</div><div>Electricity only</div><div><input type="radio"/></div><div>OR</div><div>Electricity and primary heating fuel</div><div><input checked="" type="radio"/></div></div>	2 of 2 Credits	-	Will fully comply.		

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 4 Drying Space	<p>One credit is awarded for the provision of either internal or external secure drying space with posts and footings or fixings capable of holding 4m+ of drying line for 1-2 bed dwellings and 6m+ for dwellings with 3 bedrooms or greater.</p> <p>Will drying space meeting the criteria be provided? _____</p> <p>Yes <input checked="" type="radio"/></p> <p>OR No <input type="radio"/></p>	1 of 1 Credits	-	Will comply.	
Ene 5 Energy Labelled White Goods	<p>Credits are awarded where each dwelling is provided with either information about the EU Energy Labelling Scheme, White Goods with ratings ranging from A+ to B or a combination of the previous according to the technical guide.</p> <p>Select the appropriate option below _____</p> <p>EU Energy labelling information only <input type="checkbox"/></p> <p>A+ rated appliances <input checked="" type="checkbox"/></p> <p>A+, A and B rated appliances <input checked="" type="checkbox"/></p> <p>Combination of compliant rated white goods with EU Energy Labelling Scheme <input type="checkbox"/></p>	2 of 2 Credits	-	Will fully comply.	
Ene 6 External Lighting	<p>Credits are awarded based on the provision of space lighting* with dedicated energy efficient fittings and security lighting fittings with appropriate control gear..</p> <p>Space Lighting _____</p> <p>None provided <input type="radio"/></p> <p>OR Non Code compliant lighting <input type="radio"/></p> <p>OR Code compliant lighting <input checked="" type="radio"/></p> <p>Security Lighting _____</p> <p>None provided <input type="radio"/></p> <p>OR Non Code compliant lighting <input type="radio"/></p> <p>OR Code compliant lighting and controls <input checked="" type="radio"/></p> <p>Dual lamp luminaires _____</p> <p>Compliant with both above criteria <input type="checkbox"/></p> <p>* Statutory safety lighting is not covered by this requirement</p>	2 of 2 Credits	-	Will fully comply.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 7 Low or Zero Carbon Technologies	<p>Credits are awarded where there is a 10% or 15% reduction in CO₂ emissions resulting from the use of low or zero carbon technologies.</p> <div> <p>Select % contribution made by low or zero carbon technologies</p> <p>Less than 10% of demand <input type="radio"/></p> <p>OR 10% of demand or greater <input checked="" type="radio"/></p> <p>OR 15% of demand or greater <input type="radio"/></p> </div>	1 of 2 Credits	-	Some LZCT will be required in order to achieve Level 4 Code under Ene 1.	
Ene 8 Cycle Storage	<p>Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements.</p> <div> <p>Fill in the development details below</p> <p>Number of bedrooms: <input type="text"/></p> <p>Number of cycles stored per dwelling* <input type="text"/></p> </div> <p>* if you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling</p>	0 of 2 Credits	-	No compliant storage available in the design.	
Ene 9 Home Office	<p>A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements.</p> <div> <p>Will there be provision for a Home Office? <input checked="" type="radio"/></p> <p>Yes <input checked="" type="radio"/></p> <p>OR No <input type="radio"/></p> </div>	1 of 1 Credits	-	Will comply by design of daylighting and specification of space & services.	

CATEGORY 2 WATER		Overall Level: 4	Overall Score	73.52	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 83.33		Credits	Level			
Contribution to Overall Score: 7.50 points		5 of 6 Credits	Level 4			
Wat 1 Indoor Water Use	<p>Credits are awarded based on the predicted average household water consumption, calculated using the Code Water Calculator Tool. Minimum standards for each code level apply.</p> <div><p>Select the predicted water use / Mandatory Requirement</p><p>greater than 120 litres/ person/ day <input type="radio"/></p><p>OR ≤ less than 120 litres/ person/ day <input type="radio"/></p><p>OR ≤ less than 110 litres/ person/ day <input type="radio"/></p><p>OR ≤ less than 105 litres/ person/ day <input type="radio"/></p><p>OR ≤ less than 90 litres/ person/ day <input checked="" type="radio"/></p><p>OR ≤ less than 80 litres/ person/ day <input type="radio"/></p></div>	4 of 5 Credits	Level 3 AND Level 4	Will comply to Code Level 4 standards.		
Wat 2 External Water Use	<p>A credit is awarded where a compliant system is specified for collecting rainwater for external irrigation purposes. Where no outdoor space is provided the credit can be achieved by default.</p> <div><p>Select the scenario that applies</p><p>No internal or communal outdoor space <input type="radio"/></p><p>OR Outdoor space with collection system <input checked="" type="radio"/></p><p>OR Outdoor space without collection system <input type="radio"/></p></div>	1 of 1 Credits	-	Will comply.		

CATEGORY 3 MATERIALS		Overall Level: 4	Overall Score	73.52	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 50.00		Credits	Level			
Contribution to Overall Score: 3.60 points		12 of 24 Credits	All Levels			
Mat 1 Environ- mental Impact of Materials	<p>Mandatory Requirement: At least three of the five key building elements must achieve a Green Guide 2008 Rating of A+ to D.</p> <p>Tradable Credits: Points are awarded on a scale based on the Green Guide Rating of the specifications. The Code Materials Calculator can be used to predict a potential score.</p> <div><div>Mandatory Requirement</div><div>Will the mandatory requirement be met? <input checked="" type="checkbox"/></div></div> <div><div>Enter the predicted score</div><div>What is the predicted number of credits? <input type="text" value="12"/></div></div>	12 of 15 Credits	All Levels	12 credits awarded, based upon 12.78 points as scored against the Green Guide for Specifications. As estimated at this early stage against proposed construction materials.		
Mat 2 Responsible Sourcing of Materials - Basic Building Elements	<p>Credits are awarded where materials used in the basic building elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score.</p> <div><div>Enter the predicted Score</div><div>What is the predicted number of credits? <input type="text"/></div></div>	0 of 6 Credits	-	Estimated as not compliant at this stage.		
Mat 3 Responsible Sourcing of Materials - Finishing Elements	<p>Credits are awarded where materials used in the finishing elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score.</p> <div><div>Enter the predicted Score</div><div>What is the predicted number of credits? <input type="text"/></div></div>	0 of 3 Credits	-	Estimated as not compliant at this stage.		

CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 4	Overall Score	73.52	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 50.00%			Credits	Level		
Contribution to Overall Score: 1.10 points			2 of 4 Credits	All Levels		
Sur 1 Management of Surface Water Run-off from developments	<p>Mandatory Requirement: Peak rate of run-off into watercourses is no greater for the developed site than it was for the pre-development 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. Designing 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.</p> <div> Mandatory Requirement <div> Will the mandatory requirement be met? <input checked="" type="checkbox"/> </div> </div> <div> Select the appropriate option <div> No SUDS <input type="checkbox"/> </div> <div> No runoff into watercourses for the first 5 mm of rainfall <input type="checkbox"/> </div> <div> Runoff from hard surfaces will receive an appropriate level of treatment <input type="checkbox"/> </div> </div>	0 of 2 Credits	All Levels		The mandatory aspect will be complied with. The extra criteria are under consideration by the Project Team.	
Sur 2 Flood Risk	<p>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.</p> <div> Select the annual probability of flooding (from PPS25*) <div> Zone 1 - Low <input checked="" type="radio"/> </div> <div> OR <div> Zone 2 - Medium <input type="radio"/> </div> </div> <div> OR <div> Zone 3 - High <input type="radio"/> </div> </div> </div> <div> Select the appropriate option(s) <div> Low risk of flooding from FRA** <input checked="" type="checkbox"/> </div> <div> All measures of protection are demonstrated in FRA <input type="checkbox"/> </div> <div> Ground floor level and access routes are 600 mm above design flood level <input type="checkbox"/> </div> </div> <p>* Planning Policy Statement 25 - Planning and Flood Risk ** FRA - Flood Risk Assessment</p>	2 of 2 Credits	-		The Environment Agency's Flood Risk website shows a Low Risk for this area. A full FRA, following PPS25 will be required to prove this, taking into account all of the normal potential sources of flooding. At present full compliance is anticipated.	The EA website shows flooding from rivers and the sea, but excludes flood sources such as groundwater, direct runoff from fields, or overflowing sewers.

CATEGORY 5 WASTE		Overall Level: 4	Overall Score	73.52	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 100.00%		Credits	Level			
Contribution to Overall Score: 6.40 points		8 of 8 Credits	All Levels			
Was 1 Storage of non-recyclable waste and recyclable household waste	Mandatory Requirement: 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.				Will fully comply. Current refuse collection regime includes collection of bags left on the street.	
	<div><div>Mandatory Requirement</div><div>Will the minimum space be provided and be accessible to disabled people?<input checked="" type="checkbox"/></div></div>					
	<div><div>Internal Recyclable household waste storage</div><div>Where there is no external recyclable waste storage and no Local Authority collection scheme</div><div>Internal storage (capacity 60 litres)<input type="checkbox"/></div></div>	0 of 2 Credits				
	<div><div>Local Authority collection Scheme</div><div>Post Collection sorting</div><div>Internal storage (capacity 30 litres)<input checked="" type="checkbox"/></div><div>Pre-collection sorting</div><div>Internal storage (3 separate bins, capacity 30 litres)<input type="checkbox"/></div></div>	4 of 4 Credits	All Levels			
	<div><div>External Storage, no Local Authority collection scheme</div><div>3 separate internal storage bins (capacity 30 litres)<input type="checkbox"/></div><div>AND</div><div>Houses</div><div>External Storage(capacity 180 litres)<input type="checkbox"/></div><div>Flats</div><div>Private recycling operator<input type="checkbox"/></div><div>3 or greater types of waste collected<input type="checkbox"/></div></div>	0 of 4 Credits				

Issue		Credits	Level	Assumptions Made	Evidence Required
Was 2 Construction Site Waste Management	<p>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.</p> <div> <p>SWMP details</p> <p>Does the SWMP include:</p> <p>+ No SWMP <input type="radio"/></p> <p>+ SWMP with targets and procedures to minimise waste? <input type="radio"/></p> <p>+ SWMP with procedures to divert 50% of waste <input type="radio"/></p> <p>+ SWMP with procedures to divert 85% of waste <input checked="" type="radio"/></p> </div>	3 of 3 Credits		Will fully comply.	
Was 3 Composting	<p>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.</p> <div> <p>Select the facilities available</p> <p>No composting facilities <input type="radio"/></p> <p>Individual composting facilities <input type="radio"/></p> <p>OR Communal/ community composting*? <input checked="" type="radio"/></p> <p>Local Authority <input checked="" type="checkbox"/></p> <p>OR Private with management plan <input type="checkbox"/></p> </div>	1 of 1 Credit	-	Compliance will use the Local Authority's collection regime of a 'kitchen caddy' in the kitchen and a large bin outside.	

* including if an automated waste collection system is in place

CATEGORY 6 POLLUTION		Overall Level: 4	Overall Score	73.52	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 100.00%		Credits	Level			
Contribution to Overall Score: 2.80 points		4 of 4 Credits	All Levels			
Pol 1 Global Warming Potential (GWP) of Insulants	<p>A credit is awarded where <u>all</u> insulating materials only use substances (in manufacture AND installation) that have a GWP of less than 5.</p> <div> <p>Select the most appropriate option</p> <p>All insulants have a GWP less than 5 <input checked="" type="radio"/></p> <p>OR Some insulants have a GWP of less than 5 <input type="radio"/></p> <p>OR No insulants have a GWP of less than 5 <input type="radio"/></p> </div>	1 of 1 Credits	-		Will comply.	
Pol 2 NOx Emissions	<p>Credits are awarded on the basis of NOx emissions arising from the operation of the space and water heating system within the dwelling.</p> <div> <p>Select the most appropriate option</p> <p>Greater than 100 mg/kWh <input type="radio"/></p> <p>OR Less than 100 mg/kWh <input type="radio"/></p> <p>OR Less than 70 mg/kWh <input type="radio"/></p> <p>OR Less than 40 mg/kWh <input checked="" type="radio"/></p> <p>OR Class 4 boiler <input type="radio"/></p> <p>OR Class 5 boiler <input type="radio"/></p> <p>OR All space and hot water energy requirements are met by systems who do not produce NOx emissions <input type="radio"/></p> </div>	3 of 3 Credits	-		Will fully comply.	

CATEGORY 7 HEALTH & WELLBEING		Overall Level: 4	Overall Score	73.52	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 83.00%		Credits	Level			
Contribution to Overall Score: 11.66 points		10 of 12 Credits	No level			
Hea 1 Daylighting	<p>Credits are awarded for ensuring key rooms in the dwelling have high daylight factors (DF) and a view of the sky.</p> <div> <p>Select the compliant areas</p> <p><u>Room</u></p> <p>Kitchen: Avg DF of at least 2% <input type="checkbox"/></p> <p>Living Room*: Avg DF of at least 1.5% <input checked="" type="checkbox"/></p> <p>Dining Room*: Avg DF of at least 1.5% <input checked="" type="checkbox"/></p> <p>Study*: Avg DF of at least 1.5% <input checked="" type="checkbox"/></p> <p>80% of working plane in all above rooms receive direct light from the sky? <input type="checkbox"/></p> </div> <p>Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.</p>	1 of 3 Credits	-		Estimated to partially comply with the criteria under BS8206:Pt2.	
Hea 2 Sound Insulation	<p>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.</p> <div> <p>Select a type of property</p> <p>Detached Property <input type="radio"/></p> <p>Attached Properties:</p> <p>- Separating walls and floors only exist between non habitable spaces <input type="radio"/></p> <p>- Separating walls and floors exist between habitable spaces <input checked="" type="radio"/></p> </div> <div> <p>Select a performance standard</p> <p>Performance standard not sought <input type="radio"/></p> <p>Airborne: 3db higher; Impact: 3dB lower <input type="radio"/></p> <p>OR Airborne: 5db higher; Impact: 5dB lower <input type="radio"/></p> <p>OR Airborne: 8db higher; Impact: 8dB lower <input checked="" type="radio"/></p> </div>	4 of 4 Credits	-		Will fully comply.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Hea 3 Private Space	<p>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.</p> <div> <p>Will a private/ semi-private space be provided? _____</p> <p>Yes, private/semi-private space will be provided <input checked="" type="radio"/></p> <p>OR No private/semi-private space <input type="radio"/></p> </div>	1 of 1 Credits	-	External private terrace space available for the residents.	
Hea 4 Lifetime Homes	<p><u>Mandatory Requirement:</u> Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6.</p> <p><u>Tradable credits:</u> Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme.</p> <div> <p>Mandatory Requirement _____</p> <p>Dwelling to achieve Code Level 6? <input type="checkbox"/></p> <p>Lifetime Homes Compliance _____</p> <p>All Lifetime Homes criteria will be met <input checked="" type="radio"/></p> <p>OR Exemption from LTH criteria 2/3 applied <input type="radio"/></p> <p>Credit not sought <input type="radio"/></p> </div>	4 of 4 Credits	No level	Full compliance with all sixteen criteria of LTH, including level thresholds.	

CATEGORY 8 MANAGEMENT		Overall Level: 4	Overall Score	73.52	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 100.00%		Credits	Level			
Contribution to Overall Score: 10.00 points		9 of 9 Credits	All Levels			
Man 1 Home User Guide	Credits are awarded where a simple guide is provided to each dwelling covering information relevant to the 'non-technical' home occupier, in accordance with the Code requirements. Tick the topics covered by the Home User Guide Operational Issues? <input checked="" type="checkbox"/> Site and Surroundings? <input checked="" type="checkbox"/> Is available in alternative formats? <input checked="" type="checkbox"/>	3 of 3 Credits	-	Will fully comply.		
Man 2 Considerate Constructors Scheme	Credits are awarded where there is a commitment to comply with best practice site management principles using either the Considerate Constructors Scheme or an alternative locally/ nationally recognised scheme. Select the appropriate scheme and score No scheme used <input type="radio"/> <u>Considerate Constructors</u> OR Best Practice: Score between 24 and 31.5 <input type="radio"/> OR Best Practice+: Score between 32 and 40 <input checked="" type="radio"/> <u>Alternative Scheme*</u> OR Mandatory + 50% optional requirements <input type="radio"/> OR Mandatory + 80% optional requirements <input type="radio"/> * In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.	2 of 2 Credits	-	Will fully comply.		
Man 3 Construction Site Impacts	Credits are awarded where there is a commitment and strategy to operate site management procedures on site as following: Tick the impacts that will be addressed <u>Monitor, report and set targets, where applicable, for:</u> - CO ₂ / energy use from site activities <input type="checkbox"/> - CO ₂ / energy use from site related transport <input type="checkbox"/> - water consumption from site activities <input checked="" type="checkbox"/> <u>Adopt best practice policies in respect of:</u> - air (dust) pollution from site activities <input checked="" type="checkbox"/> - water (ground and surface) pollution on site <input checked="" type="checkbox"/> <u>80% of site timber</u> is reclaimed, re-used or responsibly sourced <input checked="" type="checkbox"/>	2 of 2 Credits	-	Will fully comply.		

Issue		Credits	Level	Assumptions Made	Evidence Required
Man 4 Security	<p>Credits are awarded for complying with Section 2 - Physical Security from Secured by Design - New Homes. An Architectural Liaison Officer (ALO), or alternative, needs to be appointed early in the design process and their recommendations incorporated.</p> <div><div>Secured by Design Compliance</div><div><div>Credit not sought</div><div>OR</div><div>Secured by Design Section 2 Compliance</div></div><div><input type="radio"/><input checked="" type="radio"/></div></div>	2 of 2 Credits	-	Compliance with SBD Section 2 will be met.	

CATEGORY 9 ECOLOGY		Overall Level: 4	Overall Score	73.52	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 77.00%		Credits	Level			
Contribution to Overall Score: 9.33 points		7 of 9 Credits	All Levels			
Eco 1 Ecological Value of Site	<p>One credit is awarded for developing land of inherently low value.</p> <div><p>Select the appropriate option _____</p><div><p>Credit not sought <input type="radio"/></p><p>OR Land has ecological value <input type="radio"/></p><p>OR Land has low/ insignificant ecological value* <input checked="" type="radio"/></p></div></div> <p>* Low ecological value is determined either a) by using Checklist Eco 1 across the whole development site; or b) where an suitably qualified ecologist is appointed and can confirm or c) produces an independent ecological report of the site, that the construction zone is of low/ insignificant value; AND the rest of the development site will remain undisturbed by the works.</p>	1 of 1 Credits	-	No ecology on existing site, therefore credit awarded by default.		
Eco 2 Ecological Enhancement	<p>A credit is awarded where there is a commitment to enhance the ecological value of the development site.</p> <div><p>Tick the appropriate boxes _____</p><div><p>Will a <i>Suitably Qualified Ecologist</i> be appointed to recommend appropriate ecological features? <input checked="" type="checkbox"/></p><p>AND Will all key recommendations be adopted? <input checked="" type="checkbox"/></p><p>AND 30% of other recommendations be adopted? <input checked="" type="checkbox"/></p></div></div>	1 of 1 Credits	-	Engagement of an ecologist is required to enable score.	Site Survey by an SQE would be required prior to any demolition or construction work commencing on site.	
Eco 3 Protection of Ecological Features	<p>A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value.</p> <div><p>Type and protection of existing features _____</p><div><p>Site with features of ecological value? <input type="radio"/></p><p>OR Site of low ecological value (as Eco 1)? <input checked="" type="radio"/></p><p>AND All* existing features potentially affected by site works are maintained and adequately protected? <input type="checkbox"/></p></div></div> <p>*If a suitably qualified ecologist has confirmed that a feature can be removed due to insignificant ecological value or poor health conditions, as long all the rest have been protected, then this box can be ticked.</p>	1 of 1 Credits	-	No ecology on existing site, therefore credit awarded by default.		

Issue		Credits	Level	Assumptions Made	Evidence Required
Eco 4 Change of Ecological Value of Site	<p>Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be:</p> <div> <p>Change in Ecological Value _____</p> <p>Major negative change: fewer than -9 <input type="radio"/></p> <p>Minor negative change: between -9 and -3 <input type="radio"/></p> <p>OR Neutral: between -3 and +3 <input checked="" type="radio"/></p> <p>Minor enhancement: between +3 and +9 <input type="radio"/></p> <p>Major enhancement: greater than 9 <input type="radio"/></p> </div>	2 of 4 Credits	-	Low Ecological Value of existing site ensures at least a neutral score under this issue.	Site Survey by an SQE would be required prior to any demolition or construction work commencing on site.
Eco 5 Building Footprint	<p>Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is:</p> <div> <p>Ratio of Net Internal Floor Area: Net Internal Ground Floor Area _____</p> <p>Credit Not Sought <input type="radio"/></p> <p>OR Houses: 2.5:1 OR Flats: 3:1 <input type="radio"/></p> <p>OR Houses: 3:1 OR Flats: 4:1 <input checked="" type="radio"/></p> <p>OR Houses & Flats Weighted (2.5:1 & 3:1) <input type="radio"/></p> <p>OR Houses & Flats Weighted (3:1 & 4:1) <input type="radio"/></p> </div>	2 of 2 Credits		The proposal is for a 5-storey family house.	

CONCLUSION

The Code for Sustainable Homes assesses the environmental quality of a development by considering the broad concerns of climate change, use of resources, pollution, and impacts on bio-diversity. These concerns are balanced against their need for a high quality internal environment. The Code Certification pass marks are 36% (Level 1), 48% (Level 2), 57% (Level 3), 68% (Level 4), 84% (Level 5) and 90% (Level 6). However, these can only be applied after all categories have been sub-totalled into their overall 'Issue' categories. At such time scores are 'weighted' and the final marks then calculated.

The Preliminary rating for this scheme is estimated as achieving the Target Rating if the issues awarded with credits are implemented in full. The current estimated score includes a safety margin of at least 5%.

To allow for a margin of safety, it is recommended that a score that is at least 5.0% in excess of the required target percentage is specified. This is because failure on any major issue may force unexpected or unwanted alternative strategies to achieve the desired rating and potentially additional expense.

The Project Team should check and confirm the data and assumptions contained within this report at the earliest opportunity. This will aid the timely and accurate submission of data for the Interim Code Assessment.

The project team should ensure that the drawings and specifications follow AND clearly state ALL the relevant Code issues for each of the applicable credits. Please note that for the Interim Stage Assessment, without the evidence, the assessor cannot award the credits for such certificated assessment. Once the relevant Code issues are integrated with the design, ALL compliant data (auditable proof, as described in the Code Technical Guide) should then be submitted to the Assessor for the Interim Stage report to be written. Once this report is finished it can be submitted to the BRE for QA and Interim Certification, as necessary. This is then followed by the Post Construction Stage report, which is compiled following site visit(s), receipt of "as built" evidence and ultimately, Post Construction Certification.

REFERENCES

This report was based on the following drawings along with written, verbal and web-based evidence:

Drawing No. Reference	Status/Revision	Dated
Family House drawings 200_03_20 to 25	Planning	25/02/2013
FT Architects - Design & Access Statement		June 2012

<END>