Ian Waters BREEAM Refurbishment and Code for Sustainable Homes Assessor

Code for Sustainable Homes - Pre Assessment Report

Min Code level : **4** Pre Asses level : **4**	Project : 8 Elsworthy Road, London. NW3 3DJ Client : Shore Securities Ltd. Dwelling Type : Single Dwelling,	**Date : 28.02.2013** Ref: 075.CSH.PA.120228
Information Drawings ; 28.02.13 Sap Cals ; 04.03.13	The following estimated credits and spec notes are estimates based on current design as issued, current building regs and/or best estimates so as to achieve the required CfSH pass. The assessed CfSH information is based on current BRE Global Technical Guidance Standards Dated Nov 2010. The rating given in this report is for guidance only, please note predicted scores may vary from those obtained through the formal CfSH Design stage assessment process.	
Issued : 04.03.13	Revision : Dated : Changes :	

Credit Ref	Credit Type	Specification	Max Credits	Estimated Credits	Options / Information required / Notes
ENE 1	Energy DER	SAP calculations acreated by Energy Calculations Ltd Reported DER=11.86 TER=22.78 Improvement = 47.9% Floor area = 567m2	10	5	Estimated good figure, await SAP calculations
ENE 2	Energy FEE	SAP calculations created by Energy Calculations Ltd Fabric Energy Efficiency rating = 57.4 kWh/m2/year	9	3.5	Estimated good figure, await SAP calculations
ENE 3	Energy Display Device	Requirement to supply and install compatible energy display device. To monitor electricity **and** primary heating fuel so the end user can easily monitor fuel consumption for two credits. To monitor electricity **or** primary heating fuel for a single credit. Suggest Electric, gas and water consumption monitored. Hardwired or Wireless wall mounted user display unit.	2	2	Compatible Smart Utility meters and/or pulse type gas/water meters required for two credits. Dispay devices : `*ecoMeter P370 In Home*` *unit or a* `*EWG*` *display unit by EWGECO.*

ENE 4	Drying space	Internal or external permenant drying space facility. Assume internal most suitable / desirable Suggest an internal wall or ceiling mounted fixed clothe drying rail located within basement utility room.	1	1	Specification of unit and room venting to be agreed. Min 6m length of drying line/rails. Room to be vented min 30l/s extract rate.
ENE 5	Energy Labeled white goods	Promote use of energy efficient white goods. Either through the supply of white goods to stipulated rating for full credits or supply labeling information to assist end user purchase, for a single credit. Assumed developer to supply all white goods to stipulated rating, to suit min EU Energy Efficiency rating and Labeling scheme.	2	2	White goods are : Fridge, Freezer, Washing Machine, Tumble Dryer, Dishwasher. Specification and energy effecieny level to be confirmed.
ENE 6	External Lighting	External Space and Security lighting to be energy efficient performance specification. Assume requirements can be achieved.	2	2	Specification of fittings and location to be agreed.
ENE 7	Renewable Technology	Use of Low or Zero Carbon Technologies within, upon or directly related to the dwelling. Estimated min 3.1 Kw PV panels fitted. Min 10% pass rate achieved.	2	1	PV Panels. Area and orientation to be confirmed by Architect and agreed.
ENE 8	Cycle storage	Promote use of cycling to reduce CO2 emissions. Secure protected storage facility, to be located within rear garden. Rear garden access. 4 bedrooms and above, so allow space for 4No cycles within protected enclosure, min plan area 2 x2.5m.	2	2	Precise Cycle store size and design to be agreed. Assummed dedicated cycle store. Allow exrtra 1m2 for garden storage, min shed total 6m2. Asssume locked door, weather enclosure
ENE 9	Home Office	Create a functional Home office space within the dwelling, to reduce the need to commute. Adequate space identified within dedicated ground floor study room.	1	1	Drawing with specific facilities / labels noted as required. Confirm window opens and adequate daylight.
		ENERGY (ENE) Credits Total =	**31**	**19.5**	= Total 63 % credits.

WAT 1	Indoor Water Use	Aim is to reduce water consumption within the dwelling. Max allowance level = 105l/p/day min CL 3..	5	3	WAT 1 calculator tool yet to be completed based on on schedule of fittings. Type and water consumption levels of fittings estimated, two tier spec levels. Possible Specification of rainwater harvesting system to be agreed for WC's.
WAT 2	External Water Use	Promote water recycling on site for external use only.	1	1	Specification and location to be agreed.
		WATER (WAT) Credits Total =	**6**	**4**	= Total 66 % credits, LA Minimum stipulated requirement is 50% Pass / Fail
MAT 1	Environmental Material Impact	Specification of Low impact materials and methods of construction, based on life cycle criteria as stipulated within BRE Green Guide. Main envelope Construction materials are rated form A+ to D and collectivly an overall credit score using MAT 1 calculator tool. Initial check of details, SMR drawings RD2 800-802, I estimate an average score.	15	11	MAT 1 calculator tool to be completed. High degree of concrete within structure restricts score. Variations to some typical element specification may increase score.
MAT 2	Responsible sourcing - Basic elements	Promote specification or responsible sourced materials for basic elements of the building such as : Frame, Slab, upper floors, Roof, External and internal walls and staircase. 80% of each element to be responsibly sourced to score any credits. Mat 2 calculator to be completed to ascertain score. An `average` best guess score assumed.	6	4	MAT 2 calculator tool to be completed. Spec check and Variations to some typical element specification may increase score.
MAT 3	Responsible sourcing - Finishing elements	Promote specification of responsible sourced materials for finishing elements of the building such as : Staircase, windows, doors, skirting's, paneling, fascia etc.. 80% of each element to be responsibly sourced to score any credits. Mat 3 calculators to be completed to ascertain score. A `Very Good` best guess score assumed.	3	2	MAT 3 calculator tool to be completed. Spec check and Variations to some typical element specification may increase score.
		MATERIAL (MAT) Credits Total =	**24**	**17**	= Total 70% credits,Min required credits % Pass / Fail

SUR 1	Surface water design	Management of surface water runoff from developments to reduce / delay discharge into sewers and reduce flood risk. Mandatory elements to be included, Additional credits are sought. Approx new roof area of 55m2 over existing.	2	2	Mandatory and the additional Credits can only be gained with the submission of a report created by qualified hydrologist engineer. Await further consideration / detail on the external rain water runoff and design.
SUR 2	Flood risk	Location of dwellings within low risk flood areas or measures in medium risk areas rewarded. Elsworthy Rd in EA low risk area. Creation of flood risk assessment report in accordance with PPS25.	2	2	Assumes site has never flooded by Rivers, Groundwater, Sewers, Surface water and Infrastructure, to be confirmed by design team.
		SURFACE WATER RUN OFF (SUR) Credits Total =	**4**	**4**	= Total 100% category credits available
WAS 1	Storage Household waste	Provide adequate internal and external storage space for typical domestic non-recyclable and recyclable household waste, in accordance with local authority collection facilities. Mandatory external refuse bins required. Assumes local authority presorted collection service, minimum internal storage can be provided. External waste storage area located upon front driveway area. Checklist IDP in relation to user access and usability to be assessed against proposals.	4	4	Requires confirmation of size, location and possible drawing. Local authority collection leaflet required. Checklist IDP not completed.
WAS 2	Construction Site waste management	To minimize site construction waste. Formulate and Utilize a site waste management plan (SWMP) in accordance with best practice guidelines. Suggest SWMP instigated due to scale of site and main contractor. Address general reduction in waste, sort and divert waste from landfill by 50%. Checklist WAS 2a 2b 2c to be completed.	3	0	Checklist WAS 2a 2b 2c to be completed. Possible option to increase score

WAS 3	Composting	Promote household composting to reduce waste. Expect min 7 litre internal container and adequate garden area to locate standalone compost bin. Size min 150 litres. Formulate user guide on Composting. Checklist IDP in relation to user access and usability to be assessed against proposals.	1	1	Check distance to proposed bin. Complete checklist IDP. Requires confirmation of size, location.
		WASTE (WAS) Credits Total =	**8**	**5**	= Total 62.5% category credits available
POL 1	Insulant GWP	Reduce emissions of harmful gases from insulation materials during manufacture and installation. Related to walls, roof, floors, pipework, tanks, and doors. All insulants are expected to have GWP of less than 5.	1	1	Insulant Specifications to be agreed.
POL 2	NOx Emissions	Reduction of nitrogen Oxide (NOx) emissions into the atmosphere from heating boilers / systems. NOx Average required by SAP energy assessor due to multiple number systems proposed on site. Ideally expect levels less than 40mg/kWh to earn full credits.	3	2	Refer to SAP calculations. Initail Developer to confirmed heating system specification **SEDBUK band A, NOx class 5, Sap efficiency 91, natural gas fired, by Ariston.** = less than 70 tp 41. Less than 40 = 3 credits Possible option to increase score
		POLLUTION (POL) Credits Total =	**4**	**3**	= Total 75% category credits available
HEA 1	Daylighting	Encourage goods levels of natural day light to principle rooms within dwelling, to minimize energy use through artificial lighting. Rooms to be assessed : Kitchen, Living rooms, Dining room and Study. 80% of the working plane must receive natural light. Undertake Daylight Factor Calculations to ascertain minimum levels. Expect design to pass minimum levels due to high degree glazing.	3	3	Accurate Windows size and room areas to be confirmed. Rooms to be assessed : Ground floor - kitchen / dining room, front living room and front study.

HEA 2	Sound insulation	Promote good levels sound insulation to habitable rooms between dwellings. Dwelling Semi detached, therefore require testing or use of `Robust Details` on party wall to earn credits. Determine that reasonable levels can be achieved, based on principles drawn in SMR drawings RD2 800. Set Levels ; Airborne 5db higher, Impact 5db lower than building regs.	4	3	Developer to confirm if the site is to be registered under `Robust Details` or by acoustic site testing method.
HEA 3	Private space	Provide private secure outdoor space. Achieved by default and nature of design. Gate / Fence Security to be confirmed. Checklist IDP in relation to user access and usability to be assessed against proposals.	1	1	Complete checklist IDP.
HEA 4	Lifetime Homes	Requires design to consider access and use for current and any future users. Specifically required under local Authority planning requirements. Lifetime Homes checklist of 16 items to be confirmed and met. Expect dwelling to be compliant.	4	4	Specific checklist criteria to be checked and agreed with Architects.
		HEALTH & WELL BEING (HEA) Credits Total =	**12**	**11**	= Total 91% category credits available
MAN 1	Home user guide	Create a Home User guide using a best practice and MAN 1 part 1 & 2 checklist guidance notes. Created in combination with standard O&M manuals.	3	3	Issue checklist MAN 1 part 1 & 2. Confirm author of Home User Guide.
MAN 2	Considerate Constructors	Contractor to register the scheme and instigate Considerate Constructors Scheme best practice. Work to `Best Practice` levels with an expected score of between 25 to 34.for 1 credit. Contractor item.	2	0	Developer not registered. Advise that site is registered before works start on site Possible option to increase score

MAN 3	Construction site Impact	Minimize environmental impacts on site during the works. Contractor item. Complete MAN 3 checklist. 2 Credits earned by achieving: 80% site timber reused/responsibly sourced, reduce air/dust pollution, water pollution minimized, site water use monitored.	2	2	Issue MAN 3 checklist. Confirm contractor is able to instigate necessary procedures.
MAN 4	Security	Promote user safety and secure long term design measures. Register and consult with local crime prevention officer under Secured by Design (SBD) scheme. Scheme able to include at minimal cost / change. Include measures, Issue SBD section 2 forms and receive notice from local officer.	2	2	SMR to confirm design measures and issue form.
		MANAGEMENT (MAN) Credits Total =	**9**	**7**	= Total 77% category credits available
ECO 1	Existing ecological value site	Encourages and rewards developments built on land of low ecological value. Under Eco 1 Checklist minimum criteria. Credit cannot be possible. Site contains a tree.	1	0	
ECO 2	Enhance Ecological Value	Credit not sought.	1	1	Credits can possibly be earned by commissioning an Ecological Report created by Certified Ecologist to enhance ecological value of site.
ECO 3	Protection ecological features	Prevent damage to existing features. Tree on south boundary to be retained and protected.	1	1	SMR to create drawing for tree protection measures.
ECO 4	Ecological change	Credits not sought.	4	1	Credits can possibly be earned by commissioning an Ecological Report created by Certified Ecologist.
ECO 5	Building footprint	Encourage efficient use of building footprint by optimizing total dwelling floor areas in relation to ground floor level. As reported by as drawn design has a 2.861 ratio. Min 2.5 /1 ratio 1 credits, 3 /1 ratio 2 credits.	2	1	Total NIGFA = 183m2 House + 19m2 Habitable outbuilding = 202m2. Total NIFA = 202 + 140 + 118 + 118m2 = 578m2. To be confirmed with Architects.

		ECOLOGY (ECO) Credits Total =	**9**	**4**	= Total 44% category credits available
		Code Level % =	**100%**	**68.22%**	**Equates to an estimated Code Level 4.**
Notes : Additional credits can be earned : WAS 2 MAN 2 POL 2 SAP calculations created by Energy Calculations Ltd. Dated 04.03.13 Property ref = 001143. Surveyor ID 7869-0001.				The total percentage scores that are to be equal to or greater than ; Code Level 3 = 57%, CL4 = 68%, CL5 =84%, CL6 = 90% Note ; Credits are weighted different for each category. Code for Sustainable Homes Technical Guidance document is available to view on the planningportal.gov.uk website.	
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