



architects

Report Reference: STMO180420
Site Registration: TBC
Site Name: The Dice
Assessor Number: STRO022487
Company: Thrive Architects
Assessor: Georgie O'Connor



Site Details

Site Name: The Dice
 Site Registration: TBC
 Site Address: St Andrews Park

 City/Town: Uxbridge
 County: Greater London
 Postcode: UB10
 No. of Dwellings: 1
 No. of Dwelling Types: 0
 Planning Authority: London Borough of Hillingdon
 Funding Body:

Assessor Details

Company: Thrive Architects
 Assessor Name: Georgie O'Connor
 Cert Number: STRO022487
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 Romsey Road
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 County: Hampshire
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Client Details

Company: St. Modwen Homes
 Contact Name: Amir Khier
 Job Title: Design Manager
 Email: AKhier@stmodwen.co.uk
 Tel: 0121 6471000
 Address: Two Devon Way

 City/Town: Longbridge
 County: Birmingham
 Postcode: B31 2TS

Architect Details

Company: FBM Architects
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Developer Details

Company: St. Modwen Homes
 Contact Name: Amir Khier
 Job Title: Design Manager
 Email: AKhier@stmodwen.co.uk
 Tel: 0121 6471000
 Address: Two Devon Way

 City/Town: Longbridge
 County: Birmingham
 Postcode: B31 2TS



Dwelling ID	Plot No.	Address	Social Unit
1	2B	The Dice Uxbridge	No



Development Summary & Ratings

Dwelling ID	Dwelling Type	Description	Level	Score
		The DiceUxbridge	4	69.55

Deviations from Standard

No deviations from standard



Score Sheet for The Dice																																				
	ENE									WAT	MAT			SUR	WAS			POL	HEA				MAN				ECO					Summary				
Dwelling ID	1	2	3	4	5	6	7	8	9	1	2	1	2	3	1	2	1	2	3	1	2	1	2	3	4	1	2	3	4	1	2	3	4	5	Score	Level
1	3	0	2	1	2	2	2	2	1	4	1	10	0	0	2	2	4	3	0	1	3	3	3	1	4	3	2	2	2	0	1	1	3	1	69.55	4

Summary Score Sheet
Dwelling Type: The Dice Uxbridge

Dwelling ID: 1

			Score Assessment						
			Credit Score	Credits Available	Sub Total	Credits Available	%	Weighting Factor	Points Score
Energy & CO2 Emissions									
ENE 1	Dwelling Emission Rate		3	10	15	31	48.39	36.4	17.61
ENE 2	Fabric Energy Efficiency		0	9					
ENE 3	Energy Display Device		2	2					
ENE 4	Drying Space		1	1					
ENE 5	Energy Labelled White Goods		2	2					
ENE 6	External Lighting		2	2					
ENE 7	Low or Zero Carbon Energy Technologies		2	2					
ENE 8	Cycle Storage		2	2					
ENE 9	Home Office		1	1					
Water									
WAT 1	Internal Water Use		4	5	5	6	83.33	9	7.5
WAT 2	External Water Use		1	1					
Materials									
MAT 1	Environmental Impact of Materials		10	15	10	24	41.67	7.2	3
MAT 2	Responsible Sourcing (Basic Building Elements)		0	6					
MAT 3	Responsible Sourcing (Finishing Elements)		0	3					
Surface Water Run-off									
SUR 1	Management of Surface Water Run-Off from Site		2	2	4	4	100	2.2	2.2
SUR 2	Flood Risk		2	2					
Waste									
WAS 1	Household Waste Storage and Recycling Facilities		4	4	7	8	87.5	6.4	5.6
WAS 2	Construction Site Waste Management		3	3					
WAS 3	Composting		0	1					
Pollution									
POL 1	Global Warming Potential of Insulants		1	1	4	4	100	2.8	2.8
POL 2	NOx Emissions		3	3					
Health & Wellbeing									
HEA 1	Daylighting		3	3	11	12	91.67	14	12.83
HEA 2	Sound Insulation		3	4					
HEA 3	Private Space		1	1					
HEA 4	Lifetime Homes		4	4					
Management									
MAN 1	Home User Guide		3	3	9	9	100	10	10
MAN 2	Considerate Constructors Scheme		2	2					
MAN 3	Construction Site Impacts		2	2					
MAN 4	Security		2	2					
Ecology									
ECO 1	Ecological Value of Site		0	1	6	9	66.67	12	8
ECO 2	Ecological Enhancement		1	1					
ECO 3	Protection of Ecological Features		1	1					
ECO 4	Change of Ecological Value of Site		3	4					
ECO 5	Building Footprint		1	2					
Level Achieved: 4			Total Points Scored: 69.55						

Evidence for ENE 1 (Dwelling Emission Rate)

Improvement above Part L Building Regulations 2010. 3 credits allocated

SAP Worksheets to be provided by Thrive Architects.

Assumptions for ENE 1

Evidence for ENE 2 (Fabric Energy Efficiency)

Apartment

0 credits allocated

SAP Worksheets to be provided by Thrive Architects.

Assumptions for ENE 2

Evidence for ENE 3 (Energy Display Device)

Correctly specified display device showing current primary heating fuel consumption data.

Correctly specified display device showing current consumption data.

Please confirm in writing that a correctly specified energy display device will be provided to each dwelling, monitoring current electricity and primary fuel consumption (if not electrically sourced) and provide drawings showing the energy display device.

The display device must show at least the following:

- Local time
- Current mains energy consumption (kilowatts and kilowatt hours)
- Current emissions (g/kg CO2)
- Current tariff
- Current costs (in pounds and pence). For pre-payment customers this should be 'real time' data and for 'credit' paying customers cost should be displayed on a monthly basis.
- Display accurate account balance information (amount in credit or debit)
- Visual presentation of data (i.e. non-numeric) to allow consumers to easily identify high and low level of usage
- Historical consumption data so that consumers can compare their current and previous usage in a meaningful way. This should include cumulative consumption data in any of the following forms day/week/month/billing period.

Assumptions for ENE 3

Evidence for ENE 4 (Drying Space)

Compliant internal drying space

For internal drying space, please provide detailed documentary evidence confirming:

- The location of drying fixings
- Details/location of ventilation provided
- The length of drying line
- Details of the lock provided (for communal drying space only)

For external drying space, detailed documentary evidence confirming:

- The location of fixings/footing or posts
- The length of drying line
- Details of the lock provided (for communal drying space only)

Minimum line length:

- For 1-2 bedroom dwellings, the drying equipment must be capable of holding 4m+ of drying line
- For 3+ bedroom dwellings, the drying equipment must be capable of holding 6m+ of drying line

The drying space (internal or external) must be secure.



Assumptions for ENE 4

Evidence for ENE 5 (Energy Labelled White Goods)

A+ rated fridge & freezers or fridge/freezer
A rated washing machine and dishwasher, AND EITHER a tumble dryer (a washer-dryer would be an acceptable alternative to a standalone tumble dryer) with a B rating or where a tumble dryer is not provided, the EU Energy Efficiency Labelling Scheme Information will be provided.

Please provide a copy and written confirmation that all occupants will be provided with the EU Energy Efficiency Labelling Scheme pamphlet.

If any white goods are to be provided, detailed documentary evidence confirming:

- The appliances to be provided with their applicable ratings under the EU Energy Efficiency Labelling Scheme

Where washer dryers or tumble dryers will not be provided and the second credit is sought, provide detailed documentary evidence as follows:

- A copy of the EU Energy Efficiency Labelling Scheme Information

AND

- Confirmation that the information will be provided to all dwellings

Where details cannot be produced at this stage:

- A formal letter from the developer giving the specific undertaking.

Assumptions for ENE 5

Evidence for ENE 6 (External Lighting)

Complaint space lighting, no security lighting installed

Compliant Space Lighting:

- Where all external space lighting, including lighting in common areas, is provided by energy efficient fittings with appropriate control systems.

Compliant Security Lighting:

- Where all security lighting is designed for energy efficiency and is adequately controlled such that:

All burglar security lights have:

- A maximum wattage of 150 W

AND

- Movement detecting control devices (PIR)

AND

- Daylight cut-off sensors

All other security lighting:

- Is provided by energy efficient fittings

AND

- Is fitted with daylight cut-off sensors OR a time switch

If no security lighting is installed, the security lighting credit can be awarded by default, provided all the requirements related to the specification of space lighting have been met.

This credit is evidenced via drawings clearly showing the location of all external light fittings

AND

Detailed documentary evidence confirming:

- The types of light fittings and efficacy, in lumens per circuit watt, for all lamps
- The control systems applicable to each light fitting or group of fittings

Where detailed information is not available at the stage:

- A letter of instruction to a contractor/supplier or a formal letter from the developer giving the specific undertaking

Assumptions for ENE 6

Evidence for ENE 7 (Low or Zero Carbon Energy Technologies)

Contribution of low or zero carbon technologies greater than or equal to 15%

SAP Worksheets to be provided by Thrive Architects.

Assumptions for ENE 7

Evidence for ENE 8 (Cycle Storage)

2 or 3 bedroom dwelling - Storage for 2 cycles per dwelling

Please provide detailed documentary evidence showing:

- The number of bedrooms and the corresponding number of cycle storage spaces per dwelling
- Location, type and size of storage
- Convenient access to cycle storage
- Any security measures
- Details of the proprietary system (if applicable)
- How the requirements of clause 35 of Secured by Design - New Homes 2010 will be met (if applicable).

Where detailed information is not available at the stage:

- A letter of instruction to a contractor/supplier or formal letter from the developer giving the specific undertaking

Requirements:

1 bed dwellings - 1 cycle per dwelling - 2.5m²

2 & 3 bed dwellings - 2 cycles per dwelling - 4m²

4+ bed dwellings - 4 cycles per dwelling - 6m²

OR

Where a proprietary storage or hanging system is provided, the space requirements are flexible but the system must allow each cycle to be removed independently and meet all other criteria.

Assumptions for ENE 8**Evidence for ENE 9 (Home Office)**

Compliant home office

Please provide detailed documentary evidence showing:

- Location of and sufficient space for the home office
- Location and number of sockets (two double power sockets)
- Location and number of telephone points (two telephone points (or double telephone point), or one telephone point where cable or broadband is available)
- That adequate ventilation will be provided (the room must have a openable window or alternative ventilation (e.g. passive stack). Where the room has a window, the minimum openable casement must be 0.5m².
- That an average daylight factor of at least 1.5% is achieved

AND

Confirmation of one of the following:

- Cable connection
- That broadband is available at the site level (not for individual dwellings), i.e. a letter from the developer confirming that they have checked that broadband is available
- Two telephone points (or double telephone point)

Where detailed information is not available at this stage:

- A letter of instruction to a contractor/supplier or a formal letter from the developer giving the specific undertaking.

Assumptions for ENE 9



Evidence for WAT 1 (Internal Water Use)
Internal water use less than or equal to 90 litres per person per day
Please provide the specification or the flow rates of the wash hand basin taps, kitchen taps, w/c dual flush rate, bath capacity, shower and washing machine litres/kg dry load and dishwasher litres/place setting (if provided).
Please provide the completed Water Efficiency Calculator for New Dwellings internal potable water use for each dwelling which has a different specification
AND
Detailed documentary evidence showing:
- Location, details and type of appliances/fittings that use water in the dwelling including any specific water reduction equipment with the capacity / flow rate of equipment.
- Location, size and details of any rainwater and greywater collection systems provided for use in the dwelling
Where detailed documentary evidence is not available at the stage:
- Completed Water Efficiency Calculator for New Dwellings internal potable water use for each dwelling which has a different specification
AND
A letter of instruction to a contractor/supplier or a formal letter from the developer giving a specific undertaking, providing sufficient information to allow the water calculation to be completed.
Assumptions for WAT 1

Evidence for WAT 2 (External Water Use)

Compliant individual rainwater collection system

Please provide detailed documentary evidence stating type size and location of any rainwater collection system.

Where detailed documentary evidence is not available:

- A letter of instruction to a contractor/supplier or a formal letter from the developer giving a specific undertaking.

The specification of the rainwater collector must meet the following criteria:

- No open access at the top of the collector (a child-proof lid is allowed)
- Provision of a tap or other arrangement from drawing off water
- Connection to the rainwater downpipes with an automatic overflow into the conventional rainwater drainage system
- A means of detaching the rainwater downpipe and access provision to enable the interior to be cleaned
- Where the collection system is to be sited outside, and not buried, it must be stable and adequately supported; the material used for the container shall be durable and opaque to sunlight

Private space:

- Terraces and patios - 100 litres minimum
- 1-2 bedroom home with private garden - 150 litres minimum
- 3+ bedroom home with private garden - 200 litres minimum

Communal space:

- 1 litre/m² of land allocated to the dwelling with a minimum of 200 litres per communal garden. Where the communal garden is allocated to more than six dwellings, a maximum of 30 litres per dwelling can be applied.

Assumptions for WAT 2

Evidence for MAT 1 (Environmental Impact of Materials)

Mandatory requirements met: At least 3 elements rated A+ to D, 10 credits scored

MANDATORY REQUIREMENT

Please note that this particular credit has the following mandatory requirements. At least three of the following five elements of the building envelope must have a Green Guide rating between A+ and D:

- Roof
- External Walls
- Internal Walls (including separating walls)
- Upper and Ground Floors (including separating floors)
- Windows

<http://www.thegreenguide.org.uk/>

Please check the above website and forward your specification for the site.

Assumptions for MAT 1

Evidence for MAT 2 (Responsible Sourcing (Basic Building Elements))

Zero credits or credits not sought

Credit not sought.

Assumptions for MAT 2

Evidence for MAT 3 (Responsible Sourcing (Finishing Elements))

Zero credits or credits not sought

Credit not sought.

Assumptions for MAT 3

Evidence for SUR 1 (Management of Surface Water Run-Off from Site)

Mandatory Met: Peak rate of run-off and annual volume of run-off is no greater for the developed than for the pre-development. The system has also been designed for local drainage system failure.

No discharge to watercourse(s) for rainfall depth up to 5mm.

Run-off from all hard surfaces shall receive an appropriate level of treatment (as per the SudS manual) to minimise risk of pollution.

Please return the STROMA template SUR 1 report for assessment. Drawings also need to be provided showing the pre-development and proposed drainage systems.

For additional credits please provide:-

- Confirmation of the appointment of an appropriately qualified engineer or consultant to carry out the calculations and provide design criteria for all relevant elements of the SUDS Management Train.
- The appropriately qualified professionals report should contain all information necessary to demonstrate compliance with peak rate of run-off and volume of run-off requirements.
- Confirmation from the consultant/engineer that flooding of the property would not occur in the event of local drainage system failure.
- Copies of any drawings and specification text necessary to support the claims made.
- Where SUDS are being specified, a copy of the consultant's or engineers report detailing the design specifications, calculations and drawings to support the additional credits. Where detailed designs are not available at this stage, the specifications need to clearly state the essential design criteria.

A statement from the appropriately qualified professional confirming that they are qualified in line with the Code definition is required.

Assumptions for SUR 1

Evidence for SUR 2 (Flood Risk)

Low flood risk - zone 1

Please provide a Flood Risk Assessment (according to PPS25) confirming the risk of the development flooding from fluvial, tidal, sewers, groundwater, surface run-off and infrastructure failure sources.

For developments situated in Zone 1 please provide:

- A Flood Risk Assessment (prepared according to good practice guidance as outlined in PPS25 Development and Flood Risk) which shows that there is a low risk of flooding from all sources.

For medium (Zone 2) or high (Zone 3a) flood risk areas:

- A Flood Risk Assessment (prepared according to good practice guidance as outlined in PPS25 Development and Flood Risk) which shows that there is a medium or high risk of flooding.

AND

- Site plans indicating the design flood level, the range of ground levels of the dwellings, car parking areas and site access (lowest to highest), showing that the criteria (finished floor levels of all habitable rooms and access routes being at least 600 mm above the design flood level) are met, along with any notes explaining the function of any areas lying below the design flood level.

AND

- Confirmation from the local planning authority that the development complied with PPS25 and is appropriately flood resilient and resistant and has managed any residual risk safely.

Where the site is under the protection of flood defences and the flood risk category of the site is reduced:

- Written confirmation from the Environmental Agency of the reduction in flood risk category.

Assumptions for SUR 2

Evidence for WAS 1 (Household Waste Storage and Recycling Facilities)

Mandatory requirements met: Adequate storage of household waste with accessibility in line with checklist WAS 1. Local authority collection: After collection sorting with appropriate internal storage of recyclable materials

MANDATORY REQUIREMENT

Provide table: Cat 5.1 - Supplementary Information Sheet for Was 1 and Checklist IDP

Please provide detailed documentary evidence stating:

- The location of internal and external storage
- The number, types and sizes of internal and external storage

AND

A letter, leaflet, website or other published information from the Local Authority/waste scheme provider describing:

- The types of waste collected
- The frequency of collection
- If there will be pre or post collection sorting

Assumptions for WAS 1

Evidence for WAS 2 (Construction Site Waste Management)

Compliant site waste management plan containing benchmarks, procedures and commitments for the minimizing and diverting 80% waste from landfill in line with the criteria and with Checklist WAS 2a, 2b & 2c

Please provide a copy of the compliant SWMP containing the appropriate benchmarks, commitments and procedures for waste minimisation and diversion from landfill in line with the criteria and with Checklist Was 2a, Was 2b and Was 2c.

OR

Confirmation from the developer that the SWMP includes/will include benchmarks, procedures and commitments from minimising and diverting waste from landfill in line with the criteria and with Checklists Was 2a, Was 2b and Was 2c.

Assumptions for WAS 2**Evidence for WAS 3 (Composting)**

Credits not sought or no compliant composting provision

Credit not sought.

Assumptions for WAS 3**Evidence for POL 1 (Global Warming Potential of Insulants)**

All insulants have a GWP of less than 5

Please provide completed Checklist Pol 2 showing the proposed insulation materials (or none) for each element and whether they are foamed using blowing agents or are unfoamed (from table Cat 6.1). Please evidence this by drawings or within a specification.

For foamed materials, or propellants used to spray or inject insulation, provide manufacturer/installer's documentation confirming that their product uses either blowing agents deemed to satisfy the requirement from table Cat 6.2 in isolation or a blowing agent or blend of blowing agents which can be shown to have a GWP of less than 5.

Assumptions for POL 1**Evidence for POL 2 (NOx Emissions)**

NOx emissions less than or equal to 40mg/kWh

Please provide detailed documentary evidence describing:

- The primary and any secondary heating systems and flue type
- Dry NOx levels and/or boiler class of the primary and any secondary heating systems.

Where NOx averaging is required due to multiple heating systems within the dwelling:

Copy of calculations as detailed in the methodology based on design stage SAP outputs.

Where documentary evidence is not available at this stage:

- A letter of instruction to a contractor/supplier or a formal letter from the developer to the Code assessor giving the specific undertaking.

Assumptions for POL 2

Evidence for HEA 1 (Daylighting)

Kitchen: Average daylight factor of at least 2%
Living room: Average daylight factor of at least 1.5%
Dining room: Average daylight factor of at least 1.5%
Home office: Average daylight factor of at least 1.5%
All rooms (kitchen, living, dining and where applicable the home office) have 80% of the working plane with direct light from the sky

Please provide a copy of calculations as detailed in the methodology to demonstrate:

- Average daylight factor using the formula described in the definitions section (method described in Littlefair (1998) as set out in BS 8206-2) or computer simulation or scale model measurements.
- Position of the no-sky line and percentage of area of the working plan that received direct light from the sky.

AND

Confirmation from the developer that the calculations accurately reflect the dwelling as designed.

Assumptions for HEA 1

Evidence for HEA 2 (Sound Insulation)

Robust details have been incorporated
Airborne 5dB higher, impact 5dB lower

Where pre-completion testing will be carried out -

Please provide a letter from the developer confirming the intent to:

- Meet the relevant sound insulation performance levels
- Use a Compliant Test Body to complete testing

Where Robust Details will be used -

- Confirmation that the Robust Details chosen will achieve the required performance standards for sound insulation (as applicable)
- Confirmation that the relevant plots are registered with RDL (the Purchase Statement)

Assumptions for HEA 2

Evidence for HEA 3 (Private Space)

Individual private space provided.

Please provide detailed documentary evidence confirming:

- The number of bedrooms served by the outdoor space
- That the outdoor space meets the minimum size requirements

AND

- Completed Checklist IDP

Where a shared outdoor space is provided, detailed documentary evidence demonstrating:

- The private space is accesible only to occupants of designated dwellings

Where detailed documentary evidence is not available at this stage:

- A letter of instruction to a contractor/supplier or a formal letter from the developer to the assessor giving a specific undertaking.

Assumptions for HEA 3

Evidence for HEA 4 (Lifetime Homes)

All criteria of Lifetime Homes in line with all 16 principals of Lifetime Homes

Please provide confirmation from the developer that all 16 of the Lifetime Homes design criteria are met.

OR

Where an exemption from Lifetime Home criteria 2 and/or 3 is sought:

- Confirmation from the developer that all other design criteria are met

AND

Detailed documentary evidence demonstrating access routes subject to steeply sloping gradients at pre development and completion.

Assumptions for HEA 4

Evidence for MAN 1 (Home User Guide)

All criteria inline with checklist MAN 1 Part 1 - Operational Issues will be met

All criteria inline with checklist MAN 1 Part 2 - Site and Surroundings will be met

Please provide confirmation in the form of a letter from the developer or in the specification that the guide will be:

- Supplied to all dwellings within the development

- Be developed to the required standards as outlined in the CSH Checklist MAN 1 Part 1 and 2

AND

Confirmation that the guide will be available in other accessible formats e.g. Braille.

Assumptions for MAN 1

Evidence for MAN 2 (Considerate Constructors Scheme)

Considerate constructors scheme: Significantly beyond best practise, a score of between 35 - 50, and at least a score of 7 in each section*

Please provide a specification clause or other confirmation of commitment from the contractor or developer to comply with the Considerate Constructors Scheme and achieve formal certification under the scheme with best practice or significantly beyond best practice.

AND

Confirmation that registration with the Considerate Constructor Scheme has taken place no later than the commencement of the construction phase.

Assumptions for MAN 2

Evidence for MAN 3 (Construction Site Impacts)

Monitor, report and set targets for CO2 production or energy use from site activities
 Monitor, report and set targets for water consumption from site activities
 Adopt best practise policies in respects to air (dust) pollution from site activities
 Adopt best practise policies in respects to water (ground and surface) pollution

Please provide a letter as confirmation of your intent to meet at least four out of the following six criteria: (please state which four)

- Monitor, report and set targets for CO2 production or energy use arising from site activities
- Monitor, report and set targets for CO2 production or energy use arising from commercial transport to and from site
- Monitor, report and set targets for water consumption arising from site activities.
- Adopt best practice policies in respect of air (dust) pollution arising from site activities
- Adopt best practice policies in respect of water (ground and surface) pollution occurring on the site
- 80% of site timber is reclaimed, re-used or responsibly sourced.

Assumptions for MAN 3**Evidence for MAN 4 (Security)**

Secured by design section 2 compliant

Please provide detailed documentary evidence showing:

- That an ALO/CPDA has been consulted with to ensure that the requirements of Section 2 - Physical Security from 'Secured by Design - New Homes' are met.
- A commitment to follow the advice provided by the ALO/CPDA.

Assumptions for MAN 4**Evidence for ECO 1 (Ecological Value of Site)**

Credit not sought

Where using Checklist Eco 1, provision of:

- Site visit report from the design team/assessor confirming details adequate to meet Checklist Eco 1 based on plans of the site and surrounding area prior to the commencement of construction works/site clearance.

Where a suitably qualified ecologist is appointed:

- A copy of a report or letter from the ecologist highlighting the information required as set out in the 'Code for Sustainable Homes Ecology Report Template'.

AND

Detailed documentary evidence identifying the construction zone and how any areas of ecological value outside the construction zone will remain undisturbed in accordance with the ecologist's recommendations.

Assumptions for ECO 1

Evidence for ECO 2 (Ecological Enhancement)

Key recommendations and 30% additional recommendations by a suitably qualified ecologist

Please provide a copy of the ecologist's report highlighting the information required as set out in 'Code for Sustainable Homes Ecology Report Template'.

AND

Detailed documentary evidence stating:

- How the key recommendations and 30% of additional recommendations will be incorporated into the design.
- The planting schedule of any species to be incorporated from suitably qualified ecologists recommendations.

Assumptions for ECO 2

Evidence for ECO 3 (Protection of Ecological Features)

Ecological features will be adequately protected and maintained

Please provide detailed documentary evidence confirming ecological features present and how they will be protected.

Where ecological features are being removed for health and safety and/or conservation reasons:

- Provide written evidence from an appropriate statutory body/arboriculturalist confirming the requirement to remove any features.

Where ecological features are being removed and are of low ecological value:

- A copy of the ecologist's report highlighting the information required as set out in the Code for Sustainable Homes Ecology Report Template

Where using Checklist Eco 1, to demonstrate that there are no features to protect provision of:

- Site visit report from the design team/assessor confirming details adequate to meet Checklist Eco 1 based on plans of the site and surrounding area prior to the commencement of construction works/site clearance.

Assumptions for ECO 3

Evidence for ECO 4 (Change of Ecological Value of Site)

Minor enhancement: Greater than 3 and less than or equal to 9

Please provide a copy of the calculations completed by the assessor and supported by the following detailed documentary evidence:

- Proposed site layout
- The pre-development site survey, clearly indicating natural and built features on both the site and land surrounding the site before the proposed development
- Landscape and plot categories (in accordance with the Assessment Methodology) with a lift of site area provided for both before and after development.

Where the advice of an ecologist is sought, the following detailed documentary evidence must be provided:

- Code for Sustainable Homes Ecology Report Template completed by the ecologist

AND

Written confirmation from the developer confirming how the ecologist's recommendations will be implemented including a planting schedule.

Assumptions for ECO 4



Evidence for ECO 5 (Building Footprint)
Flats ratio of 3:1
Please provide calculations of the building footprint ratio, stating the Net Internal Floor Area (NIFA) and the Net Internal Ground Floor Area (NIGFA).
Assumptions for ECO 5

Assessor Declaration

I Georgie O'Connor, can confirm that I have compiled this report to the best of my ability, I have based all findings on the information that is referenced within this report, and that this report is appropriate for the registered site.

To the best of my knowledge all the information contained within this report is correct and accurate. I have within my possession all the reference material that relates to this report, which is available for inspection by the client, the clients representative or Stroma Certification for Quality Assurance monitoring.

Signed:



Georgie O'Connor
Thrive Architects
11 May 2018

Information about Code for Sustainable Homes

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 improvement in sustainable home building. The Code is based on EcoHomes®.

It was launched in December 2006 with the publication of 'Code for Sustainable Homes: A stepchange in sustainable home building practice' (Communities and Local Government, 2006), and became operational in England from April 2007.

The Code for Sustainable Homes covers nine categories of sustainable design. Each category includes a number of environmental issues. Each issue is a source of impact on the environment which can be assessed against a performance target and awarded one or more credits. Performance targets are more demanding than the minimum standards needed to satisfy Building Regulations or other legislation. They represent good or best practice, are technically feasible, and can be delivered by the building industry. The issues and categories are as follows:

- Energy & CO2 Emissions
 - Dwelling Emission Rate
 - Building Fabric
 - Internal Lighting
 - Drying Space
 - Energy Labelled White Goods
 - External Lighting
 - Low or Zero Carbon Technologies
 - Cycle Storage
 - Home Office
- Water
 - Internal Water Use
 - External Water Use
- Materials
 - Environmental Impact of Materials
 - Responsible Sourcing of Materials - Basic Building Elements
 - Responsible Sourcing of Materials - Finishing Elements
- Surface Water Run-off
 - Management of Surface Water Run-off from the Development
 - Flood Risk
- Waste
 - Storage of Non-Recyclable Waste and Recyclable Household Waste
 - Construction Site Waste Management
 - Composting
- Pollution
 - Global Warming Potential of Insulants
 - NOx Emissions

- Health & Wellbeing
 - Daylighting
 - Sound Insulation
 - Private Space
 - Lifetime Homes
- Management
 - Home User Guide
 - Considerate Constructors Scheme
 - Construction Site Impacts
 - Security
- Ecology
 - Ecological Value of Site
 - Ecological Enhancement
 - Protection of Ecological Features
 - Change in Ecological Value of Site
 - Building Footprint

The Code assigns one or more performance requirements (assessment criteria) to all of the above environmental issues. When each performance requirement is achieved a credit is awarded (with the exception of the four mandatory requirements which have no associated credits). The total number of credits available to a category is the sum of credits available for all the issues within it.

Mandatory minimum performance standards are set for some issues. For four of these, a single mandatory requirement is set which must be met, whatever Code level rating is sought. Credits are not awarded for these issues. Confirmation that the performance requirements are met for all four is a minimum entry requirement for achieving a level 1 rating. The four un-credited issues are:

- Environmental Impacts of Materials
- Management of Surface Water Run-off from Developments
- Storage of Non-Recyclable Waste and Recyclable Household Waste
- Construction Site Waste Management

If the mandatory minimum performance standard is met for the four un-credited issues, four further mandatory issues need to be considered. These are agreed to be such important issues that separate Government policies are being pursued to mitigate their effects. 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.

The two issues with increasing mandatory minimum standards are:

- Dwelling Emission Rate
- Indoor Water Use

For one issue a mandatory requirement at Level 5 or 6:

- Fabric Energy Efficiency

The final issue with a mandatory requirement for Level 6 of the Code is:

- Lifetime Homes

Further credits are available on a free-choice or tradable basis from other issues so that the developer may choose how to add performance credits (converted through weighting to percentage points) achieve the rating which they are aiming for.

The environmental impact categories within the Code are not of equal importance. Their relative value is conveyed by applying a consensus-based environmental weighting factor (see details below) to the sum of all the raw credit scores in a category, resulting in a score expressed as percentage points. The points for each category add up to 100.

The weighting factors used in the Code have been derived from extensive studies involving a wide range of stakeholders who were asked to rank (in order of importance) a range of environmental impacts. Stakeholders included international experts and industry representatives.

It is also important to note that achieving a high performance in one category of environmental impact can sometimes result in a lower level of performance for another. For instance, if biomass is used to meet heating demands, credits will be available for performance in respect of energy supplied from a renewable source, but credits cannot be awarded for low NOX emission. It is therefore impossible to achieve a total percentage points score of 100.

The Code uses a rating system of one to six stars. A star is awarded for each level achieved. Where an assessment has taken place by where no rating is achieved, the certificate states that zero stars have been awarded:

Code Levels	Total Points Score (Equal to or Greater Than)
Level 1 ★☆☆☆☆	36 Points
Level 2 ★★☆☆☆	48 Points
Level 3 ★★★☆☆	57 Points
Level 4 ★★★★☆	68 Points
Level 5 ★★★★★	84 Points
Level 6 ★★★★★★	90 Points

Formal assessment of dwellings using the Code for Sustainable Homes may only be carried out using Certified assessors, who are qualified 'competent persons' for the purpose of carrying out Code assessments.

Energy & CO2 Emissions

ENE 1:Dwelling Emission Rate

Available Credits:10

Aim:To limit CO2 emissions arising from the operation of a dwelling and its services in line with current policy on the future direction of regulations.

ENE 2:Fabric Energy Efficiency

Available Credits:9

Aim:To improve fabric energy efficiency performance thus future-proofing reductions in CO2 for the life of the dwelling.

ENE 3:Energy Display Device

Available Credits:2

Aim:To promote the specification of equipment to display energy consumption data, thus empowering dwelling occupants to reduce energy use.

ENE 4:Drying Space

Available Credits:1

Aim:To promote a reduced energy means of drying clothes.

ENE 5:Energy Labelled White Goods

Available Credits:2

Aim:To promote the provision or purchase of energy efficient white goods, thus reducing the CO2 emissions from appliance use in the dwelling.

ENE 6:External Lighting

Available Credits:2

Aim:To promote the provision of energy efficient external lighting, thus reducing CO2 emissions associated with the dwelling.

ENE 7:Low or Zero Carbon Technologies

Available Credits:2

Aim:To limit CO2 emissions and running costs arising from the operation of a dwelling and its services by encouraging the specification of low and zero carbon energy sources to supply a significant proportion of energy demand.

ENE 8:Cycle Storage

Available Credits:2

Aim:To promote the wider use of bicycles as transport by providing adequate and secure cycle storage facilities, thus reducing the need for short car journeys and the associated CO2 emissions.

ENE 9:Home Office

Available Credits:1

Aim:To promote working from home by providing occupants with the necessary space and services thus reducing the need to commute.

Water

WAT 1:Indoor Water Use

Available Credits:5

Aim:To reduce the consumption of potable water in the home from all sources, including borehole well water, through the use of water efficient fittings, appliances and water recycling systems.

WAT 2:External Water Use

Available Credits:1

Aim:To promote the recycling of rainwater and reduce the amount of mains potable water used for external water uses.

Materials

MAT 1:Environmental Impact of Materials

Available Credits:15

Aim:To specify materials with lower environmental impacts over their life-cycle.

MAT 2:Responsible Sourcing of Materials - Basic Building Elements

Available Credits:6

Aim:To promote the specification of responsibly sourced materials for the basic building elements.

MAT 3:Responsible Sourcing of Materials - Finishing Elements

Available Credits:3

Aim:To promote the specification of responsibly sourced materials for the finishing elements.

Surface Water Run-off

SUR 1: Management of Surface Water Run-off from developments

Available Credits: 2

Aim: To design surface water drainage for housing developments which avoid, reduce and delay the discharge of rainfall run-off to watercourses and public sewers using SuDS techniques. This will protect receiving waters from pollution and minimise the risk of flooding and other environmental damage in watercourses.

SUR 2: Flood Risk

Available Credits: 2

Aim: To promote housing development in low flood risk areas, or to take measures to reduce the impact of flooding on houses built in areas with a medium or high risk of flooding.

Waste

WAS 1: Storage of non-recyclable waste and recyclable household waste

Available Credits: 4

Aim: To promote resource efficiency via the effective and appropriate management of construction site waste.

WAS 2: Construction Site Waste Management

Available Credits: 3

Aim: To promote resource efficiency via the effective and appropriate management of construction site waste.

WAS 3: Composting

Available Credits: 1

Aim: To promote the provision of compost facilities to reduce the amount of household waste sent to landfill.

Pollution

POL 1: Global Warming Potential of Insulants

Available Credits: 1

Aim: To promote the reduction of emissions of gases with high GWP associated with the manufacture, installation, use and disposal of foamed thermal and acoustic insulating materials.

POL 2: NOx Emissions

Available Credits: 3

Aim: To promote the reduction of nitrogen oxide (NOX) emissions into the atmosphere.

Health & Wellbeing

HEA 1: Daylighting

Available Credits: 3

Aim: To promote good daylighting and thereby improve quality of life and reduce the need for energy to light the home.

HEA 2: Sound Insulation

Available Credits: 4

Aim: To promote the provision of improved sound insulation to reduce the likelihood of noise complaints from neighbours.

HEA 3: Private Space

Available Credits: 1

Aim: To improve quality of life by promoting the provision of an inclusive outdoor space which is at least partially private.

HEA 4: Lifetime Homes

Available Credits: 4

Aim: To encourage the construction of homes that are accessible and easily adaptable to meet the changing needs of current and future occupants.

Management

MAN 1:Home User Guide

Available Credits:3

Aim:To promote the provision of guidance enabling occupants to understand and operate their home efficiently and make the best use of local facilities.

MAN 2:Considerate Constructors Scheme

Available Credits:3

Aim:To promote the environmentally and socially considerate, and accountable management of construction sites.

MAN 3:Construction Site Impacts

Available Credits:2

Aim:To promote construction sites managed in a manner that mitigates environmental impacts.

MAN 4:Security

Available Credits:2

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

Ecology

ECO 1:Ecological value of site

Available Credits:1

Aim:To promote development on land that already has a limited value to wildlife, and discourage the development of ecologically valuable sites.

ECO 2:Ecological enhancement

Available Credits:1

Aim:To enhance the ecological value of a site.

ECO 3:Protection of ecological features

Available Credits:1

Aim:To promote the protection of existing ecological features from substantial damage during the clearing of the site and the completion of construction works.

ECO 4:Change in ecological value of site

Available Credits:4

Aim:To minimise reductions and promote an improvement in ecological value.

ECO 5:Building footprint

Available Credits:2

Aim:To promote the most efficient use of a building's footprint by ensuring that land and material use is optimised across the development.

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