



Results

Development Name:	Land off New Road, Rhosrobin, Wrexham
Dwelling Description:	Mixed-Property Development
Name of Company:	Carpenter Davies Partnership Ltd
Code Assessor's Name:	Ian Carpenter
Company Address:	53 High Street, Denbigh, Denbighshire, LL16 3SD
Notes/Comments:	This CfSH Pre-assessment is a generic assessment for all dwellings at the development. It outlines the potential at the design stage to meet Code Level 3.

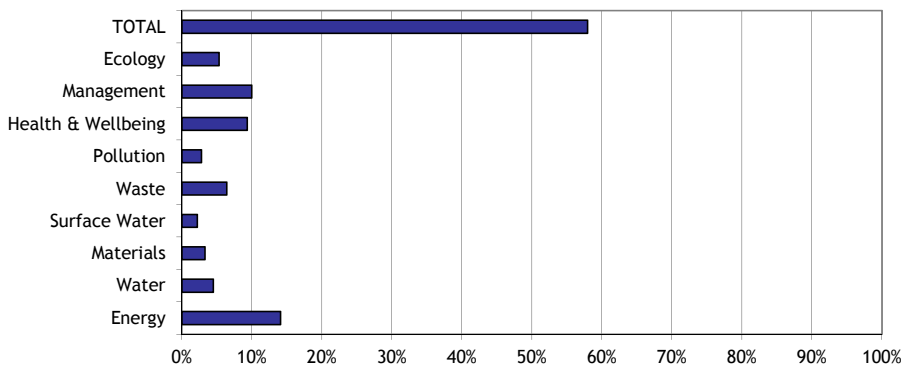
PREDICTED RATING - CODE LEVEL: 3

Mandatory Requirements: All Levels

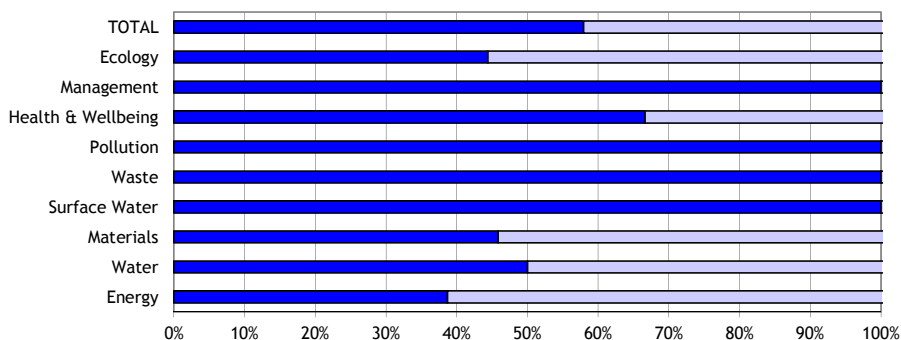
% Points: 57.95% - Code Level: 3

Breakdown: Energy - Code Level: 3
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.

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CATEGORY 1 ENERGY		Overall Level: 3	Overall Score	57.95	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 38.70		Credits	Level			
Contribution to Overall % Score: 14.09 points		12.0 of 31 Credits	Level 3			
Ene 1 Dwelling Emission Rate	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. Enter the predicted score _____ What is the predicted number of credits? 1.0 OR Are zero net CO₂ emissions achieved? ☐	1.0 of 10 Credits	Level 3	Dwellings will be required to achieve an 8% improvement of the DER over the TER.	SAP calculations.	
Ene 2 Fabric Energy Efficiency	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. Enter the predicted score _____ Apartments, Mid-terrace ☒ OR End terrace, Semi and Detached ☐ OR Staggered Mid terrace ☐ What is the predicted number of credits? 3.0	3.0 of 9 Credits	-	The dwellings will be designed to achieve 3 credits under this issue.	SAP calculations.	
Ene 3 Energy Display Devices	Credits are awarded where a correctly specified Energy Display Device is installed monitoring electricity and/or primary heating fuel 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	-	Energy Display Devices to be installed to monitor usage.	Specification clause & manufacturer's details	

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 4 Drying Space	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. Will drying space meeting the criteria be provided? _____ Yes ☒ OR No ☐	1 of 1 Credits	-	The design will take account of adequate space for a 4m or 6m washing line external to each dwelling	Specification clause
Ene 5 Energy Labelled White Goods	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. Select the appropriate option below _____ EU Energy labelling information <u>only</u> ☒ A+ rated appliances ☐ A rated washing machine and dishwasher ☐ B rated tumble dryer or washer dryer ☐ EU Energy labelling information provided ☐	1 of 2 Credits	-	Energy labelling information will be provided to each dwelling to inform occupants of energy savings which can be made through the purchase of A+ rated appliances	Letter of confirmation and copy of EU Energy Labelling Scheme information
Ene 6 External Lighting	Credits are awarded based on the provision of space lighting* with dedicated energy efficient fittings and security lighting fittings with 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 ☐ Dual lamp luminaires _____ Compliant with both above criteria ☐	2 of 2 Credits	-	All external lighting to be Code compliant	Specification clause
* Statutory safety lighting is not covered by this requirement					

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 7 Low or Zero Carbon Technologies	Credits are awarded where there is a 10% or 15% reduction in CO₂ emissions resulting from the use of low or zero carbon technologies. Select % contribution made by low or zero carbon technologies Less than 10% of demand ☒ OR 10% of demand or greater ☐ OR 15% of demand or greater ☐	0 of 2 Credits	-		
Ene 8 Cycle Storage	Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements. Fill in the development details below Number of bedrooms: 2 Number of cycles stored per dwelling* 1.0 * if you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling	1 of 2 Credits	-	Consideration will be given to an area to store 1 to 2 No. cycles depending on dwelling type and sizes	Specification clause and design drawings
Ene 9 Home Office	A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements. Will there be provision for a Home Office? ☒ OR No ☐	1 of 1 Credits	-	A home office area to be provided in each dwelling meeting the code requirements	Design drawings

CATEGORY 2 WATER		Overall Level: 3	Overall Score	57.95	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: 4.50 points		3 of 6 Credits	Level 4			
Wat 1 Indoor Water Use	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. 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	Low flush wc's and low flow taps/showers to be specified to ensure a calculated water use of less than 105 litres/person/day.	Sanitaryware specification and assessor's completed calculator tool.	
Wat 2 External Water Use	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. Select the scenario that applies _____ No internal or communal outdoor space ☐ OR Outdoor space with collection system ☐ OR Outdoor space without collection system ☒	0 of 1 Credits	-	Current proposals do not include for a rainwater collection system however compliant water butts could be provided.	N/A	

CATEGORY 3 MATERIALS		Overall Level: 3	Overall Score	57.95	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 45.83		Credits	Level			
Contribution to Overall Score: 3.30 points		11 of 24 Credits	All Levels			
Mat 1 Environmental Impact of Materials	Mandatory Requirement: At least three of the five key building elements must achieve a Green Guide 2008 Rating of A+ to D. 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. Mandatory Requirement _____ Will the mandatory requirement be met? ☒ Enter the predicted score _____ What is the predicted number of credits? 8	8 of 15 Credits	All Levels		Materials to be specified to meet Green Guide ratings of A+ or A where possible.	Schedule of materials for building elements and Green Guide ratings plus assessor's completed calculator tool.
Mat 2 Responsible Sourcing of Materials - Basic Building Elements	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. Enter the predicted Score _____ What is the predicted number of credits? 2	2 of 6 Credits	-		Materials specified should be responsibly sourced where possible.	Specification of materials and confirmation that specified suppliers have the required responsible sourcing certification.
Mat 3 Responsible Sourcing of Materials - Finishing Elements	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. Enter the predicted Score _____ What is the predicted number of credits? 1	1 of 3 Credits	-		Materials specified should be responsibly sourced where possible.	Specification of materials and confirmation that specified suppliers have the required responsible sourcing certification.

CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 3	Overall Score	57.95	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: 2.20 points		4 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 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. 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 ☒	2 of 2 Credits	All Levels		A report will be produced by a relevant professional to ensure that the drainage system is designed to meet the mandatory requirements of this credit and to ensure that there is no run-off into watercourses for the first 5mm of rainfall. Additionally, runoff from all hard surfaces will receive an appropriate level of treatment.	Report and drainage design.
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 appropriate 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	-		A FRA will be produced to show that the site lies in an area of low probability of flooding that that there is a low risk of flooding from all sources.	Report.
* Planning Policy Statement 25 - Planning and Flood Risk						
** FRA - Flood Risk Assessment						

CATEGORY 5 WASTE		Overall Level: 3	Overall Score	57.95	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. Tradable Credits are awarded for adequate internal and/ or external recycling facilities.	0 of 2 Credits	All Levels		There is currently a waste collection scheme in place operated by Wrexham County Borough Council which requires households to separate recyclable waste for separate collection. 3 No. separate internal storage bins will be provided for waste (min 30l capacity).	Details of local authority collection scheme and design drawings showing size and location of internal and external waste storage areas.
	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) ☐					
	Local Authority collection Scheme Post Collection sorting Internal storage (capacity 30 litres) 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) Flats Private recycling operator 3 or greater types of waste collected ☐☐☐☐	0 of 4 Credits				

Issue		Credits	Level	Assumptions Made	Evidence Required
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 ☒	3 of 3 Credits		The appointed main contractor to have a SWMP in place with a commitment to divert 85% of waste from landfill.	Specification clause.
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 ☐	1 of 1 Credit	-	As part of WCBC's collection scheme, there is currently an organic waste collection. This includes for a 7l kitchen container.	Details of the local authority collection scheme.

* including if an automated waste collection system is in place

CATEGORY 6 POLLUTION		Overall Level: 3	Overall Score	57.95	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	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. Select the most appropriate option All insulants have a GWP less than 5 ☒ OR Some insulants have a GWP of less than 5 ☐ OR No insulants have a GWP of less than 5 ☐	1 of 1 Credits	-		The specification of insulating materials will ensure that insulants have a GWP of less than 5.	Specification clause.
Pol 2 NOx Emissions	Credits are awarded on the basis of NOx emissions arising from the operation of the space and water heating system within the dwelling. Select the most appropriate option Greater than 100 mg/kWh ☐ OR Less than 100 mg/kWh ☐ OR Less than 70 mg/kWh ☐ OR Less than 40 mg/kWh ☒ OR Class 4 boiler ☐ OR Class 5 boiler ☐ OR All space and hot water energy requirements are met by systems who do not produce NOx emissions ☐	3 of 3 Credits	-		Should the solution include for gas boilers, NOx emissions to be less than 40mg/kWh.	Specification clause.

CATEGORY 7 HEALTH & WELLBEING		Overall Level: 3	Overall Score	57.95	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 66.00%		Credits	Level			
Contribution to Overall Score: 9.33 points		8 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 <u>Room</u> 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% ☒ 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%.	3 of 3 Credits	-		Daylighting calculations to be carried out to confirm design takes account of adequate daylighting.	Daylighting calculations for all dwelling types.
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 not sought ☒ Airborne: 3db higher; Impact: 3dB lower ☐ OR Airborne: 5db higher; Impact: 5dB lower ☐ OR Airborne: 8db higher; Impact: 8dB lower ☐	0 of 4 Credits	-		Detached properties will achieve this credit by default however attached properties would require pre-completion testing or the use of Robust Details.	N/A.

Issue	Credits	Level	Assumptions Made	Evidence Required
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 ☐	1 of 1 Credits -	Each property will have some private outdoor space.	Design drawings.
Hea 4 Lifetime Homes	<u>Mandatory Requirement:</u> Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6. <u>Tradable credits:</u> 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	Lifetime Homes requirements will be met.	Completion of checklist.

CATEGORY 8 MANAGEMENT		Overall Level: 3	Overall Score	57.95	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? ☒ Site and Surroundings? ☒ Is available in alternative formats? ☒	3 of 3 Credits	-		A user guide to be developed for each of the dwellings and their surroundings. This is to be available in alternative formats.	Letter of commitment.
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 ☐ <u>Considerate Constructors</u> ☐ OR Best Practice ☐ OR Significantly Beyond Best Practice ☒ <u>Alternative Scheme*</u> ☐ OR Mandatory + 50% optional requirements ☐ OR Mandatory + 80% optional requirements ☐ * In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.	2 of 2 Credits	-		Appointed main contractor to ensure that CCS scheme is signed up to and the site is managed as such to achieve a significantly beyond best practice compliance certification.	Specification clause.
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> - CO₂/ energy use from site activities ☒ - CO₂/ energy use from site related transport ☐ - water consumption from site activities ☒ <u>Adopt best practice policies in respect of:</u> - air (dust) pollution from site activities ☒ - water (ground and surface) pollution on site ☒ <u>80% of site timber</u> is reclaimed, re-used or responsibly sourced ☒	2 of 2 Credits	-		Appointed main contractor to monitor and record CO2 emissions on site from energy use, monitor and record water consumption arising from site activities, adopt best practice policies with respect to air and water pollution and ensure that site time is re-claimed, re-used or responsibly sourced.	Specification clause.

Issue		Credits	Level	Assumptions Made	Evidence Required
Man 4 Security	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. Secured by Design Compliance _____ Credit not sought ☐ OR Secured by Design Section 2 Compliance ☒	2 of 2 Credits	-	A secured by design assessment to be applied for or ALO to be consulted and their recommendations to be implemented.	Copies of correspondence with ALO.

CATEGORY 9 ECOLOGY		Overall Level: 3	Overall Score	57.95	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 44.00%		Credits	Level			
Contribution to Overall Score: 5.33 points		4 of 9 Credits	All Levels			
Eco 1 Ecological Value of Site	One credit is awarded for developing land of inherently low value. Select the appropriate option _____ Credit not sought ☐ OR Land has ecological value ☐ OR Land has low/ insignificant ecological value* ☒ * 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.	1 of 1 Credits	-	It is likely that an Ecologist would assess the land as currently having ecological value.	Ecologist's Report	
Eco 2 Ecological Enhancement	A credit is awarded where there is a commitment to enhance the ecological value of the development site. Tick the appropriate boxes _____ Will a <i>Suitably Qualified Ecologist</i> be appointed to recommend appropriate ecological features? ☒ AND Will all key recommendations be adopted? ☒ AND 30% of other recommendations be adopted? ☒	1 of 1 Credits	-	Ecologist to provide a report and their recommendations to be implemented.	Ecologist's Report & confirmation of commitment to implement their recommendations	
Eco 3 Protection of Ecological Features	A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value. Type and protection of existing features _____ Site with features of ecological value? ☒ OR Site of low ecological value (as Eco 1)? ☐ AND All* existing features potentially affected by site works are maintained and adequately protected? ☒ *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.	1 of 1 Credits	-	All existing ecological features to be protected as per the recommendations in the ecologist's report.	Ecologist's Report & confirmation of commitment to implement the protection measures identified.	

Issue	Credits	Level	Assumptions Made	Evidence Required
Eco 4 Change of Ecological Value of Site	Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be: Change in Ecological Value _____ Major negative change: fewer than -9 ☐ Minor negative change: between -9 and -3 ☒ OR Neutral: between -3 and +3 ☐ Minor enhancement: between +3 and +9 ☐ Major enhancement: greater than 9 ☐	1 of 4 Credits	-	Ecologist to provide advice on how to ensure a small negative change in plant species. Ecologist's Report & confirmation of commitment to implement their recommendations
Eco 5 Building Footprint	Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is: 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 ☐ OR Houses & Flats Weighted (2.5:1 & 3:1) ☐ OR Houses & Flats Weighted (3:1 & 4:1) ☐	0 of 2 Credits		It is unlikely that any of the dwellings could achieve this credit. N/A