London Borough of Camden

Energy Efficiency and Renewable Energy and Sustainability Plan

S106 Pro-forma – Part B Post Completion

(To be completed and submitted for approval prior to occupation)

S106 CLAUSE DETAILS

Please summarise how the applicant is meeting their planning obligations relating to energy / sustainability as outlined within the relevant S106 agreement (please add/remove rows as applicable).

S106 clause no.	S106 clause wording	Summary of performance
4.8.3 – 4.8.4	Not to Occupy or permit Occupation of the Relevant Phase until a satisfactory post-completion review has been submitted to and approved by the Council in writing confirming that the measures incorporated in the Energy Efficiency and Renewable Energy Plan as approved by the Council have been incorporated into the Relevant Phase. Following the Occupation Date the Owner shall not Occupy or permit Occupation of the Relevant Phase at any time when the Relevant Phase is not being managed in accordance with the Energy Efficiency and Renewable Energy Plan as approved by the Council from time to time and shall not Occupy or permit Occupation of the Relevant Phase otherwise than in accordance with the requirements of the Energy Efficiency and Renewable Energy Plan.	The completion of this Energy Efficiency and Renewable Energy and Sustainability pro-forma is intended to set out how the final design and construction for the Maitland Park scheme align with/ exceed the commitments set out in the planning submission document titled 'Energy Statement' by TGA Consulting dated 21 February 2020. Key performance indicators are set out in the 'Building Specification Targets' section of this form, on the next page, demonstrating how the detailed design proposals for the building fabric, LZC technologies and metering & monitoring arrangements meet/ exceed the planning stage commitments. The sitewide CO_2 emission reductions over baseline have been demonstrated by the design stage SAP sample calculations to be 66% - exceeding the minimum on-site requirement of 35% dictated by the London plan and the planning stage commitment of 44%.
4.9.3 – 4.9.4	Not to Occupy or permit Occupation of the Relevant Phase until a satisfactory post-completion review has been submitted to and approved by the Council in writing confirming that the measures incorporated in the Sustainability Plan as approved by the Council have been incorporated into the Relevant Phase. Following the Occupation Date the Owner shall not Occupy or permit Occupation of the Relevant Phase at any time when the Development is not being managed in accordance with the Sustainability Plan as approved by the Council and shall not Occupy or permit Occupation of the Relevant Phase otherwise than in accordance with the requirements of the Sustainability Plan.	The completion of this Energy Efficiency and Renewable Energy and Sustainability pro-forma is intended to set out how the final design and construction for the Maitland Park scheme align with/ exceed the commitments set out in the planning submission document titled 'Home Quality Mark Assessment' by Envision dated 23rd July 2020, that sets out a sustainability strategy for the development. Letter of Comfort provided by Envision dated 07 July 2023 confirms that all evidence has now been received for the Home Quality Mark (HQM) assessment to demonstrate the achievement of the required overall rating of Three Stars.

		Furthermore, as per the planning stage commitments 51% of Energy credits, 53% of Water credits and 24% of Material credits have been proven based on the Final design and constructed building.

BUILDING SPECIFICATION TARGETS

Key targets from approved Energy and Sustainability Statements:

Please outline in the table below the key targets from the Energy and Sustainability Statements submitted at Full Planning stage, and summarise how the as-built building compares. Add or delete rows as necessary.

Please clearly outline any reasons for changes to the approved building specification.

	Approved Planning Documents: energy and sustainability statement targets	**Post completion (Post Construction Stage): performance against targets**
Carbon reduction targets	44% Reduction in CO_2 Emissions from Baseline (Section 3.4 of TGA Energy Statement)	66% Reduction in CO_2 Emissions from Baseline
Building fabric u-values and air permeability	External Wall: 0.12W/m^2K Party Wall: 0.25W/m^2K Windows: 1.4W/m^2K External Doors: 1.4W/m^2K Ground Floor: 0.12W/m^2K Roof: 0.1W/m^2K Air Permeability: 2m^3/h.m^2 (Table 2.1 of TGA Energy Statement)	External Wall: 0.12W/m^2K Party Wall: 0W/m^2K Windows: 1.4W/m^2K External Doors: 1.4W/m^2K Ground Floor: 0.11W/m^2K Roof: 0.1W/m^2K Air Permeability: 1.9m^3/h.m^2
Low carbon technologies	80.85kWp Solar PV Centralised ASHP (Section 2.5 and 2.6 of TGA Energy Statement)	80.85kWp Solar PV Centralised ASHP
Renewable energy targets	Target from LBC planning guidance document CPG3 for 20% reduction in CO_2 emissions (Section 1.2 of TGA Energy Statement)	66% Reduction in CO_2 Emissions from Baseline.
Decentralised energy network connection	'There is no viable municipal heat and power network in this area nor is there one planned. No provision has been made, therefore, to connect this development into a heat network in the future.' i.e. **N/A** (Section 2.8 of TGA Energy Statement)	N/A

Metering, monitoring and management	Dwellings to have individual heat meters (Section 2.5 of TGA Energy Statement)	Heat meters have been installed to monitor the heat supplied by the ASHP installations. The Dwelling Heat Interface Units (HIU's) have their own meter on the front case and the Heat meters in the plantroom are active. Local smart meters are to be provided for the PV generated power with BT points such that they can be remote monitored and read by Camden. The building services plant will be monitored and controlled by a BMS system. The BMS is to be interfaced with the billing system which shall be provided by the BMS supplier but shall be in accordance with the requirements of the Camden Heat Network Specification. The outputs from the BMS shall be available for monitoring and metering of the various elements of the building services installation, including data logging, benchmarking and alarms.
Code for Sustainable Homes - **Overall % + Rating** - **% credits Energy** - **% credits Water** **% credits Materials**	**HQM Targets** Overall Rating: Level 3 Energy Credits: 50% Water Credits: 53% Materials Credits: 24% (Envision Home Quality Mark Assessment, 23/07/2020)	**HQM Design Stage Assessment** Overall Rating: Level 3 Energy Credits: 51% Water Credits: 53% Materials Credits: 24% Letter of Comfort provided by Envision dated 07 July 2023 confirms that all evidence has now been received for the Home Quality Mark (HQM) assessment to demonstrate the achievement of the required overall rating of Three Stars. Furthermore, as per the planning stage commitments 51% of Energy credits, 53% of Water credits and 24% of Material credits have been proven based on the Final design and constructed building. Envision confirm in the letter of comfort that the assessment ill now be submitted to the BRE for verification and final certification.
BREEAM rating - **Overall % + Rating** - **% credits Energy** - **% credits Water** **% credits Materials**	BREEAM N/A	BREEAM N/A
Materials, sourcing and waste	Relevant HQM Credits **Assumed** 6.1 Responsible Sourcing: 9	Relevant HQM Credits **Proven**

	6.2 Materials Impacts: 0 6.3 Life Cycle Costing: 0 6.4 Durability: 7 10.4 Site Waste Management: 4 (Envision Home Quality Mark Assessment, 23/07/2020)	6.1 Responsible Sourcing: 9 6.2 Materials Impacts: 0 6.3 Life Cycle Costing: 0 6.4 Durability: 7 10.4 Site Waste Management: 4 (Envision Home Quality Mark, Post Construction Assessment 07/07/2023)
Green infrastructure	Relevant HQM Credits **Assumed** 2.1 Identifying Ecological Risks and Opportunities: 6 2.2 Managing Impacts on Ecology: 9 2.3 Ecological Change and Enhancement: 8 2.4 Long Term Ecological Management and Maintenance: 4 (Envision Home Quality Mark Assessment, 23/07/2020)	HQM Design Stage Credits **Proven** 2.1 Identifying Ecological Risks and Opportunities: 6 2.2 Managing Impacts on Ecology: 9 2.3 Ecological Change and Enhancement: 8 2.4 Long Term Ecological Management and Maintenance: 4 (Envision Home Quality Mark, Post Construction Assessment 07/07/2023)
Water efficiency and SuDS	Relevant HQM Credits **Assumed** 3.1 Flood Risk: 19 3.2 Managing Rainfall Impacts: 9 8.1 Water Efficiency: 0 10.3 Construction Water Use: 4 (Envision Home Quality Mark Assessment, 23/07/2020)	HQM Design Stage Credits **Proven** 3.1 Flood Risk: 19 3.2 Managing Rainfall Impacts: 9 8.1 Water Efficiency: 0 10.3 Construction Water Use: 4 (Envision Home Quality Mark, Post Construction Assessment 07/07/2023)
Other		

Post-Completion (Post Construction Stage) results:

Please enter in the tables below the carbon reductions for each stage of the energy hierarchy (Baseline, Be Lean, Be Clean, Be Green) and for each development type, following the guidance outlined in the GLAs *Guidance on Preparing Energy Assessments* and *Camden Planning Guidance CPG3*.

Please be aware that where carbon dioxide reduction targets are not met, the applicant will be required to provide details of their remedial proposals either:

1. Retrofit on-site carbon reduction measures with a view to meeting targets
2. Implement carbon reduction measures elsewhere in the borough (prior agreement with the Council will be sought)
3. Make a carbon offset payment, where appropriate.

	Commercial New-build (includes major refurbishments assessed under Part L2A)			Residential New-build (includes major refurbishments assessed under Part L1A)			Commercial Refurbishment (assessed under Part L2B)			Residential Refurbishment (assessed under Part L1B)		
	Total tCO2	tCO2 reduction*	% reduction*	Total tCO2	tCO2 reduction*	% reduction*	Total tCO2	tCO2 reduction*	% reduction*	Total tCO2	tCO2 reduction*	% reduction*
Baseline		N/A	N/A	194.95	N/A	N/A		N/A	N/A		N/A	N/A
Be Lean				-	-	-						
Be Clean				-	-	-						
Be Green				-	-	-						
TOTAL				68.99	**125.96**	**66%**						
Target						55%	N/A	N/A	N/A	N/A	N/A	N/A
Shortfall					0	0	N/A	N/A	N/A	N/A	N/A	N/A

** reduction calculated against previous stage (except TOTAL, which is calculated against Baseline)*

Post Completion (Post Construction Stage) Review

	Enclosed? Yes	Enclosed? No	Notes:
Copies of SAP/ SBEM worksheets	☒	☐	Please submit SAP/SBEM calculations evidencing the CO_2 savings for each stage of the energy hierarchy, including baseline (TER), alongside this report. Please provide details of which apartments have been sampled (if applicable). Results will need to reflect the actual constructed building.

Title of Submission	Date produced	Author's Name, Organisation & Client
SAP Calculations	16/12/2022	Author: John Simpson Author Organisation: AJ Energy Consultants Limited Client: Bouygues
Sitewide Emissions Summary	11/07/2023	Author: Kat Adair Author Organisation: Ridge & Partners LLP Client: Bouygues

Code for Sustainable Homes Post Construction Assessment and Certificate	☒	☐	This will need to be the final Post Construction Stage Assessment review and certificate. Although the Council is no longer able to condition new housing developments to achieve CfSH certification, any application which has already committed to achieving certification through S106 will be required to fulfil this obligation.

Title of Submission	Date produced	Author's Name, Organisation & Client
Maitland Park HQM Assessment - Post Construction Letter of Comfort (final)	07/07/23	Author: Charlotte Brewin Author Organisation: Envision Client: Bouygues

BREEAM Post Construction Assessment and Certificate	☐	☒	This will need to be the Post Construction Assessment review and not a copy of the "Pre-Assessment" or "Design Stage" review. Applicants should also submit Post Construction Stage certificates, or evidence from BRE of submission of this review for certification

Title of Submission	Date produced	Author's Name, Organisation & Client

Technical details/ plans/ drawing of installed CHP and other low/ zero carbon technologies (where relevant)	☒	☐	Please provide confirmation/ evidence that approved measures have been implemented.

Title of Submission	Date produced	Author's Name, Organisation & Client
ASHP datasheet (doc ref: RE Maitland Park; Part AB of pro-forma for LBC – ME)	22/03/2023	Author: Tom Caughlin Author Organisation: JD Geerings Client: Bouygues

Decentralised Energy Network connection details.	☐	☒	Please provide confirmation/ evidence that approved measures have been implemented.

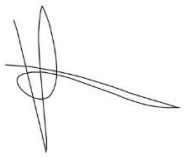
Title of Submission	Date produced	Author's Name, Organisation & Client

Remedial CO_2 and renewables proposals	☐	☒	Document containing full details of proposals to fulfil approved carbon reduction targets &/or renewable energy targets by:

retrofitting on site, measures elsewhere in Borough, or additional offset contribution.

Title of Submission	Date produced	Author's Name, Organisation & Client

I confirm that the information supplied in this Proforma (and supporting evidence) is accurate. I will notify the Council should any of the information contained change. The agreed contents of the Energy Efficiency and Renewable Energy and Sustainability Plan, the information contained in this Proforma and the terms of Section 106 agreement pursuant to the planning permission must be complied with, unless otherwise agreed in writing by the Council.

Signed:	
Print full name:	Kat Adair
Position:	Sustainability Associate Ridge & Partners LLP
Date:	13/07/2023

Please submit to: planningobligations@camden.gov.uk

End of form – B (Post Completion)