

Richmond Inn (Richmond Rehab Centre). Response to Sustainability Strategy Review Comments.

1. Recommended Actions for Applicant:

1.1 Provide a copy of the Sustainable Construction Checklist (SPD) to confirm compliance.

10/08/2022 HL Response: Noted. This has been submitted as part of the original planning application. Please find attached the Sustainable Construction Checklist (Sustainable Construction Checklist 3488410) downloaded from Richmond planning portal.

1.2 Provide water calculation sheet or specification confirming the total water consumption for the development.

10/08/2022 HL Response: This is a non-domestic building; therefore, the water consumption target is 25% better than the baseline (2 credits), which is a minimum standard for BREEAM 2018 Excellent rating under Wat 01 criteria. Please note that an additional Wat 01 credit has also been targeted as there is the potential to achieve 40% water consumption savings over the baseline (2 credits + 1 credit as potential). Please refer to BREEAM Pre-Assessment, Appendix C within the submitted Sustainability Statement.

1.3 Provide copies of the SAP 2012

10/08/2022 HL Response: Appendix I (GLA Carbon Emissions Reporting Spreadsheet) within the energy strategy also includes the target and building emission rates (TER and BER) using SAP 2012 carbon factors, these are also included on the BRUKL documents provided in Appendices C, D, E, G and H. Table 1 below summarises CO_2 emissions reduction using both SAP 2012 and SAP 10 carbon factors.

Table 1: Summary of regulated carbon emissions savings using SAP 2012 and SAP 10 carbon factors

	Regulat	ed non-domestic	carbon dioxide sa	avings
	SAP 2012 ca	rbon factor	SAP 10 cark	oon factor
	(tonnes CO ₂ /yr.)	(%)	(tonnes CO ₂ /yr.)	(%)
Savings from energy demand reduction	88	30%	78	32%
Savings from heat network / CHP	0	0%	0	0%
Savings from renewable energy	39	13%	86	35%
Cumulative on-site savings	127	43%	164	67%

1.4 Provide a copy of the BREEAM assessment confirming the targeted score

10/08/2022 HL Response: This has been provided as an Appendix C within the submitted Sustainability Statement.

1.5 The Energy Statement to address the (Be Seen) option

10/08/2022 HL Response: See response below, Appendix A and supporting completed GLA Be Seen excel spreadsheet.



SUSTAINABILITY RICHMOND INN - RESPONSE TO SUSTAINABILITY STRATEGY REVIEW COMMENTS

The Energy Strategy

The Energy Strategy sets out the proposed approach regarding reducing carbon dioxide (CO₂) emissions and optimising energy efficiency within the Proposed Development. This strategy summarises the pertinent regulatory and planning policies applicable to the Proposed Development, and sets targets commensurate with these policies, which the Proposed Development will seek to achieve. The Energy Strategy has been developed using a 'fabric first' approach through the 'Be Lean', 'Be Clean', 'Be Green' energy hierarchy.



After 'Be Green' an additional stage of the energy hierarchy has been introduced: Be seen - monitor, verify and report on energy performance in-use. The 'Be Seen' stage endorses the disclosure of the Proposed Development's energy use with annual energy consumption being displayed on a public online platform accompanied by the predicted energy performance at the design stage.

This approach will demonstrate how developments are performing in-use and will underpin progress in reducing carbon emissions, operational running costs and will encourage the industry's route to achieving zero carbon buildings.

Be Seen - Monitor and Report Operational Energy

Monitoring and Reporting

Effective energy metering will be enabled by the provision of suitable infrastructure within the buildings services systems.

Development Monitoring and Reporting Plan

The developed strategy will allow for an exhaustive metering of all the various energy usage in the facility.

Electrical meters will be provided on the main central Air Source Heat Pump(s), providing data on plant energy consumption throughout the year.

Each area of high energy load will be sub-metered in order to monitor energy consumption in greater granularity and facilitate reporting. All the main sub-systems (i.e., small power, lighting etc) will be separately monitored and their energy usage separately accounted. Energy intensity and carbon emissions will be monitored and reported annually.

The applicant has also completed the GLA's suggested "Be Seen" energy reporting spreadsheet. Please refer to Appendix A for the completed Be Seen Spreadsheet, and also the supporting completed GLA Be Seen excel spreadsheet.

1.6 Confirm compliance with TM52 criteria for DSY1 along with addressing DSY2 & DSY3

10/08/2022 HL Response: For these non-domestic buildings, the overheating and cooling have been addressed in the energy strategy Section 4.4 in line with the cooling hierarchy. The actual buildings have much lower cooling demand than the notional buildings – see Table 2 below included in Section 4.4.1 within the Energy Strategy. It demonstrates how both buildings have been designed to minimise comfort cooling demand as much as possible in line with the cooling hierarch.



SUSTAINABILITY RICHMOND INN - RESPONSE TO SUSTAINABILITY STRATEGY REVIEW COMMENTS

Table 2: Proposed Development Actual and Notional Area Weighted Average Cooling Demand

	Area Weighted Average Bu	ilding Cooling Demand (MJ/m²)
	Refurbished Building	New Building
Actual	304.0	87.7
Notional	704.3	129.1

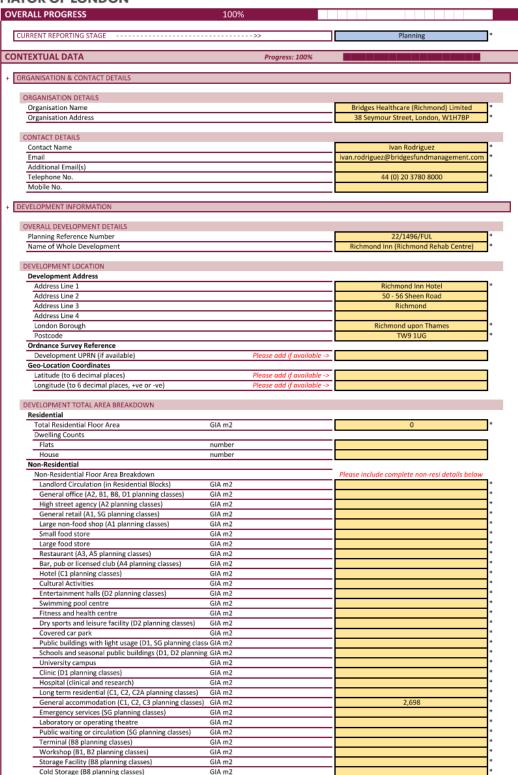
Please note that all occupied spaces will be comfort cooled and the building will be designed to comply with the TM52 overheating criteria using DSY1, DSY2 and DSY3 weather files.

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Appendix A: Be Seen (Monitor and report operational energy) Completed Spreadsheet.

COMMENTS

MAYOR OF LONDON



SUSTAINABILITY
RICHMOND INN - RESPONSE TO SUSTAINABILITY STRATEGY REVIEW COMMENTS

Total Development Floor Area		
Residential	GIA m2	0
Non-Residential	GIA m2	2,698
Total	GIA m2	2,698
Total Non-Residential Uses		General accommodation
PLEMENTARY FILES AND UPCOMING REPORTING S	TAGES	
JPPLEMENTARY FILES Site Plan		
Does the development have a site plan?		Yes
What is the site plan filename?		99 Proposed Site Plan (3488402)
Best Practice Documents		
Does the development have a predicted DEC?		No
NTICIPATED DATES FOR UPCOMING REPORTING ST	AGES	
As-Built Stage		30 Nov 2023
Operational Year 1 End		30 Nov 2024
OPMENT PERFORMANCE AND EMISSIO	NS Progress: 100%	
ELOPMENT PERFORMANCE		
EVELOPMENT OVERALL PREDICTED PERFORMANCE Predicted Performance Calculation Details		
Fuel Carbon Intensity Source (aligned with planni	ng energy statemei	SAP 10.0
Residential Elements of the development		
Predicted Annual Energy Use		Fill in all applicable fuels below
Annual Electricity Use	kWh/yr	0
Annual Gas Use	kWh/yr	0
Annual Oil Use (if applicable)	kWh/yr	
Annual Biomass Use (if applicable)	kWh/yr	
Annual District Htg Use (if applicable)	kWh/yr	
Annual District Clg Use (if applicable) Elec Generation, Gross (if applicable)	kWh/yr kWh/yr	
Solar Thermal Generation (if applicable)	kWh/yr	
Predicted Annual Carbon Emissions	tCO2/yr	0
Non-Residential Elements of the development (Pa		
Predicted Annual Energy Use	·	Fill in all applicable fuels below
Annual Electricity Use	kWh/yr	305,689
Annual Gas Use	kWh/yr	53,990
Annual Oil Use (if applicable)	kWh/yr	
Annual Biomass Use (if applicable)	kWh/yr	
Annual District Htg Use (if applicable)	kWh/yr	
Annual District Clg Use (if applicable)	kWh/yr	
Elec Generation, Gross (if applicable)	kWh/yr	
Solar Thermal Generation (if applicable)	kWh/yr	02
Predicted Annual Carbon Emissions Non-Residential Elements of the development (TN	tCO2/yr I54 Calculation)	82
Predicted Annual Energy Use		Fill in all applicable fuels below
Annual Electricity Use	kWh/yr	373,534
Annual Gas Use	kWh/yr	53,990
Annual Oil Use (if applicable)	kWh/yr	
Annual Biomass Use (if applicable)	kWh/yr	
Annual District Htg Use (if applicable)	kWh/yr	
Annual District Clg Use (if applicable)	kWh/yr	
Elec Generation, Gross (if applicable)	kWh/yr	
Solar Thermal Generation (if applicable)	kWh/yr	
Predicted Annual Carbon Emissions	tCO2/yr	98
ARBON OFFSETTING Predicted Carbon Shortfall (aligned with planning e	nergy s tCO2	2,457
		233,374
Total Committed Carbon Offset	£	