

BREEAM 2018 New Construction											
Score Summary											
Targeted Score: 75.2% EXCELLENT Score with potential credits: 84.3% EXCELLENT		Minimum Standards	Credits	Exemplary	Targeted	Potential	RIBA Stage 1-2 Criteria	Credit Overview	Notes / Comments	Responsibility	Eight Service
<b>MANAGEMENT</b>		21	0	17	2						
Man 01	Project brief and design										
	Project delivery planning	1	-	1		✓	Define roles, responsibilities and contributions of each team member before end of RIBA Stage 2. Evidence how stakeholder input influences initial project brief, project execution plan, communication strategy and concept design.			Project Manager / Client	
	Stakeholder consultation	1	-	1		✓	All third party stakeholders consulted with (e.g. local residents) / feedback given to consultees			Client / Architect	
	BREEAM AP (concept design)	1	-	1		✓	AP appointed at RIBA Stage 1/2 and BREEAM targets set			Client appointment (EA to carry out role)	✓
	BREEAM AP (developed design)	1	-	1		✓	AP monitor progress throughout design & report			as above.	✓
Man 02	Life cycle cost and service life planning										
	Elemental LCC	2	-			✓	LCC RIBA Stage 2 and LCC analysis shows: a) outline LCC plan - structure and envelope b) fabric and servicing strategy - services and fit out			Specialist consultant/QS	✓
	Component level LCC options appraisal	1	-	1			Component LCC plan developed by RIBA Stage 4 including: Envelope, Services Finishes and External Spaces			Specialist consultant	✓
	Capital cost reporting	1	-	1			Report the capital cost for the building in £/m2			Project Manager / Client	
Man 03	Responsible construction practices										
	Prerequisite - Legally harvested & traded timber	Yes	-	Yes			Pre-requisite: All timber to be legally sourced				
	Environmental management	1	-	1			Contractors (who manage site) have an ISO 14001 EMS certificate and implement best practice pollution prevention in line with PPG 6			Contractor	
	BREEAM AP (site)	1	-	1			BREEAM AP during construction - monitoring on site			Contractor appointment (EA to carry out role)	✓
	Responsible construction management	1	2	2			Responsible construction management (e.g. CCS)			Contractor	
	Monitoring of construction site impacts - Energy & water	1	-	1			Monitor energy & water data monthly and set targets for expected consumption			Contractor	
	Transport of construction materials & waste	1	-	1			Monitor transport data monthly and set targets for expected consumption			Contractor	
Man 04	Commissioning and handover										
	Commissioning - Testing schedule and responsibilities	1	1	1			Commissioning in line with regulations / programme of commissioning			M&E to Spec / Contractor to implement	
	Commissioning - Design and preparation	1	-	1			Specialist commissioning manager (who was not involved in the general installation works)			M&E to Spec / Contractor to implement	
	Testing and inspecting building fabric	1	-	1			Thermographic survey and air tightness testing			Contractor	
	Handover	BUG	1	-	1		Non-technical and technical building user guides & training schedule covering BREEAM specific points			Contractor	
Man 05	Aftercare										
	Aftercare Support	1	-	1			Provide initial aftercare support to the building occupiers 12 months after handover			Contractor	
	Commissioning - Implementation	1	1	1			Seasonal commissioning of complex and simple Systems within first year of occupation at full load and part load			M&E to Spec / Contractor to implement	
	Post Occupancy Evaluation (POE)	1	-	1			POE one year after initial building occupation by an independent 3rd party			Client	✓
<b>HEALTH AND WELLBEING</b>		18	0	14	4						
Hea 01	Visual comfort										
	Control of glare from sunlight	1	-	1			Identify areas at risk of glare using a glare control assessment. Glare control strategy to design out potential glare in all relevant building areas where risk has been identified.			Architect / Specialist consultant	
	Daylighting	2	-	2			Daylighting factors of 2% are met as per BREEAM guidance AND uniformity ratio is at least 0.3; at least 80% of the room has a view of the sky from desk height			Specialist consultant	✓
	View out	1	-	1			View Out - all workstations are 8m from window AND window area is at least 20% of surrounding wall area, OR window to room depths comply with Table 1.0 BS 8206: Part 2 (25% where >8m, 30% where >11m and 35% where >14m)			Architect	
	Internal and external lighting levels, zoning and control	1	-	1			Lighting guidance met - SLL Code for Lighting 2012 and CIBSE Lighting Guide 7 for Offices			M&E to Spec / Contractor to implement	
Hea 02	Indoor air quality										
	Prerequisite - Indoor air quality (IAQ) plan	Yes	-	Yes			HEA 02 Pre-requisite: An IAQ Plan is carried out in accordance with BREEAM requirements to achieve any of the below credits:			Specialist consultant	✓
	Ventilation	1	-	1			Designed to provide fresh air whilst minimising air pollutants: air intakes and exhausts over 10m apart & intakes 10m horizontal distance from sources of external pollution (e.g. car parks / roads)			M&E to Spec / Contractor to implement	
	Emissions from construction products	2	-	1	1		Compliance with emission requirements for formaldehyde / TVOCs and carcinogens, as follows: One credit: three products comply Two credits: all products comply			Architect to Spec / Contractor to implement	
	Post-construction indoor air quality measurement	1	-	1			Test internal air quality and remediate where necessary before re-testing.			Contractor	✓
Hea 03	Safe containment in laboratories										
	Not applicable in BREEAM 2018	-	-								
Hea 04	Thermal comfort										
	Thermal Modelling CIBSE AM11	1	-	1			Thermal Modelling (in accordance with CIBSE AM11), to comply with CIBSE Guide A			M&E / Specialist consultant	✓
	Design for future thermal comfort	1	-	1			Thermal Modelling - As above for a projected climate change environment			M&E / Specialist consultant	✓
	Thermal zoning and controls	1	-	1			Thermal Strategy produced as a result of the thermal model and installation of occupant control within 7m zones			M&E to Spec / Contractor to implement	
Hea 05	Acoustic performance										
	Acoustic performance	3	-	3			Building meets appropriate acoustic performance standards (and testing reqs) for a) sound insulation; b) indoor ambient noise level; c) room acoustics.			Acoustician (Architect to Spec, Contractor to appoint / implement)	
Hea 06	Security										
	Security of site and building	1	-	1		✓	Security consultant appointed at design stage (RIBA Stage 2) to carry out a Security Needs Assessment			Architect / Contractor to implement security recommendations	
Hea 07	Safe and healthy surroundings										
	Safe access	1	-	1			Delivery routes do not cross pedestrian or cyclist routes. Separate access routes for cyclists, pedestrians and vehicles			Architect	
	Outside space	1	-	1			There is an outside space providing building users with an external amenity area.			Architect / Landscape Architect	
<b>ENERGY</b>		23	0	17	0						
Ene 01	Reduction of energy use & carbon emissions										
	Energy Performance	4	9	4			Energy Performance Ratio for New Construction (SBEM modelling)			M&E / Specialist consultant (Contractor to carry out at PC)	✓
	Prediction of operational energy consumption	-	4	4			Prediction of operational energy consumption: - Energy design workshop to be carried out at design stage with relevant members of design team - Energy modelling & reporting to predict operational energy consumption figures by end use, design assumptions and input data - Risk assessment to highlight any significant design, technical, and process risks			M&E / Specialist Consultant	✓
Ene 02	Energy monitoring										
	Sub-metering of end-use categories	1	1	1			Sub-meters with pulsed output for major energy consuming systems and high energy load areas: Space heating, Domestic hot water heating, Humidification, Cooling, Ventilation, i.e. fans (major), Pumps, Lighting, Small power, Renewable or low carbon systems (separately), Controls, Other major energy consuming systems or plant			M&E to Spec / Contractor to implement	
	Sub-metering of high energy load & tenancy areas	1	-	1			Accessible BEMS or accessible sub-meters for tenancy areas / relevant function areas / departments			M&E to Spec / Contractor to implement	
Ene 03	External lighting										
	External Lighting	1	-	1			Average luminous efficacy of at least 70 luminaire lumens per circuit Watt and controls for daylighting and PIR in areas of intermittent pedestrian traffic			M&E to Spec / Contractor to implement	
Ene 04	Low carbon design										
	Passive Design Analysis	1	-	1		✓	Hea 04 achieved and a Passive Design Analysis produced outlining opportunities for passive design solutions			M&E / Specialist Consultant	✓
	Free Cooling	1	-				Above achieved / free cooling strategy implemented (or building naturally ventilated)			M&E	
	LZC feasibility study	1	-	1		✓	Feasibility Study + LZC technology specified			M&E / Specialist Consultant	✓
Ene 05	Energy efficient cold storage										
	Refrigeration energy consumption	-	-								
	Indirect greenhouse gas emissions	-	-								
Ene 06	Energy efficient transport systems										
	Energy consumption	1	-	1			Transport demand analysis undertaken to determine correct number and size of lifts Lift comparison between at least 2 different lift types with the most energy efficient specified			M&E to Spec / Contractor to implement	
	Energy efficient features - Lifts	1	-	1			Energy efficient features installed for system - standby mode for off peak periods, lift car lighting >70lm/W and variable speed, voltage and frequency. Regenerative drives where this is shown to be energy saving			M&E to Spec / Contractor to implement	
	Energy efficient features - Escalators or moving walks	-	-								
Ene 07	Energy efficient laboratory systems										
	Design specification	-	-								
	Best practice energy efficient measures	-	-								
Ene 08	Energy efficient equipment										
	Energy efficient equipment	2	-	2			Where installed, equipment using a significant proportion of the total annual unregulated energy consumption of the building to meet BREEAM requirements (e.g. white goods / IT equipment)			Client	
<b>TRANSPORT</b>		12	0	10	0						
Tra 01	Transport assessment & travel plan										
	Travel Plan	2	-	2		✓	Develop a travel plan based on a site-specific travel assessment, including analysis of Accessibility Index			Transport consultant	✓

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Tra 02	Sustainable transport measures	Transport options implementation	10	-	8			Identify the sustainable transport measures (e.g. cycle storage, cyclist facilities, electric car charging points, car share schemes, travel information point, new bus service, improved cycle / pedestrian routes)	AI >8 or >4 for prison or MOD sites, rural location sensitive buildings, and other building group 3 - 1 point Cycle storage - 1 point Cyclist facilities - 1 point Existing amenities - 1 point	Client / Architect	
<b>WATER</b>			9	0	6	0					
Wat 01	Water consumption	Water consumption	1	5	-	2		Percentage improvement on baseline - litres / person / day 12.5% (1) / 25% (2) / 40% (3) / 50% (4) / 55% (5) / 65% (exemplar)		Architect to Spec / Contractor to implement	
Wat 02	Water monitoring	Water monitoring	1	1	-	1		Water meter on mains supply - pulsed output Sub-metering for areas expected to use more than 10% consumption		M&E to Spec / Contractor to implement	
Wat 03	Water leak detection	Leak detection system	1	-	1			Water leak detection between boundary and building and within building - alarm must be audible and programmable		M&E to Spec / Contractor to implement	
		Flow control devices	1	-	1			Cold water supply shut off valves linked to presence detectors in each WC area / facility		M&E to Spec / Contractor to implement	
Wat 04	Water efficient equipment	Water efficient equipment	1	-	1			Mitigate significant unregulated water demands QR Where there is no significant water demand		Landscape architect	
<b>MATERIALS</b>			14	0	9	2					
Mat 01	Building life cycle assessment (LCA)	Superstructure	6	-	4	1	✓	Life cycle assessment: - Comparison with the BREEAM benchmark (office, retail & industrial only) and options appraisal - Integrate the LCA options appraisal activity within the wider design decision-making process <b>Early stage req:</b> For maximum credits: LCA must be submitted to BRE prior to planning application		Architect / Specialist Consultant	✓
		Substructure and hard landscaping options appraisal during Concept Design	1	-	1		✓			as above.	✓
Mat 02	Environmental Product Declarations (EPDs)	Specification of products with a recognised EPD	1	-	1			Specification of products with a recognised EPD within the life cycle analysis. Must be at least 14 EPDs to		Architect to Spec / Contractor to implement	
Mat 03	Responsible sourcing construction products	Prerequisite - Legally harvested & traded timber	Yes	Yes	-	Yes		<b>Pre-requisite : all timber to be legally sourced</b>		Architect to Spec / Contractor to implement	
		Enabling sustainable procurement	1	-	1		✓	Sustainable Procurement Plan in place - all materials for the project		Architect / Developer	✓
		Measuring responsible sourcing	3	-	1			Responsible sourcing of materials (ISO / FSC etc)		Architect to Spec / Contractor to implement	
Mat 04	Insulation	Not applicable in BREEAM 2018	-	-	-	-					
Mat 05	Design for durability & resilience	Design for durability and resilience	1	-	1			Protecting vulnerable parts of the building from damage / Protecting exposed parts of the building from material degradation		Architect and Contractor	✓
Mat 06	Material efficiency	Material efficiency	1	-	1		✓	Optimise the use of materials in building design, procurement, construction, maintenance and end of life		Architect and Contractor	✓
<b>WASTE</b>			11	0	8	2					
Wst 01	Construction waste management	Pre-demolition audit	-	1	-	1	✓	Determine whether refurbishment or reuse is feasible / maximise recovery of materials		Client / Developer	
		Construction resource efficiency	3	-	2			Amount of Waste per 100m2 of GIFA - SWMP		Contractor	
		Diversion of resources from landfill	1	-	1			Meet with diversion from landfill benchmarks		Contractor	
		RMP (Resource Management Plan) measuring and reporting	-	-	-	-					
Wst 02	Recycled & sustainably sourced aggregates	Prerequisite - Pre demolition audit	Yes	-	Yes		✓	Identify all aggregate uses / types on the project + total amounts (weight) and distance travelled - points calculated using Wst 02 calculator		Client / Developer	
		Project sustainable aggregate points	1	-	1					Contractor	
Wst 03	Operational waste	Operational waste	1	1	-	1		Dedicated, recyclable waste storage area: 1. At least 2m <sup>2</sup> per 1000m <sup>2</sup> of net floor area for buildings < 5000m <sup>2</sup> 2. A minimum of 10m <sup>2</sup> for buildings ≥ 5000m <sup>2</sup> 3. An additional 2m <sup>2</sup> per 1000m <sup>2</sup> of net floor area where catering is provided (with an additional minimum of 10m <sup>2</sup> for buildings ≥ 5000m <sup>2</sup> )		Architect	
Wst 04	Speculative finishes (offices only)	Speculative floor and ceiling finishes	1	-	1			Offices only: no floor or ceiling finishes are installed OR show areas are installed OR tenant confirms finishes to be installed			
Wst 05	Adaptation to climate change	Resilience of structure, fabric, building services and renewables installation	1	-	1		✓	Conduct a climate change adaptation strategy appraisal for structural and fabric resilience by the end of Concept Design - RIBA Stage 2		Specialist consultant	✓
Wst 06	Design for disassembly & adaptability	Design for disassembly and functional adaptability - recommendations	1	-	1		✓	Recommend a building-specific functional adaptation strategy - RIBA Stage 2		Architect / Specialist consultant	✓
		Disassembly and functional adaptability – implementation	1	-	1			Disassembly and functional adaptability strategy to be implemented – RIBA Stage 4		Architect / Contractor	✓

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<b>ECOLOGY</b>		13	0	9	1	1					
LE 01	Site selection	Previously Occupied Land	1	-	1			75% land pre-developed (building or hardstanding) in last 50 years		Client / Architect	
		Contaminated Land	1	-	1			Site investigation confirming contamination and remediation needed		Client / Contractor	
LE 02	Ecological risks & opportunities	Prerequisite	Yes	-	Yes		✓	<b>Assessment route selection</b> Determine Route 1 or Route 2 - GN 34 checklist		Ecologist	
		Survey and evaluation and Determining the ecological outcomes for the site (route 1)	-	-				<b>Route 1 (one credit)</b> - checklist must be carried out to determine 'ecological value'		Architect / Landscape architect	
		Survey and evaluation and Determining the ecological outcomes for the site (route 2)	2	-	2		✓	<b>Route 2 (two credits)</b> - desktop study and survey by Suitably Qualified Ecologist (SQE) confirming current and potential ecological value & condition to determine baseline, risks to ecological value and feasibility for enhancement, including determining the zone of influence.		Ecologist	✓
LE 03	Managing impacts on ecology	Prerequisite - Achieved LE 02	Yes	-	Yes		✓	<b>Prerequisite - ID risks and opportunities for the site</b> LE 02 must be achieved + EU & UK legislation will be implemented		Ecologist	
		Planning, liaison, implementation and data (route 1)	-	-	0			<b>Route 1 and Route 2 (one credit)</b> - Planning to be carried out for activities during site clearance and construction, including: - Roles and responsibilities for managing negative impacts on the ecology have been identified. - Determine timescales for implementing on-site measures - Ensure contract requirements focus on reducing and managing potential knock-on impacts of works (e.g. pollution and disturbance)		Architect / Landscape architect	
		Planning, liaison, implementation and data (route 2)	1	-	1					Ecologist	✓
		Managing negative impacts of the project (route 1)	-	-	0			<b>Route 1 (one credit)</b> - negative impacts are managed in accordance with mitigation hierarchy and no overall loss of ecological value		Architect / Landscape architect	
		Managing negative impacts of the project (route 2)	2	-	1			<b>Route 2 (Up to two credits)</b> - Managing negative impacts of the project and construction works have been managed in accordance with the mitigation hierarchy One credit - minimising loss Two credits - no loss of ecological value		Ecologist / Landscape architect	✓
LE 04	Ecological change & enhancement	Prerequisite - Achieved LE 03	Yes	-	Yes		✓	<b>ID risks and opportunities for the site</b> LE 03 must be achieved + EU & UK legislation will be implemented <b>Route 2 only</b> - Liaison, implementation and data collation: Ecological measures have been implemented that enhance the sites ecological value.		Ecologist	
		Ecological enhancement (route 2 only)	1	-	1			Measures are based on: a) SQE recommendations b) input from the project team / relevant stakeholders and c) data collected for LE 02		Ecologist / Landscape architect	✓
		Change and enhancement of ecology (route 1)	-	-				<b>Route 1 only</b> - Locally relevant ecological measures have been implemented that enhance the sites ecological value. Measures are based on: a) local expert recommendations b) input from the project team / relevant stakeholders and c) data collected for LE 02		Architect / Landscape architect	
		Change and enhancement of ecology (route 2)	3	-	1			<b>Route 1</b> - n/a <b>Route 2</b> Enhancement of ecology based on the change in ecological value, determined by a calculation carried out by the SQE		Ecologist / Landscape architect	✓
LE 05	Long term ecology management & maintenance	Prerequisite (route 1)	-	-				<b>Prerequisite: Route 1 - LE03 credit 'managing negative impacts of the project' is achieved</b>		Architect / Landscape architect	
		Prerequisite (route 2)	Yes	-	Yes		✓	<b>Prerequisite: Route 2 - LE03 credit 'Managing negative impacts of the project' is achieved AND at least one LE 04 credit for 'Change and enhancement of ecology'</b>		Ecologist	
		Management and maintenance - Landscape and ecology management plan (or similar) development (route 1)	-	-				<b>Route 1</b> - Measures are implemented to manage and maintain ecology through the project to ensure optimal ecological outcomes agreed in LE 02 are met. Information made available to future building user on ecological values.		Architect / Landscape architect	
		Management and maintenance (route 2)	1	-	1			<b>Route 2</b> - Measures are implemented to manage and maintain ecology through the project to ensure optimal ecological outcomes agreed in LE 02 are met. Information made available to future building user on ecological values.		Ecologist / Landscape architect	✓
		Landscape and ecology management plan (or similar) development (route 2)	1	-	1			Landscape and ecology management plan (or similar) development		Ecologist / Landscape architect	✓
<b>POLLUTION</b>			12	0	10	1					
Pol 01	Impact of refrigerants	No Refrigerants	-	-							
		Prerequisite - BS EN 378:2016 (ammonia)	Yes	-	Yes		✓	<b>Pre-requisite : all systems with electric compressors comply with the requirements of BS EN 378:2016(207) (parts 2 and 3). Refrigeration systems containing ammonia comply with the Institute of Refrigeration Ammonia Refrigeration Systems code of practice (208).</b>			
		Impact of refrigerant	2	-	1			GWP of 10 or less / DELC CO2e of 100 kgCO2/kW cooling capacity <b>OR</b> DELC CO2e of 1000 kgCO2/kW cooling capacity		M&E to Spec / Contractor to implement	
		Leak detection	1	-	1			Refrigerant leak detection system provided		As above.	
Pol 02	Local air quality	Local air quality	2	-	2			If all heating / hot water fed by electric - 2 credits achieved by default. Where heating / hot water fed by combustion plant (i.e. boiler), minimum emission levels must be met. Gas fired boilers: 1 credit: 27 mg / kWh 2 credits: 24 mg / kWh		M&E to Spec / Contractor to implement	
Pol 03	Flood and surface water management	Prerequisite	Yes	-	Yes		✓	<b>Prerequisite - an appropriate consultant must be appointed</b>			
		Flood resilience	2	-	2			Flood risk assessment (FRA) required. 2 credits if low annual prob of flooding / 1 credit if medium/high annual prob of flooding		Drainage engineer	✓
		Surface water run-off rate	1	-	1			<b>Surface Water Run-Off - Rate</b> - Peak run off rate shows a 30% improvement - maintenance agreements - allowance for climate change		Drainage engineer	✓
		Surface water run-off volume	1	-	1			<b>Surface Water Run-Off - Volume</b> Where flooding will not occur in the event of local drainage failure Post-development run-off no greater than pre-development		Drainage engineer	
		Minimum watercourse pollution	1	-	1			<b>Minimum water course Pollution</b> No discharge from the developed site for rainfall up to 5 mm and SUDS / oil interceptors installed		Drainage engineer	
Pol 04	Reduction of night time light pollution	Reduction of night time light pollution	1	-	1			External lighting in accordance with ILP guidance and connected to timer clock		M&E to Spec / Contractor to implement	
Pol 05	Reduction of noise pollution	Reduction of noise pollution	1	-	1			External noise assessment if within 800m of a noise sensitive building		M&E to Spec / Contractor to implement	

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<b>INNOVATION</b>			10	1							
Inn 01	Man 03 - Responsible construction management	Man 03 - Responsible construction management	-	1	1			All responsible construction management criteria are met and evidenced by the Contractor		Contractor	
Inn 02	Hea 01 - Daylighting	Hea 01 - Daylighting	-	2				Daylighting levels achieved beyond standard BREEAM compliance		Specialist consultant	✓
Inn 03	Hea 01 - Internal and external lighting levels,	Hea 01 - Internal and external lighting levels, zoning and control	-	1				Lighting in each zone can be manually dimmed by occupants down to 20% of the max. light output		M&E to Spec / Contractor to implement	
Inn 04	Hea 02 - Minimising sources of air pollution - Emissions from construction products	Hea 02 - Minimising sources of air pollution - Emissions from construction products	-	1				Emission levels achieved beyond standard BREEAM compliance		Contractor	✓
Inn 05	Hea 06 - Security of site and building	Hea 06 - Security of site and building	-	1				A compliant risk based security rating scheme (SABRE) is used and confirmed by independent assessment and verification		Architect	
Inn 06	Ene 01 - Beyond zero net regulated carbon	Ene 01 - Beyond zero net regulated carbon	-	2				Energy performance beyond standard BREEAM compliance		M&E / Specialist consultant (Contractor to carry out at PC)	✓
Inn 07	Ene 01 - Carbon negative	Ene 01 - Carbon negative	-	1				Energy performance carbon negative		as above	
Inn 08	Ene 01 - Post occupancy stage	Ene 01 - Post occupancy stage	-	2				Contractual agreement to carry out DEC		Client	✓
Inn 09	Wat 01 - Water consumption	Wat 01 - Water consumption	-	1				Water consumption performance beyond standard BREEAM compliance		M&E to Spec / Contractor to implement	
Inn 10	Mat 01 - Core building services options appraisal during Concept Design	Mat 01 - Core building services options appraisal during Concept Design	-	1			✓	LCA including building services appraisal - must be carried out at concept design		Architect / Specialist Consultant	✓
Inn 11	Mat 01 - LCA and LCC alignment	Mat 01 - LCA and LCC alignment	-	1			✓	LCA and LCC carried out with same programme, and findings align		Architect / Specialist Consultant	✓
Inn 12	Mat 01 - Third party verification	Mat 01 - Third party verification	-	1			✓	LCA provider to provide third party verification of the LCA outputs		Architect / Specialist Consultant	✓
Inn 13	Mat 03 - Measuring responsible sourcing	Mat 03 - Measuring responsible sourcing	-	1				Responsible sourcing performance beyond standard BREEAM compliance		Contractor	
Inn 14	Wst 01 - Construction waste management	Wst 01 - Construction waste management	-	1				Waste consumption performance beyond standard BREEAM compliance		Contractor	
Inn 15	Wst 02 - Use of recycled and sustainably sourced	Wst 02 - Use of recycled and sustainably sourced aggregates	-	1				Waste aggregates performance beyond standard BREEAM compliance		Contractor	
Inn 16	Wst 05 - Responding to climate change	Wst 05 - Responding to climate change	-	1				Wst 05 credit achieved, <b>AND</b> credits for the following met: Hea 04; Ene 01 (6 credits); Ene 04 passive design; Wat 01 (3 credits); Mat 05 (environmental degradation); and Pol 03 (1 credit for resilience, 2 credits for surface water run off)		Specialist consultant	
Inn 17	LE 02 - Determine the ecological outcomes for the site (sustainability-related activities)	LE 02 - Determine the ecological outcomes for the site (sustainability-related activities)	-	1				LE 02 credits achieved, <b>AND</b> achieve the following: Hea 07 (both credits); Pol 03 (surface water run off and minimising watercourse pollution credits); and Pol 05.		Ecologist	✓

Targeted score: 75.2 EXCELLENT (Excellent Rating - 70% required)

Score with additional credits: 84.3 EXCELLENT (Excellent Rating - 70% required)

Please note that we recommend a safety margin between 3-5%

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	Project delivery planning	1	-	1		✓	Define roles, responsibilities and contributions of each team member before end of RIBA Stage 2. Evidence how stakeholder input influences initial project brief, project execution plan, communication strategy and concept design.		Project Manager / Client		
	Stakeholder consultation	1	-	1	1	✓	All third party stakeholders consulted with (e.g. local residents) / feedback given to consultees		Client / Architect		
	BREEAM AP (concept design)	1	-	1		✓	AP appointed at RIBA Stage 1/2 and BREEAM targets set		Client appointment (EA to carry out role)	✓	
	BREEAM AP (developed design)	1	-	1			AP monitor progress throughout design & report		as above.	✓	
Man 02	Life cycle cost and service life planning										
	Elemental LCC	2	-			✓	LCC RIBA Stage 2 and LCC analysis shows: a) outline LCC plan - structure and envelope b) fabric and servicing strategy - services and fit out		Specialist consultant/QS	✓	
	Component level LCC options appraisal	1	-	1			Component LCC plan developed by RIBA Stage 4 including: Envelope, Services Finishes and External Spaces		Specialist consultant	✓	
	Capital cost reporting	1	-	1			Report the capital cost for the building in £/m2		Project Manager / Client		
Man 03	Responsible construction practices										
	Prerequisite - Legally harvested & traded timber	Yes	-	Yes			Pre-requisite: All timber to be legally sourced				
	Environmental management	1	-	1			Contractors (who manage site) have an ISO 14001 EMS certificate and implement best practice pollution prevention in line with PPG 6		Contractor		
	BREEAM AP (site)	1	-	1			BREEAM AP during construction - monitoring on site		Contractor appointment (EA to carry out role)	✓	
	Responsible construction management	1	2	2			Responsible construction management (e.g. CCS)		Contractor		
	Monitoring of construction site impacts - Energy & water	1	-	1			Monitor energy & water data monthly and set targets for expected consumption		Contractor		
	Transport of construction materials & waste	1	-	1			Monitor transport data monthly and set targets for expected consumption		Contractor		
Man 04	Commissioning and handover										
	Commissioning - Testing schedule and responsibilities	1	1	1			Commissioning in line with regulations / programme of commissioning		M&E to Spec / Contractor to implement		
	Commissioning - Design and preparation	1	-	1			Specialist commissioning manager (who was not involved in the general installation works)		M&E to Spec / Contractor to implement		
	Testing and inspecting building fabric	1	-	1	1		Thermographic survey and air tightness testing		Contractor		
	Handover	BUG	1	-	1		Non-technical and technical building user guides & training schedule covering BREEAM specific points		Contractor		
Man 05	Aftercare										
	Aftercare Support	1	-	1			Provide initial aftercare support to the building occupiers 12 months after handover		Contractor		
	Commissioning - Implementation	1	1	1			Seasonal commissioning of complex and simple Systems within first year of occupation at full load and part load		M&E to Spec / Contractor to implement		
	Post Occupancy Evaluation (POE)	1	-	1			POE one year after initial building occupation by an independent 3rd party		Client	✓	
<b>HEALTH AND WELLBEING</b>		17	0	13	3						
Hea 01	Visual comfort										
	Control of glare from sunlight	1	-	1			Identify areas at risk of glare using a glare control assessment. Glare control strategy to design out potential glare in all relevant building areas where risk has been identified.		Architect / Specialist consultant		
	Daylighting	1	-	1	1		Daylighting factors of 2% are met as per BREEAM guidance AND uniformity ratio is at least 0.3; at least 80% of the room has a view of the sky from desk height		Specialist consultant	✓	
	View out	1	-				View Out - all workstations are 8m from window AND window area is at least 20% of surrounding wall area, OR window to room depths comply with Table 1.0 BS 8206: Part 2 (25% where >8m, 30% where >11m and 35% where >14m)		Architect		
	Internal and external lighting levels, zoning and control	1	-	1			Lighting guidance met - SLL Code for Lighting 2012 and CIBSE Lighting Guide 7 for Offices		M&E to Spec / Contractor to implement		
Hea 02	Indoor air quality										
	Prerequisite - Indoor air quality (IAQ) plan	Yes	-	Yes			HEA 02 Pre-requisite: An IAQ Plan is carried out in accordance with BREEAM requirements to achieve any of the below credits:		Specialist consultant	✓	
	Ventilation	1	-	1			Designed to provide fresh air whilst minimising air pollutants: air intakes and exhausts over 10m apart & intakes 10m horizontal distance from sources of external pollution (e.g. car parks / roads)		M&E to Spec / Contractor to implement		
	Emissions from construction products	2	-	1	1		Compliance with emission requirements for formaldehyde / TVOCs and carcinogens, as follows: One credit: three products comply Two credits: all products comply		Architect to Spec / Contractor to implement		
	Post-construction indoor air quality measurement	1	-	1			Test internal air quality and remediate where necessary before re-testing.		Contractor	✓	
Hea 03	Safe containment in laboratories						Not applicable in BREEAM 2018				
Hea 04	Thermal comfort										
	Thermal Modelling CIBSE AM11	1	-	1			Thermal Modelling (in accordance with CIBSE AM11), to comply with CIBSE Guide A		M&E / Specialist consultant	✓	
	Design for future thermal comfort	1	-	1			Thermal Modelling - As above for a projected climate change environment		M&E / Specialist consultant	✓	
	Thermal zoning and controls	1	-	1			Thermal Strategy produced as a result of the thermal model and installation of occupant control within 7m zones		M&E to Spec / Contractor to implement		
Hea 05	Acoustic performance										
	Acoustic performance	3	-	3			Building meets appropriate acoustic performance standards (and testing reqs) for a) sound insulation; b) indoor ambient noise level; c) room acoustics.		Acoustician (Architect to Spec, Contractor to appoint / implement)		
Hea 06	Security										
	Security of site and building	1	-	1	1	✓	Security consultant appointed at design stage (RIBA Stage 2) to carry out a Security Needs Assessment		Architect / Contractor to implement security recommendations		
Hea 07	Safe and healthy surroundings										
	Safe access	1	-	1			Delivery routes do not cross pedestrian or cyclist routes. Separate access routes for cyclists, pedestrians and vehicles		Architect		
	Outside space	1	-	1			There is an outside space providing building users with an external amenity area.		Architect / Landscape Architect		
<b>ENERGY</b>		23	0	17	0						
Ene 01	Reduction of energy use & carbon emissions										
	Energy Performance	4	9	-	4		Energy Performance Ratio for New Construction (SBEM modelling)		M&E / Specialist consultant (Contractor to carry out at PC)	✓	
	Prediction of operational energy consumption	-	4	-	4		Prediction of operational energy consumption: - Energy design workshop to be carried out at design stage with relevant members of design team - Energy modelling & reporting to predict operational energy consumption figures by end use, design assumptions and input data - Risk assessment to highlight any significant design, technical, and process risks		M&E / Specialist Consultant	✓	
Ene 02	Energy monitoring										
	Sub-metering of end-use categories	1	1	-	1		Sub-meters with pulsed output for major energy consuming systems and high energy load areas: Space heating, Domestic hot water heating, Humidification, Cooling, Ventilation, i.e. fans (major), Pumps, Lighting, Small power, Renewable or low carbon systems (separately), Controls, Other major energy consuming systems or plant		M&E to Spec / Contractor to implement		
	Sub-metering of high energy load & tenancy areas	1	-	1			Accessible BEMS or accessible sub-meters for tenancy areas / relevant function areas / departments		M&E to Spec / Contractor to implement		
Ene 03	External lighting										
	External Lighting	1	-	1			Average luminous efficacy of at least 70 luminaire lumens per circuit Watt and controls for daylighting and PIR in areas of intermittent pedestrian traffic		M&E to Spec / Contractor to implement		
Ene 04	Low carbon design										
	Passive Design Analysis	1	-	1		✓	Hea 04 achieved and a Passive Design Analysis produced outlining opportunities for passive design solutions		M&E / Specialist Consultant	✓	
	Free Cooling	1	-				Above achieved / free cooling strategy implemented (or building naturally ventilated)		M&E		
	LZC feasibility study	1	-	1		✓	Feasibility Study + LZC technology specified		M&E / Specialist Consultant	✓	
Ene 05	Energy efficient cold storage										
	Refrigeration energy consumption	-	-								
	Indirect greenhouse gas emissions	-	-								
Ene 06	Energy efficient transport systems										
	Energy consumption	1	-	1			Transport demand analysis undertaken to determine correct number and size of lifts Lift comparison between at least 2 different lift types with the most energy efficient specified		M&E to Spec / Contractor to implement		
	Energy efficient features - Lifts	1	-	1			Energy efficient features installed for system - standby mode for off peak periods, lift car lighting >70lm/W and variable speed, voltage and frequency. Regenerative drives where this is shown to be energy saving		M&E to Spec / Contractor to implement		
	Energy efficient features - Escalators or moving walks	-	-								
Ene 07	Energy efficient laboratory systems										
	Design specification	-	-								
	Best practice energy efficient measures	-	-								
Ene 08	Energy efficient equipment										
	Energy efficient equipment	2	-	2			Where installed, equipment using a significant proportion of the total annual unregulated energy consumption of the building to meet BREEAM requirements (e.g. white goods / IT equipment)		Client		
<b>TRANSPORT</b>		12	0	10	0						
Tra 01	Transport assessment & travel plan										
	Travel Plan	2	-	2		✓	Develop a travel plan based on a site-specific travel assessment, including analysis of Accessibility Index		Transport consultant	✓	

BREEAM 2018 New Construction		Score Summary									
Targeted Score: 74.9% EXCELLENT Score with potential credits: 83.4% EXCELLENT		Minimum Standards	Credits	Exemplary	Targeted	Potential	RIBA Stage 1-2 Criteria	Credit Overview	Notes / Comments	Responsibility	Eight Service
Tra 02	Sustainable transport measures	Transport options implementation	10	-	8			Identify the sustainable transport measures (e.g. cycle storage, cyclist facilities, electric car charging points, car share schemes, travel information point, new bus service, improved cycle / pedestrian routes)	AI >8 or >4 for prison or MOD sites, rural location sensitive buildings, and other building group 3 - 1 point Cycle storage - 1 point Cyclist facilities - 1 point Existing amenities - 1 point	Client / Architect	
<b>WATER</b>			9	0	6	0					
Wat 01	Water consumption	Water consumption	1	5	-	2		Percentage improvement on baseline - litres / person / day 12.5% (1) / 25% (2) / 40% (3) / 50% (4) / 55% (5) / 65% (exemplar)		Architect to Spec / Contractor to implement	
Wat 02	Water monitoring	Water monitoring	1	1	-	1		Water meter on mains supply - pulsed output Sub-metering for areas expected to use more than 10% consumption		M&E to Spec / Contractor to implement	
Wat 03	Water leak detection	Leak detection system	1	-	1			Water leak detection between boundary and building and within building - alarm must be audible and programmable		M&E to Spec / Contractor to implement	
		Flow control devices	1	-	1			Cold water supply shut off valves linked to presence detectors in each WC area / facility		M&E to Spec / Contractor to implement	
Wat 04	Water efficient equipment	Water efficient equipment	1	-	1			Mitigate significant unregulated water demands QR Where there is no significant water demand		Landscape architect	
<b>MATERIALS</b>			14	0	9	2					
Mat 01	Building life cycle assessment (LCA)	Superstructure	6	-	4	1	✓	Life cycle assessment: - Comparison with the BREEAM benchmark (office, retail & industrial only) and options appraisal - Integrate the LCA options appraisal activity within the wider design decision-making process <b>Early stage req:</b> For maximum credits: LCA must be submitted to BRE prior to planning application		Architect / Specialist Consultant	✓
		Substructure and hard landscaping options appraisal during Concept Design	1	-	1		✓			as above.	✓
Mat 02	Environmental Product Declarations (EPDs)	Specification of products with a recognised EPD	1	-	1			Specification of products with a recognised EPD within the life cycle analysis. Must be at least 14 EPDs to		Architect to Spec / Contractor to implement	
Mat 03	Responsible sourcing construction products	Prerequisite - Legally harvested & traded timber	Yes	Yes	-	Yes		<b>Pre-requisite : all timber to be legally sourced</b>		Architect to Spec / Contractor to implement	
		Enabling sustainable procurement	1	-	1		✓	Sustainable Procurement Plan in place - all materials for the project		Architect / Developer	✓
		Measuring responsible sourcing	3	-	1			Responsible sourcing of materials (ISO / FSC etc)		Architect to Spec / Contractor to implement	
Mat 04	Insulation	Not applicable in BREEAM 2018	-	-	-	-					
Mat 05	Design for durability & resilience	Design for durability and resilience	1	-	1			Protecting vulnerable parts of the building from damage / Protecting exposed parts of the building from material degradation		Architect and Contractor	✓
Mat 06	Material efficiency	Material efficiency	1	-	1		✓	Optimise the use of materials in building design, procurement, construction, maintenance and end of life		Architect and Contractor	✓
<b>WASTE</b>			10	0	7	2					
Wst 01	Construction waste management	Pre-demolition audit	-	1	-	1	✓	Determine whether refurbishment or reuse is feasible / maximise recovery of materials		Client / Developer	
		Construction resource efficiency	3	-	2			Amount of Waste per 100m2 of GIFA - SWMP		Contractor	
		Diversion of resources from landfill	1	-	1			Meet with diversion from landfill benchmarks		Contractor	
		RMP (Resource Management Plan) measuring and reporting	-	-	-	-					
Wst 02	Recycled & sustainably sourced aggregates	Prerequisite - Pre demolition audit	Yes	-	Yes		✓	Identify all aggregate uses / types on the project + total amounts (weight) and distance travelled - points calculated using Wst 02 calculator		Client / Developer	
		Project sustainable aggregate points	1	-	1					Contractor	
Wst 03	Operational waste	Operational waste	1	1	-	1		Dedicated, recyclable waste storage area: 1. At least 2m <sup>2</sup> per 1000m <sup>2</sup> of net floor area for buildings < 5000m <sup>2</sup> 2. A minimum of 10m <sup>2</sup> for buildings ≥ 5000m <sup>2</sup> 3. An additional 2m <sup>2</sup> per 1000m <sup>2</sup> of net floor area where catering is provided (with an additional minimum of 10m <sup>2</sup> for buildings ≥ 5000m <sup>2</sup> )		Architect	
Wst 04	Speculative finishes (offices only)	Speculative floor and ceiling finishes	-	-	-	-		Offices only: no floor or ceiling finishes are installed OR show areas are installed OR tenant confirms finishes to be installed			
Wst 05	Adaptation to climate change	Resilience of structure, fabric, building services and renewables installation	1	-	1		✓	Conduct a climate change adaptation strategy appraisal for structural and fabric resilience by the end of Concept Design - RIBA Stage 2		Specialist consultant	✓
Wst 06	Design for disassembly & adaptability	Design for disassembly and functional adaptability - recommendations	1	-	1		✓	Recommend a building-specific functional adaptation strategy - RIBA Stage 2		Architect / Specialist consultant	✓
		Disassembly and functional adaptability – implementation	1	-	1			Disassembly and functional adaptability strategy to be implemented – RIBA Stage 4		Architect / Contractor	✓

BREEAM 2018 New Construction												
Score Summary												
Targeted Score: 74.9% EXCELLENT Score with potential credits: 83.4% EXCELLENT		Minimum Standards	Credits	Exemplary	Targeted	Potential	RIBA Stage 1-2 Criteria	Credit Overview	Notes / Comments	Responsibility	Eight Service	
<b>ECOLOGY</b>		13	0	9	1							
LE 01	Site selection	Previously Occupied Land	1	-	1		75% land pre-developed (building or hardstanding) in last 50 years			Client / Architect		
		Contaminated Land	1	-	1		Site investigation confirming contamination and remediation needed			Client / Contractor		
LE 02	Ecological risks & opportunities	Prerequisite	Yes	-	Yes	✓	<b>Assessment route selection</b> Determine Route 1 or Route 2 - GN 34 checklist			Ecologist		
		Survey and evaluation and Determining the ecological outcomes for the site (route 1)	-	-			<b>Route 1 (one credit)</b> - checklist must be carried out to determine 'ecological value'			Architect / Landscape architect		
		Survey and evaluation and Determining the ecological outcomes for the site (route 2)	2	-	2	✓	<b>Route 2 (two credits)</b> - desktop study and survey by Suitably Qualified Ecologist (SQE) confirming current and potential ecological value & condition to determine baseline, risks to ecological value and feasibility for enhancement, including determining the zone of influence.			Ecologist	✓	
LE 03	Managing impacts on ecology	Prerequisite - Achieved LE 02	Yes	-	Yes		<b>Prerequisite - ID risks and opportunities for the site</b> LE 02 must be achieved + EU & UK legislation will be implemented			Ecologist		
		Planning, liaison, implementation and data (route 1)	-	-	0		<b>Route 1 and Route 2 (one credit)</b> - Planning to be carried out for activities during site clearance and construction, including: - Roles and responsibilities for managing negative impacts on the ecology have been identified.			Architect / Landscape architect		
		Planning, liaison, implementation and data (route 2)	1	-	1		- Determine timescales for implementing on-site measures - Ensure contract requirements focus on reducing and managing potential knock-on impacts of works (e.g. pollution and disturbance)			Ecologist	✓	
		Managing negative impacts of the project (route 1)	-	-	0		<b>Route 1 (one credit)</b> - negative impacts are managed in accordance with mitigation hierarchy and no overall loss of ecological value			Architect / Landscape architect		
		Managing negative impacts of the project (route 2)	2	-	1		<b>Route 2 (Up to two credits)</b> - Managing negative impacts of the project and construction works have been managed in accordance with the mitigation hierarchy One credit - minimising loss Two credits - no loss of ecological value			Ecologist / Landscape architect	✓	
LE 04	Ecological change & enhancement	Prerequisite - Achieved LE 03	Yes	-	Yes		<b>ID risks and opportunities for the site</b> LE 03 must be achieved + EU & UK legislation will be implemented <b>Route 2 only</b> - Liaison, implementation and data collection: Ecological measures have been implemented that enhance the sites ecological value.			Ecologist		
		Ecological enhancement (route 2 only)	1	-	1		Measures are based on: a) SQE recommendations b) input from the project team / relevant stakeholders and c) data collected for LE 02			Ecologist / Landscape architect	✓	
		Change and enhancement of ecology (route 1)	-	-			<b>Route 1 only</b> - Locally relevant ecological measures have been implemented that enhance the sites ecological value. Measures are based on: a) local expert recommendations b) input from the project team / relevant stakeholders and c) data collected for LE 02			Architect / Landscape architect		
		Change and enhancement of ecology (route 2)	3	-	1		<b>Route 1</b> - n/a <b>Route 2</b> Enhancement of ecology based on the change in ecological value, determined by a calculation carried out by the SQE			Ecologist / Landscape architect	✓	
LE 05	Long term ecology management & maintenance	Prerequisite (route 1)	-	-			<b>Prerequisite: Route 1 - LE03 credit 'managing negative impacts of the project' is achieved</b>			Architect / Landscape architect		
		Prerequisite (route 2)	Yes	-	Yes		<b>Prerequisite: Route 2 - LE03 credit 'Managing negative impacts of the project' is achieved AND at least one LE 04 credit for 'Change and enhancement of ecology'</b>			Ecologist		
		Management and maintenance - Landscape and ecology management plan (or similar) development (route 1)	-	-			<b>Route 1</b> - Measures are implemented to manage and maintain ecology through the project to ensure optimal ecological outcomes agreed in LE 02 are met. Information made available to future building user on ecological values.			Architect / Landscape architect		
		Management and maintenance (route 2)	1	-	1		<b>Route 2</b> - Measures are implemented to manage and maintain ecology through the project to ensure optimal ecological outcomes agreed in LE 02 are met. Information made available to future building user on ecological values.			Ecologist / Landscape architect	✓	
		Landscape and ecology management plan (or similar) development (route 2)	1	-	1		Landscape and ecology management plan (or similar) development			Ecologist / Landscape architect	✓	
<b>POLLUTION</b>			12	0	10	1						
Pol 01	Impact of refrigerants	No Refrigerants	-	-								
		Prerequisite - BS EN 378:2016 (ammonia)	Yes	-	Yes		<b>Pre-requisite : all systems with electric compressors comply with the requirements of BS EN 378:2016(207) (parts 2 and 3). Refrigeration systems containing ammonia comply with the Institute of Refrigeration Ammonia Refrigeration Systems code of practice (208).</b>					
		Impact of refrigerant	2	-	1		GWP of 10 or less / DELC CO2e of 100 kgCO2/kW cooling capacity <b>OR</b> DELC CO2e of 1000 kgCO2/kW cooling capacity			M&E to Spec / Contractor to implement		
		Leak detection	1	-	1		Refrigerant leak detection system provided			As above.		
Pol 02	Local air quality	Local air quality	2	-	2		If all heating / hot water fed by electric - 2 credits achieved by default. Where heating / hot water fed by combustion plant (i.e. boiler), minimum emission levels must be met. Gas fired boilers: 1 credit: 27 mg / kWh 2 credits: 24 mg / kWh			M&E to Spec / Contractor to implement		
Pol 03	Flood and surface water management	Prerequisite	Yes	-	Yes		<b>Prerequisite - an appropriate consultant must be appointed</b>					
		Flood resilience	2	-	2		Flood risk assessment (FRA) required. 2 credits if low annual prob of flooding / 1 credit if medium/high annual prob of flooding			Drainage engineer	✓	
		Surface water run-off rate	1	-	1		<b>Surface Water Run-Off - Rate</b> - Peak run off rate shows a 30% improvement - maintenance agreements - allowance for climate change			Drainage engineer	✓	
		Surface water run-off volume	1	-	1		<b>Surface Water Run-Off - Volume</b> Where flooding will not occur in the event of local drainage failure Post-development run-off no greater than pre-development			Drainage engineer		
		Minimum watercourse pollution	1	-	1		<b>Minimum water course Pollution</b> No discharge from the developed site for rainfall up to 5 mm and SUDS / oil interceptors installed			Drainage engineer		
Pol 04	Reduction of night time light pollution	Reduction of night time light pollution	1	-	1		External lighting in accordance with ILP guidance and connected to timer clock			M&E to Spec / Contractor to implement		
Pol 05	Reduction of noise pollution	Reduction of noise pollution	1	-	1		External noise assessment if within 800m of a noise sensitive building			M&E to Spec / Contractor to implement		

BREEAM 2018 New Construction Score Summary												
Targeted Score: 74.9% EXCELLENT Score with potential credits: 83.4% EXCELLENT				Minimum Standards Credits	Exemplary	Targeted	Potential	RIBA Stage 1-2 Criteria	Credit Overview	Notes / Comments	Responsibility	Eight Service
INNOVATION				-	10	1	0					
Inn 01	Man 03 - Responsible construction management	Man 03 - Responsible construction management	-	1	1				All responsible construction management criteria are met and evidenced by the Contractor		Contractor	
Inn 02	Hea 01 - Daylighting	Hea 01 - Daylighting	-	2					Daylighting levels achieved beyond standard BREEAM compliance		Specialist consultant	✓
Inn 03	Hea 01 - Internal and external lighting levels,	Hea 01 - Internal and external lighting levels, zoning and control	-	1					Lighting in each zone can be manually dimmed by occupants down to 20% of the max. light output		M&E to Spec / Contractor to implement	
Inn 04	Hea 02 - Minimising sources of air pollution - Emissions from construction products	Hea 02 - Minimising sources of air pollution - Emissions from construction products	-	1					Emission levels achieved beyond standard BREEAM compliance		Contractor	✓
Inn 05	Hea 06 - Security of site and building	Hea 06 - Security of site and building	-	1					A compliant risk based security rating scheme (SABRE) is used and confirmed by independent assessment and verification		Architect	
Inn 06	Ene 01 - Beyond zero net regulated carbon	Ene 01 - Beyond zero net regulated carbon	-	2					Energy performance beyond standard BREEAM compliance		M&E / Specialist consultant (Contractor to carry out at PC)	✓
Inn 07	Ene 01 - Carbon negative	Ene 01 - Carbon negative	-	1					Energy performance carbon negative		as above	
Inn 08	Ene 01 - Post occupancy stage	Ene 01 - Post occupancy stage	-	2					Contractual agreement to carry out DEC		Client	✓
Inn 09	Wat 01 - Water consumption	Wat 01 - Water consumption	-	1					Water consumption performance beyond standard BREEAM compliance		M&E to Spec / Contractor to implement	
Inn 10	Mat 01 - Core building services options appraisal during Concept Design	Mat 01 - Core building services options appraisal during Concept Design	-	1			✓		LCA including building services appraisal - must be carried out at concept design		Architect / Specialist Consultant	✓
Inn 11	Mat 01 - LCA and LCC alignment	Mat 01 - LCA and LCC alignment	-	1			✓		LCA and LCC carried out with same programme, and findings align		Architect / Specialist Consultant	✓
Inn 12	Mat 01 - Third party verification	Mat 01 - Third party verification	-	1			✓		LCA provider to provide third party verification of the LCA outputs		Architect / Specialist Consultant	✓
Inn 13	Mat 03 - Measuring responsible sourcing	Mat 03 - Measuring responsible sourcing	-	1					Responsible sourcing performance beyond standard BREEAM compliance		Contractor	
Inn 14	Wst 01 - Construction waste management	Wst 01 - Construction waste management	-	1					Waste consumption performance beyond standard BREEAM compliance		Contractor	
Inn 15	Wst 02 - Use of recycled and sustainably sourced	Wst 02 - Use of recycled and sustainably sourced aggregates	-	1					Waste aggregates performance beyond standard BREEAM compliance		Contractor	
Inn 16	Wst 05 - Responding to climate change	Wst 05 - Responding to climate change	-	1					Wst 05 credit achieved, <b>AND</b> credits for the following met: Hea 04; Ene 01 (6 credits); Ene 04 passive design; Wat 01 (3 credits); Mat 05 (environmental degradation); and Pol 03 (1 credit for resilience, 2 credits for surface water run off)		Specialist consultant	
Inn 17	LE 02 - Determine the ecological outcomes for the site (sustainability-related activities)	LE 02 - Determine the ecological outcomes for the site (sustainability-related activities)	-	1					LE 02 credits achieved, <b>AND</b> achieve the following: Hea 07 (both credits); Pol 03 (surface water run off and minimising watercourse pollution credits); and Pol 05.		Ecologist	✓

Targeted score: 74.9 EXCELLENT (Excellent Rating - 70% required)  
 Score with additional credits: 83.4 EXCELLENT (Excellent Rating - 70% required)  
 Please note that we recommend a safety margin between 3-5%