



3681 Twibell Street, Barnsley

Planning BREEAM Preassessment Report

PASS	30
GOOD	45
VERY GOOD	55
EXCELLENT	70
OUTSTANDING	85

Report Prepared By: Wendy Broomhead

Date: 05.06.20

Results Summary

Sector	Total Available	Weighting FULLY FITTED (SIMPLE BUILDINGS)	Predicted score
Management	12	7.5%	5.62%
Health & Wellbeing	16	16.5%	11.34%
Energy	15	11.5%	6.90%
Transport	12	11.5%	2.87%
Water	8	7.5%	4.68%
Materials	14	17.5%	2.50%
Waste	10	7.0%	3.50%
Land Use & Ecology	13	15.0%	1.15%
Pollution	8	6.0%	5.25%
Total Predicted Score			43.81%
Innovation	10	10.0%	2.00%
Total Score			45.81%
BREEAM Rating			GOOD

Key to Responsibilities		
Role	Company	Ref
End User	Allenby Commercial Ltd	AC
Developer	Allenby Commercial Ltd	AC
Architect	Dixson Dawson Architects	DD
M&E Consultant	Vic Coupland Ltd	VC
Drainage Designers	GGP	GGP
Acoustician	INVC	INVC
Ecologist	Betts Ecology	Betts
Landscape Architect	Dixson Dawson Architects	DD
BREEAM Assessor & AP	Scott Hughes Design	SHD
Main Contractor	Allenby Commercial Ltd	Contractor
M&E Sub Contractor	Allenby Commercial Ltd	M&E Sub

Notes:

- 1) Shading Denotes Mandatory Credit for VERY GOOD
- 2) This document is to be read in conjunction with the current BREEAM Manual available online, which gives full details of credit requirements - <https://www.breeam.com/NC2018/>

BREEAM 2018 New Construction, Industrial, Fully fitted (simple building)

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design engineers innovative solutions

Assessment Issue	Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
MANAGEMENT						
Man01	Project Brief and Design					
Req 1-3	Project Delivery Planning	1	0.63	Credit not targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0	
Req 4-7	Stakeholder Consultation (Interested Parties)	1	0.63	Credit not targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0	
Man02	Life Cycle Cost and Service Life Planning					
Req 6	Capital Cost Reporting	1	0.63	It is assumed that the capital cost for the building is reported in £k/m2 to the Assessor for submission to BRE	1	Low QS
Man03	Responsible Construction Practices Minimum standard: Req 7 for Excellent, Req 8-9 for Outstanding					
Req 1	Pre-requisite: Timber			The Main Contractor will be responsible for any demolition works and that the following requirements can be achieved: All timber and timber based products used on the project will be 'legally harvested and traded timber'. It is recommended that this is included in a BREEAM Contractor Specification.		Low Contractor
Req 3-4	Environmental Management	1	0.63	Credit not targeted because Main Contractor does not hold ISO 14001 certification	0	
Req 7	Responsible Construction Management - Credit 1	1	0.63	The Main Contractor will be responsible for any demolition works and that the following requirements can be achieved: The contractor achieves the requirements of the 9no. ticked items within Table 4.1 of the BREEAM 2018 manual. Note achieving a score of 35 using the Considerate Constructors Scheme will achieve 8no. of the 9no. requirements by default (see GN22 for further information). It is recommended that this is included in a BREEAM Contractor Specification.	1	Medium Contractor
Req 8-9	Responsible Construction Management - Credit 2	1	0.63	The Main Contractor will be responsible for any demolition works and that the following requirements can be achieved: In addition to req 7, the contractor achieves an additional 6no. items from the remaining 10no. unticked items in Table 4.1. Note achieving a score of 35 using the Considerate Constructors Scheme will achieve 8no. of the 10no. unticked requirements by default (see GN22 for further information). It is recommended that this is included in a BREEAM Contractor Specification.	1	Medium Contractor
Req 10	Monitoring of Construction- Site Impacts- Pre-requisite			The Main Contractor will be responsible for any demolition works and that the following requirements can be achieved: Responsibility will be assigned to an individual(s) for monitoring, recording and reporting energy use, water consumption and transport data throughout the build programme. It is recommended that this is included in a BREEAM Contractor Specification.		Low Contractor
Req 11 - 18	Monitoring of Construction- Site Impacts (Energy and Water)	1	0.63	The Main Contractor will be responsible for any demolition works and that the following requirements can be achieved: The appointed individual sets targets for, and monitors site energy consumption in kWh and also reports kgCO2, and kgCO2/project value. The appointed individual sets targets for, and monitors potable water consumption (m3) usage on site. It is recommended that this is included in a BREEAM Contractor Specification.	1	Low Contractor

Assessment Issue	Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
Man04	Commissioning and Handover	Minimum Standard: Req 1-5 & 11 for Very Good & Above				
Req 1-5	Commissioning - Testing Schedule and Responsibilities	1	0.63	1	Medium	Ridings/ M&E Sub / Contractor
It is assumed that the following can be achieved: - An appropriate team member will be appointed to monitor and programme pre-commissioning, commissioning and testing.(Ridings) - A schedule of commissioning is prepared, identifying appropriate timescales and standards e.g. CIBSE, BSRIA. (M&E Sub) - The contractor accounts for commissioning, testing, responsibilities and standards within budget and programme of works.(Contractor) It is recommended that this requirement is included in the M&E Spec.				1	Medium	Ridings/ M&E Sub / Contractor
Req 11-12	Handover	1	0.63	1	Low	Contractor
It is assumed that the following can be achieved: Prior to handover, two building user guides are developed - a non technical guide for building occupiers and a technical guide for FM. A draft copy is developed and discussed with users first, where building occupiers are known. Two training schedules are prepared, one as a non-technical training schedule for the building occupiers, and a technical version for FM team. It is recommended that this is included in a BREEAM Contractor Specification.				1	Low	Contractor
Man04	Commissioning and Handover	Minimum Standard: Req 3 for Excellent or Outstanding				
Req 1-2	Aftercare Support	1	0.63	1	Medium	Contractor
Aftercare is provided to building occupiers as follows: - Meeting is held to cover BUG and training schedules, and to present key design information - On site FM training - Weekly attendance on site for the first 4 weeks - Longer term aftercare for 12 months e.g. helpline There will be collection and monitoring of energy and water consumption data for a minimum of 12 months, once the building is occupied and systems adjusted accordingly. It is recommended that this is included in a BREEAM Contractor Specification.				1	Medium	Contractor
Req 3	Commissioning Implementation	1	0.63	1	High	All
Commissioning activities will continue over a 12-month period covering: - Identification of changes made by the owner or operator that might have caused impaired or improved performance. - Testing of all building services under full load conditions - Testing during periods of extreme (high or low) occupancy. - Interviewing of building occupants (where they are affected by the complex services) to identify problems or concerns regarding the effectiveness of the systems. - Production of monthly reports comparing sub-metered energy performance to the predicted one - Identification of inefficiencies and areas in need of improvement. - Re-commissioning of systems (following any work needed to serve revised loads), and incorporation of any revisions in operating procedures into the operations and maintenance (O&M) manuals. It is recommended that this requirement is included in the M&E Spec.				1	High	All
Req 4-7	Post occupancy Evaluation	1	0.63	1	Low	AC
It is assumed that a Post Occupancy Evaluation will be undertaken by an independent third party one year after building occupation, to gain building performance feedback and to disseminate this information via a case study in order to share good practice and lessons learned. The client commits funds to pay for the POE in advance, evidence of appointment needed to award the credit.				1	Low	AC
HEALTH & WELLBEING						
Hea01	Visual Comfort					
Req 1-3	Control of Glare from Sunlight	1	1.03	1	Medium	DD
On the tele-con (29.10.19) it was agreed that the following could be achieved for the office areas, but that this could be an issue given the rooflights in the process area: A glare control assessment is carried out to identify areas at risk from glare and justify areas not at risk AND glare control is provided to appropriate areas. This should not result in increased energy consumption e.g. vertical blinds used so that direct glare can be removed but sunlight is let in. Blinds if used must have a transmittance of <10% and openness factor of 1% or less. It is recommended this requirement is included in the Architects drgs and Spec.				1	Medium	DD

Assessment Issue		Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/for full details	Predicted score	Risk	Responsibility
Req 4	Daylighting	1	1.03	This credit is not targeted because the main open plan reception /office will NOT achieve the required level of natural daylighting - 2% daylighting factor over 80% of area for all occupied spaces plus uniformity ratios, minimum point daylight factors, view of the sky or room depth criterion).	0		
Req 5-7	View Out	1	1.03	This credit is not targeted because the main open plan reception and offices do not achieve the required level of view out as defined below: - All potential workstations would have to be within 8m of an external wall which has a window or permanent opening, AND the window or opening must be $\geq 20\%$ of the surrounding wall area. - Where the room depth is greater than 8m, the percentage of window or opening must instead be the same as, or greater than, the values in Table 1.0 BS8206. - The view out must be a view of a landscape or buildings (rather than just the sky) at seated eye level (1.2– 1.3m) within the relevant building areas and should ideally be through an external window.	0		
Req 8-14	Internal and External Lighting Levels, Zoning and Control	1	1.03	It is assumed that the following can be achieved: - Internal lighting meets SLL Code for Lighting 2012. - Areas with computer screens meet CIBSE Lighting Guide 7 sections 2.4, 2.13 to 2.15, 2.20, and 6.10 to 6.20. - Internal lighting meets zoning and <i>occupant</i> control requirements as per the BREEAM 2018 Manual. - External lighting within the construction zone will comply with BS5489-1:2013 and BS12464-2:2014 Part 2. It is recommended this requirement is included in the M&E Spec.	1	Low	VC / M&E Sub
Hea02 Indoor Air Quality							
Req 1	Pre-Requisite - Indoor Air Quality Plan (IAQ)			It is assumed that, the Contractor will meet the following requirement: An Indoor Air Quality Plan is produced and implemented in accordance with the BRE's Guidance Note GN06. It is recommended that this is included in a BREEAM Contractor Specification.		Medium	Contractor
Req 2	Ventilation	1	1.03	This credit cannot be achieved due to proximity of roads & car parking to openable windows.	0		
Req 3	Emissions from Construction Products (Credit One)	1	1.03	It is assumed that the following requirements will be met however they are highly onerous: Three out of the five product types meet the emission limits, testing requirements and any additional requirements listed in Table 5.11. Where wood-based products are not one of three selected product types, all wood-based products used for internal fixtures and fittings must be tested and classified as formaldehyde E1 class as a minimum. It is recommended that this is included in a BREEAM Contractor Specification.	1	Very High	DD / Contractor
Req 4	Emissions from Construction Products (Credit Two)	1	1.03	This credit is not targeted because it is assumed that the following requirements cannot be met being highly onerous: All of the product types listed meet the emission limits, testing requirements and any additional requirements listed in Table 5.11.	0		
Hea04 Thermal Comfort							
Req 1-4	Thermal Modelling	1	1.03	It is assumed that the following requirements will be met for all occupied areas (i.e. offices and showroom areas): - Full dynamic thermal modelling will be carried out in accordance with CIBSE AM11. - The study will demonstrate that the building design & services strategy can deliver thermal comfort levels in accordance with the criteria set out in CIBSE Guide A Table 1.5, and that for naturally ventilated areas overheating meets the recommendations of TM52 or TM59.	1	Medium	Ridings

Assessment Issue		Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
Req 5-8	Design for Future Thermal Comfort	1	1.03	It is assumed that the following requirements will be met for all occupied areas (i.e. offices and show room areas): Dynamic thermal modelling demonstrates compliance for the above criteria when run for a projected climate change environment (see definitions in the BREEAM 2018 Manual). Where thermal comfort criteria are not met, a report must be produced demonstrating how the building has been or can be easily adapted in future using passive design solutions in order to meet the requirements above.	1	Medium	Ridings
Req 9-11	Thermal Zoning and Controls	1	1.03	It is assumed that the following requirements will be met: The thermal modelling analysis has informed the temperature control strategy for the building and its users, addressing all of the issues below: 1. Zones within the building and how these could be efficiently heated and cooled. 2. The degree of occupant control required for these zones, based on discussions with the end user (or specific design guidance, case studies, feedback). This should consider: - User knowledge of building services - Occupancy type, patterns and room functions - How the user is likely to operate or interact with the system(s), - The user expectations and degree of individual control 3. If there are multiple systems, how they will interact with each other and how this will affect the thermal comfort of occupants. 4. The need for an accessible building user actuated manual override for automatic systems	1	Medium	Ridings/VC/ M&E Sub
Hea05 Acoustic Performance							
	Indoor Ambient Noise level	3	1.03	It is assumed that that INVC could be appointed to confirm that these requirements will be achieved: 1st credit: The sound insulation between rooms and other occupied areas complies with the performance criteria given in Section 7 of BS 8233:2014 2nd credit: Achieve indoor ambient noise levels that comply with the design ranges given in Section 7 of BS 8233:2014 3rd credit: Achieve the requirements relating to sound absorption and reverberation times, where applicable, set out in Section 7 of BS 8233:2014. A programme of pre-completion acoustic testing is carried out by a compliant test body in accordance with the acoustic testing and measurement procedures outlined in the BREEAM 2018 NC Manual Hea 05 'Methodology' section.	3	High	INVC/ Contractor
Hea06 Security							
Req 1-3	Security of Site and Building	1	1.03	It is assumed that: - A Suitably Qualified Security Specialist (SQSS) conducts an evidence-based Security Needs Assessment (SNA) during or prior to Concept Design (RIBA Stage 2 or equivalent). - The SQSS develops a set of security controls and recommendations for incorporation into the proposals. Those controls and recommendations shall directly relate to the threats and assets identified in the preceding SNA. - The controls and recommendations are incorporated into the proposals and implemented into the as-built development. Any deviation from those controls and recommendations shall be justified and agreed with the SQSS.	1	Medium	DD

Assessment Issue	Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/for full details	Predicted score	Risk	Responsibility
Hea07	Safe and Healthy Surroundings					
Req 1-6	Safe Access	1	1.03 Due to the single site access and the constraints of the existing site, all the requirements of this credit listed below cannot be met. There are compliant dedicated combined footpath / cycle lanes (clearly delineated) on site which are lit in accordance with BS 5489-1:2013 with: cyclist access from the site entrance to any cycle storage and pedestrian access from the site entrance to building entrance; Car park to building entrance; Building to outdoor space and connection of off-site paths to on-site paths. Dedicated pedestrian crossing points are provided where needed to allow pedestrians to cross vehicle routes. Appropriate traffic calming measures are in place at crossing points. Pedestrian drop-off areas are designed off, or adjoining to, the access road and should provide direct access to other footpaths. Delivery areas are not accessed through general parking areas and do not cross or share the pedestrian and cyclist paths, or outside amenity areas accessible to building users and general public. There is a dedicated parking or waiting area for goods vehicles with appropriate separation from the manoeuvring area and staff and visitor car parking. Parking and turning areas are designed for simple manoeuvring according to the type of delivery vehicle likely to access the site, thus avoiding the need for repeated shunting.	0		
Req 7	Outside Space	1	1.03 It is assumed that an appropriately sized outside space providing building users with an external amenity area will be provided. The outside space must : - Be an outdoor landscaped area open to the sky. - Have appropriate seating areas and be non-smoking. - Be accessible to all building users. - Away from areas which may cause noise pollution e.g. building services, car parks, busy roads and delivery areas.	1	Medium	DD/ Landscape Architect
ENERGY						
Ene01	Reduction of Energy Use and Carbon Emissions Minimum standard: 4 Credits for Excellent, 6 for Outstanding					
Req 1	Energy Performance	9	0.77 It is assumed that an Energy Performance Ratio for New Construction (EPR NC)) of at least 0.6 (2 credits) should be targeted. BRUKL provided achieves an EPRnc of 0.664 using .inp upload	6	Medium	Ridings
Ene02	Energy Monitoring Minimum Standard: Req 1-4 (first credit) for Very Good and above					
Req 1-4	Sub-metering of Major Energy Consuming Systems	1	0.77 It is assumed that the following can be achieved: - Energy metering systems are installed that enable at least 90% of the estimated annual energy consumption of each fuel to be assigned to the various end-use categories of energy consuming systems (NB. For Simple Buildings the BREEAM assessor can use their discretion to identify which end-use categories (where present) should be sub-metered). - As the total area of each unit is approx 420m2 (i.e. <1000m2) use either i. an energy monitoring and management system or ii. separate accessible energy sub-meters with pulsed or other open protocol communication outputs. - The end energy consuming uses are identifiable to the building users, for example through labelling or data outputs. It is recommended this requirement is included in the M&E Spec.	1	Medium	VC / M&E Sub
Req 5	Sub-metering of High Energy Load and Tenancy Areas	1	0.77 It is assumed that the following can be achieved: A significant majority of the energy supply to the building will be monitored by an accessible energy monitoring and management system for relevant function areas or departments. (Office, ancillary and operational areas for industrial developments) It is recommended this requirement is included in the M&E Spec.	1	Medium	VC / M&E Sub
Ene03	External lighting					
	External lighting	1	0.77 It is assumed that the following can be achieved: - The average initial luminous efficacy of the external light fittings within the construction zone is not less than 70 luminaire lumens per circuit Watt. - All external lights have daylight sensors and PIRs are installed in areas of intermittent pedestrian traffic. It is recommended this requirement is included in the M&E Spec.	1	Medium	M&E / M&E Sub

Assessment Issue		Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
Ene04 Low Carbon Design							
Req 1-4	Passive Design Analysis	1	0.77	Credit cannot be targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0		
Req 5-8	Free Cooling	1	0.77	Credit cannot be targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0		
Req 9-12	Low Zero Carbon Feasibility Study	1	0.77	Credit cannot be targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0		
TRANSPORT							
Tra01 Transport Assessment and Travel Plan							
	Travel Plan	2	0.96	It is assumed that the following cannot be achieved because a site transport assessment and draft travel plan was not produced before planning application. It is assumed that a travel plan will be completed before the design is completed as a pre-requisite to Tra 02 - During the design stages a travel plan is created based and a site specific travel assessment. Note that all the points under criterion 2 need to be covered as minimum, including Accessibility Index and Local Amenities - see BREEAM 2018 NC Manual for more details. - The travel plan includes proposals to increase or improve sustainable modes of transport and movement of people and goods during the building operation and use covering all items in table 7.4 of the BREEAM 2018 Manual. -The occupier must be involved in the development of the travel plan - The travel plan is completed prior to construction and is implemented post construction, supported by the building's management in operations.	0	Medium	DD
Tra02 Sustainable Transport Measures							
1	Pre-requisite			Produce compliant travel plan before the end of the design stages.		Medium	DD
	Sustainable Transport Measures	10	0.96	The existing Accessibility Index for the site is likely to be <8 (0 credits) and that it is unlikely that there are three existing core amenities within 500m (0 credit). It is assumed that the following sustainable transport measures will be implemented: - BREEAM compliant covered cycle storage - 1 per 10 staff will be installed (min 4)(1 Point) - Provision of electric recharging stations (min 3kw) for at least 10% of the total car parking capacity (1 point) (3 charging points required for the 25 spaces provided) - Provision of 2 BREEAM compliant cyclist facilities from showers, changing facilities, lockers and drying - space (1 point) (possible by addition of lockers and a drying cabinet) --Access to 3 No core amenities within 500m. (Asda 450m)	3	Medium	DD/VC/AC
WATER							
Wat01 Water Consumption Minimum standard: 1 credit for Good and above; 2 credits for Outstanding							
	Water Consumption	5	0.94	It is assumed that the following will be achieved: A 25% improvement in water consumption over the notional baseline. An example of how this could be achieved by: - 4l flush WCs - wash handbasins limited to 5 l/min - kitchenette taps limited to 6 l/min - urinals (3 no) limited to 3 ltrs/bowl/hr - no dishwasher - no showers / baths / waste disposal unit // domestic sized washing machines - no grey water / rainwater system It is recommended that this requirement is included in the Architectural Spec.	2	Medium	DD/ M&E Sub

Assessment Issue	Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
Wat02	Water Monitoring	Minimum standard: Criterion One Only for Good and Above				
Req 1	Water Sub Meters		It is assumed that the following will be achieved: The main supply to the building will be fitted with a pulsed water meter. It is recommended that this requirement is included in the M&E Spec.		Medium	Contractor / M&E Sub
Req 2-6	Water Sub Meters	1	0.94	1	Medium	M&E Sub
Wat03						
Water Leak Detection and Prevention						
Req 1-2	Leak Detection System	1	0.94	1	Medium	M&E Sub
Req 3	Flow Control Devices	1	0.94	1	Medium	M&E Sub
MATERIALS						
Mat01	Environmental impacts from construction products -Building life cycle assessment (LCA)					
	Superstructure	6	1.25	0		
Req 6-7	Substructure and Hard Landscaping Options Appraisal	1	1.25	0		
Mat02	Environmental impacts from construction products -Environmental Product Declarations (EPD)					
	Specification of products with a recognised environmental product declaration (EPD)	1	1.25	0		
Mat03	Responsible Sourcing	Minimum standard: Req 1 for all BREEAM assessments				
Req 1	Pre Requisite		It is assumed that all timber and timber based products used within the project will be legally harvested and traded timber. It is recommended that this requirement is included in a BREEAM Contractor Specification document.		Low	Contractor
Req 2	Enabling Sustainable Procurement	1	1.25	0		
Req 3	Measuring Responsible Sourcing	3	1.25	1	High	Contractor

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Mat05	Designing for Durability and Resilience					
Designing for Durability and Resilience	1	1.25	It is assumed that that the following can be achieved: - The buildings will incorporate suitable durability / protection measures / designed features / solutions to prevent damage to vulnerable parts of the internal and external building and landscaping, including: - Protection from the effects of high pedestrian traffic in main entrances, public areas and thoroughfares (corridors, lifts, stairs, doors etc.). - Protection against any internal vehicular/trolley movement within 1m of the internal building fabric in storage, delivery, corridor and kitchen areas. - Protection against, or prevention from, any potential vehicular collision where vehicular parking and manoeuvring occurs within 1m of the external facade (e.g. kerbs or bollards) - Protection from malicious damage to building materials and finishes, in public and common areas where appropriate. - Key exposed building elements have been designed and specified to limit long and short term degradation due to environmental factors. This can be demonstrated through one of the following: - The element or product achieving an appropriate quality or durability standard or design guide, see Table 9.14 in BREEAM 2018 NC Manual for more details. - OR - A detailed assessment of the element's resilience when exposed to the applicable material degradation and environmental factors. - Include convenient access to the roof and façade for cost-effective cleaning, replacement and repair in the building's design. A façade access strategy designed in line with CIRIA guide C686 would be considered compliant. If access to the majority of the façade requires contracting on a one-off basis to an external firm with specialist equipment, or specialist access professionals it would not generally be considered to be convenient. - Design the roof and façade to prevent water damage, ingress and detrimental ponding.	1	High	DD
Mat06	Material Efficiency					
Material Efficiency	1	1.25	Credit not targeted because it requires action prior to Concept Design Stage	0		
WASTE						
Wst01	Construction Site Waste Management			Minimum standard: One Credit for Outstanding		
Req 1-3	Pre-demolition audit	1	0.70	Credit not targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0	
Req 13	Construction Resource Efficiency	1	0.70	It is assumed that a Resource Management Plan (RMP) with the aim of minimising and monitoring waste will be produced. It is recommended that this is included in a BREEAM Contractor Specification.	1	Low Contractor
Req 13	RMP measurements and reporting	2	0.70	It is assumed that there will be waste management procedures recorded in the RMP which will be implemented. The RMP will measure and report: - Construction waste generated by the project in m³ or tonnes per 100m² gross internal floor area, excluding demolition and excavation waste - The proportion of construction waste diverted from landfill, i.e. reused, recycled or recovered. It is recommended that this is included in a BREEAM Contractor Specification.	2	Low Contractor
Req 5-6	Diversion of resources from Landfill	1	0.70	It is assumed that the following percentages of non-hazardous construction (on-site and off-site manufacture / fabrication in a dedicated facility) waste generated by the project will be diverted from landfill: Non-demolition: 70% by volume or 80% by tonnage Demolition: 80% by volume or 90% by tonnage Sort waste materials into separate key waste groups either on-site or through a licensed contractor for recovery. It is recommended that this is included in a BREEAM Contractor Specification.	1	Low Contractor

Assessment Issue		Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
Wst02	Use of Recycled and Sustainably Sourced Aggregates						
Req 1	Pre-requisite	X	X	Credit not targeted because it requires action at Concept Design Stage (i.e. prior to planning)	X		
Req 2-6	Project Sustainable Aggregate Points	1	0.70	Credit not targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0		
Wst03	Operational Waste Minimum standard: 1 credit for Excellent and Outstanding						
Req 1	Dedicated space for recyclables	1	0.70	It is assumed that a dedicated recycling area, adequately sized to serve the development and accessible to building occupiers and waste contractors will be provided. (2m2 per 1000m2 GIFA rounded up)	1	Medium	DD
Req 2	Compactor / Baler / Composting			In addition to the recycled bin store, a static compactor / baler will be provided if required with good vehicular access not in the vehicle manoeuvring are. Compostable waste storage facilities will not be required as there is no formal food preparation on site.		Medium	DD/VC/AC
Wst05	Adaptation to Climate Change						
	Resilience of structure, fabric, building services and renewables installation	1	0.70	Credit not targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0		
Wst06	Design for Disassembly and Adaptability						
Req 1-5	Design for disassembly and adaptability	2	0.70	Credits not targeted because they require action at Concept Design Stage (i.e. prior to planning)	0		
LAND USE & ECOLOGY							
LE01	Site Selection						
Req 1	Previously Developed land	1	1.15	This credit cannot be achieved given that the majority of the development is scrubland i.e. <75% of the development's footprint (including building, hard landscaping, and temporary works) is on previously land previously covered by buildings or hard landscaping.	0		
Req 2-3	Contaminated land	1	1.15	SI confirmed that the site was not contaminated and it is currently assumed that a gas membrane will not be required to enable development therefore this credit cannot be targeted.	0		
LE02	Identifying and understanding the risks and opportunities for the project						
Req 1	Pre-requisite	X	X	It is assumed that the comprehensive route 2 (requiring use of a suitably qualified ecologist) must be followed because of the make up of the site. therefore, the client or contractor will need to confirm that compliance is monitored against all relevant UK and EU or international legislation relating to the ecology of the site.	X	Medium	AC/ Betts
Req 3-5	Ecological Survey & Evaluation	1	1.15	It is assumed that a Suitably Qualified Ecologist (SQE) was appointed at a project stage that ensured early involvement in site configuration and could influence planning decisions and that prior to submission of the planning application, a survey and evaluation was carried out to determine the ecological baseline of the site, taking account of the zone of influence to establish: a. Current and potential ecological value and condition of the site, and related areas within the zone of influence. b. Direct and indirect risks to current ecological value. c. Capacity and feasibility for enhancement of the ecological value of the site. Data are collated and shared with the project team to inform the site preparation, design or construction works. See Betts report Dec 2019	1	Medium	Betts/ Landscape Architect/ DD/ Contractor

Assessment Issue		Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
Req 6-7	Determining Ecological Outcome	1	1.15	Because this is a pre planning action it was confirmed at the pre assessment meeting that that the following cannot be fully evidenced : Prior to submission of the planning application, the project team liaised and collaborated with representative stakeholders to identify & consider ecological outcome for the sites (appropriate to the scale & type of development), taking into account the following hierarchy: 1. Avoidance. 2. Protection. 3. Reduction or limitation of negative impacts. 4. On site compensation. 5. Enhancement, considering capacity & feasibility within the site, or where viable, off-site The optimal ecological outcome for the site are selected after liaising with representative stakeholders and the project team.	0		
LE03 Managing negative impacts on ecology							
Req 1	Pre-requisite			The pre-requisite of achieving both credits under LE02 cannot be met because the pre-planning actions required for LE02 req 6-7 cannot be evidenced.			
Req 2-4	Planning, Liaison, Implementation & Data	1	1.15	This credit cannot be targeted because both LE02 credits cannot be achieved because the pre planning actions cannot be evidenced.	0		
Req 8 (Route 2)	Managing negative impacts of the project	2	1.15	This credit cannot be targeted because both LE02 credits cannot be achieved because the pre planning actions cannot be evidenced.	0		
LE04 Change and Enhancement of Ecological Value							
Req 1-2	Pre-requisite			It is assumed that LE 03 Criterion 8 is achieved (i.e. negative impacts from site preparation and construction works have been managed according to the mitigation hierarchy, in line with the SQE's recommendations, and the loss of ecological value has been minimised) AND The client or contractor confirms compliance is monitored against all relevant UK, EU or international legislation relating to the ecology of the site.		Medium	Betts /DD/ Contractor
Req 4-5 (Route 2)	Liaison, implementation and data collation	1	1.15	Because this is a pre planning action the following cannot be evidenced: Measures have been implemented that enhance ecological value, which are based on input from the project team and SQE in collaboration with representative stakeholders and data collated as part of the 'Determining ecological outcomes' in LE 02. Measures are implemented in the following order: - a On site, and where this is not feasible, - b Off site within the Zone of Influence. Data collated are analysed and where potentially valuable, provided to the local environmental records centres nearest to, or relevant for, the site.	0		
Req 6 (Route 2)	Enhancement of ecology	3	1.15	Because of the overgrown nature of the existing site, it is likely that calculated change of biodiversity as a result of the development will result in a score of <75% using the BRE's Ecological Calculator.	0		
LE05 Long Term Ecology Management and Maintenance							
Req 1-2	Pre-requisite			It is assumed that the following although: - the client or contractor will confirm that compliance will be being monitored against all relevant UK, EU and international standards relating to the ecology of the site - and Criterion 8 in LE 03 has can be achieve. No credits under Req 6 of LE04 are likely to be possible, therefore the pre-requisite cannot be achieved forward of any credits under LE05.			
Req 3-4	Management and maintenance throughout the project	1	1.15	This credit cannot be targeted because the pre-require for LE 05 and the Pre planning actions of LE 02 cannot be achieved.	0		
Req 5-6	Landscape and ecology management plan	1	1.15	This credit cannot be targeted because the pre-require for LE 05 is unlikely to be achieved.	0		

Assessment Issue		Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
POLLUTION							
Pol02	Local Air Quality						
	Local Air Quality	2	0.75	It is assumed that all heating and hot water is likely to be powered by electricity OR gas boilers will be used which have <24(mg/kWh) NOX emissions.	2	Medium	VC / M&E Sub
Pol03	Flood and Surface Water Management						
Req 1	Pre-requisite			It is assumed that the an Appropriate Consultant is appointed to carry out, demonstrate and/or confirm the development's compliance with all the criteria.		Low	Allenby
Req 2	Low Flood Risk	2	0.75	Flood Risk Assessment confirms that the site is in a low flood risk zone for all the following risks: Tidal; Surface Water; Groundwater; Sewers; Reservoirs, canals or other artificial sources.	2	Medium	Allenby
Req 5	Pre-requisite			It is assumed that the surface water run-off design solutions will be bespoke, i.e. they will take account of the specific site requirements & natural or man-made environment of and surrounding the site.		Low	GGP / Allenby
Req 6-16	Surface Water Run-Off	2	0.75	It is assumed that: - Flooding of property will not occur in the event of local drainage system failure (caused either by extreme rainfall or a lack of maintenance); - Justification from the Consultant indicating why infiltration cannot be technically achieved. - Drainage measures are specified to ensure that the peak rate of run-off from the site to the watercourses (natural or municipal) shows, where brownfield, a 30% improvement for developed site compared with the pre-developed site. Where greenfield, the pre-developed site run-off should be no greater than pre-developed site. This should comply at the 1-year and 100-year return period events. - Drainage design measures ensure that the post development peak rate of run-off is reduced to the limiting discharge. This is defined as the highest flow rate from the: pre-development 1-year peak flow rate; mean annual flow rate Qbar or 2L/s/ha. - Relevant maintenance agreements for the ownership, long term operation and maintenance of all specified SuDS/ attenuation are in place. - Calculations include an allowance for climate change; this should be made in accordance with current best practice planning guidance.	2	Medium	GGP / Allenby
Req 17-24	Minimising water course pollution	1	0.75	It is assumed that the credit requirements cannot all be achieved because infiltration is not possible on site therefore there will be discharge from site for up to 5mm of rainfall .	0		
Pol04	Reduction of Night Time Light Pollution						
	Reduction of Night Time Light Pollution	1	0.75	It is assumed that the following will be achieved: - The external lighting strategy has been designed in compliance with Table 2 of the ILP Guidance notes for the reduction of obtrusive light, 2011. - All external lighting (except for safety and security lighting) can be automatically switched off between 23:00 and 07:00. - Any safety or security lighting which is used between 23:00 & 07:00, complies with the lower levels of lighting recommended in Table 2 of the ILP's Guidance notes. - Illuminated advertisements must be designed in compliance with ILP PLG05.	1	Low	VC / M&E Sub
INNOVATION CREDITS							
Man 01 Req 8	Pre-Requisite - BREEAM AP			Requirement not targeted because it needs action at Concept Design Stage (i.e. prior to planning)			
Man 01 Req 9	BREEAM AP (Concept Design)	1	1.00	Credit not targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0		
Man 01 Req 11-12	BREEAM AP (Developed Design)	1	1.00	Credit not targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0		

Assessment Issue		Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
INNOVATION CREDITS							
Man 01 Req 19-22	Monitoring of Construction- Site Impacts (Transport)	1	1.00	The Main Contractor will be responsible for any demolition works and that the following requirements can be achieved: The appointed individual sets targets for, and monitors data on transport of construction materials and waste. KgCO2eq, km and litres should be reported separately for materials and waste. It is recommended this is included in the BREEAM Contractor Specification.	1	High	Contractor
Man 03 Req 23	Responsible Construction Management	1	1.00	This credit was not targeted because this requirement is too onerous to achieve: All requirements in Table 4.1 of the BREEAM NC 2018 Manual are achieved. Note this includes evidencing relating to 'fleet operators', defined by the BRE as follows: <i>'A fleet operator is responsible for groups of motor vehicles owned or leased by a business, government agency or other organisation rather than by an individual or family. Transportation to the project is likely to be by several fleet operators many of which will not be under the control of the constructor. The criteria relate to all fleet operators nonetheless'.</i>	0		
Hea 01 Req 14	Daylighting	1	1.00	It is assumed that the following will NOT be achieved: Relevant building areas must meet good practice daylighting criteria as per Table 5.8 or Table 5.9 within the BREEAM 2018 Manual.	0		
Hea 01 Req 15	Internal and external lighting levels, zoning and control	1	1.00	It is assumed that the following will NOT be achieved: Lighting in each zone can be manually dimmed by occupants down to 20% of the maximum light output using dimmer switches positioned in accessible locations. Dimming and control gear should avoid flicker and noise.	0		
Hea 06 Req 4	Security of Site and Building	1	1.00	It is assumed that the following will NOT be achieved due to the pre planning actions required and the costs of implementation: A compliant risk based security assessment scheme has been used, and the performance against the scheme has been confirmed by independent assessment and verification. Note that SABRE is currently the only BRE recognised scheme.	0		
Ene 01 Req2-5	Prediction of Operational energy consumption	2	1.00	It is assumed that the following will NOT be achieved: - relevant members of the design team will hold a preliminary design workshop focusing on operational design performance -The team undertakes additional energy modelling during the design and post-construction stage to generate predicted operational energy consumption figures.(CIBSE TM54 Study) -Predicted energy consumption targets by end use, design assumptions & input data will be reported. -Undertake a risk assessment to highlight any significant design, technical & process risks that should be monitored & managed throughout the construction & commissioning process.	0		
Ene 01 Req 6-7	Beyond Zero Net Regulated Carbon	2	1.00	It is assumed that the building will not achieve an EPR of at least 0.9 with zero net regulated carbon emissions and that energy generation from on-site & near-site LZC sources will not offset carbon emissions from regulated energy use plus unregulated energy use by >10% for 1 credit or >50% for 2 credits.	0		
Ene 01 Req 9	Carbon Negative Req 9	1	1.00	It is assumed that <100% carbon emissions from unregulated (and regulated) energy use are offset by energy generated from off-site and near-site LZC sources.	0		
Ene 01 Req 10-12	Post Occupancy Stage	2	1.00	It is assumed that the following will NOT be achieved: - Achieve maximum available credits in Ene 02. - Funds are committed to pay for the post occupancy stage. An assessor is appointed to report on the actual energy consumption compared with targets set. - Energy model is submitted to the BRE & retained by the building owner.	0		
Wat 01 Req 7-8	Water Consumption	1	1.00	It is assumed that the building will NOT achieve a reduction in water consumption by 65% over the notional baseline.	0		
Mat01	Environmental impacts from construction products - Building LCA	2	1.00	Credit for independent validation has not been targeted because it requires action at Concept Design Stage (i.e. prior to planning)	0		

Assessment Issue		Credits Available	Weighted worth of 1 credit	Credit Information Please refer to https://www.breeam.com/NC2018/ for full details)	Predicted score	Risk	Responsibility
INNOVATION CREDITS							
Mat 03 Req 3	Measuring Responsible Sourcing	1	1.00	It is assumed that manufacturers with appropriate responsible sourcing certification will NOT be used for the following: Superstructure, internal finishes, substructure, hard landscaping and core building services (50% of available points must be achieved).	0		
Wst 01 Req 3-4	Construction Waste Management	1	1.00	It is assumed that the following will NOT all be met: - Achieve <1.9 tonnes per 100m2 GIFA construction resource efficiency - Record the source of the waste arisings of the non-hazardous construction waste measured or monitored by associating the waste with project work packages - Meet or improve on the BREEAM exemplary level benchmark for the diversion from landfill of generated non-hazardous construction and demolition waste, i.e. Non-demolition: 85% by volume (90% by tonnage) Demolition: 85% by volume (95% by tonnage) Excavation: 95% by volume (95% by tonnage)	0		
Wst 02 Req 7	Project Sustainable Aggregate Points	1	1.00	Credit not targeted because it requires action at Concept Design Stage (i.e. prior to planning) and the exemplary requirements are unlikely to be met.	0		
Wst 05 Req 4-5	Responding to Climate Change	1	1.00	Credit not targeted because it requires actions at Concept Design Stage (i.e. prior to planning) and requires targets in other credits that are higher than can be reasonably expected for a building of this nature on this site	0		
LE 02 Req 11-13	Determine the Ecological Outcomes for the Site	1	1.00	Credit not targeted because it requires actions at Concept Design Stage (i.e. prior to planning) and requires targets in other credits that are higher than can be reasonably expected for a building of this nature on this site	0		
LE 04 Req 7	Change and enhancement of ecological value	1	1.00	It is assumed that the following will NOT be achieved: The change in ecological value occurring is calculated in accordance with the process set out in GN36 - BREEAM, CEEQUAL and HQM Ecology Calculation Methodology – Route 2. The credit is awarded as follows: - Significant net gain of ecological value (percentage score of 110 or above)	0		
Pol 03 Req 5-16	Surface Water Run-Off	1	1.00	This credit will be achieved by default as req 5-16 are assumed to have been achieved	1	Medium	Allenby/ GGP
Unlisted, BRE Approved Innovations		10	1.00	It is assumed that NO approved innovation credits will be achieved.	0		