GREENBUILD CONSULT

A Complete Sustainable Consultancy

BREEAM Design Stage Report for:

Picturehouse Cinema, Crouch End, London.

Date: 2nd November 2015

Version 1.0

GreenBuild Consult Ltd.
29 Bocam Park
Old Field Road
Pencoed
Bridgend
CF35 5LJ
Email: enquiries@greenbuildconsult.co.uk

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Document Checking:

Prepared By:	Gareth Davies	Signed:	
Checked By:	Daryl Fisher	Signed:	
Verified By:	Gareth Davies	Signed:	

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1.0 Introduction

This report is intended as a summary of the formal assessment of Picturehouse Crouch End under New Construction version at Interim (Design Stage).

The project has been submitted to BRE for Quality Assurance and Certification at a score of 58.2%, a Very Good rating.

The licenced assessor for this project is Gareth Davies of GreenBuild Consult Ltd and the BRE registration number for the project is BREEAM-0060-0171.

	Available	Weighting	Awarded
Management	21	12	16
Health & Wellbeing	17	15	5
Energy	25	15	18
Transport	11	9	10
Water	8	7	4
Materials	14	13.5	11
Waste	8	8.5	4
Land Use & Ecology	10	10	5
Pollution	13	10	3
Innovation	19		0
Awarded:	**58.2 %**		

2.0 The BREEAM Standard

BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's leading and most widely used environmental assessment method for buildings. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance.

2.1 Aims of BREEAM

- To mitigate the life cycle impacts of buildings on the environment
- To enable buildings to be recognised according to their environmental benefits
- To provide a credible, environmental label for buildings
- To stimulate demand for sustainable buildings

2.2 Objectives of BREEAM

- To provide market recognition of buildings with a low environmental impact
- To ensure best environmental practice is incorporated in building planning, design, construction and operation.
- To define a robust, cost-effective performance standard surpassing that required by regulations.
- To challenge the market to provide innovative, cost effective solutions that minimise the environmental impact of buildings.
- To raise the awareness amongst owners, occupants, designers and operators of the benefits of buildings with a reduced life cycle impact on the environment.
- To allow organisations to demonstrate progress towards corporate environmental objectives.

BREEAM has been developed to meet the following underlying principles:

- Ensure environmental quality through an accessible, holistic and balanced measure of environmental impacts.
- Use quantified measures for determining environmental quality.
- Adopt a flexible approach, avoiding prescriptive specification and design solutions.
- Use best available science and best practice as the basis for quantifying and calibrating a cost effective performance standard for defining environmental quality.
- Reflect the social and economic benefits of meeting the environmental objectives covered.
- Provide a common framework of assessment that is tailored to meet the 'local' context including regulation, climate and sector.
- Integrate construction professionals in the development and operational processes to ensure wide understanding and accessibility.
- Adopts third party certification to ensure independence, credibility and consistency of the label.
- Adopts existing industry tools, practices and other standards wherever possible to support developments in policy and technology, build on existing skills and understanding and minimise costs.
- Stakeholder consultation to inform ongoing development in accordance with the underlying principles and the pace of change in performance standards (accounting for policy, regulation and market capability).

2.3 BREEAM issues and credits

Tradable credits

Each environmental issue has a set number of 'credits' available and these credits are awarded where the building demonstrates that it complies with the requirements of that issue.

Minimum standards

A number of issues within a category have set minimum standards, i.e. a minimum number of credits that must be achieved in order for a particular BREEAM rating level to be met.

Innovation credits

Innovation credits provide additional recognition for a building that innovates in the field of sustainable performance, above and beyond the level that is currently recognised and rewarded by standard BREEAM issues. Innovation credits are awarded for either complying with pre-defined BREEAM issue exemplary level requirements, through the appointment of a BREEAM Accredited Professional or or via application to BRE Global to have a particular building feature, system or process approved as 'innovative'.

Environmental weightings, final score and BREEAM Rating

Once each BREEAM issues has been assessed the category percentage scores are determined (based on the number of credits achieved over those available within a category), and an environmental weighting applied (as shown below).

The weighted category scores are then totalled to give an overall score, and any additional score for innovation is added to give the final BREEAM score which is used to determine the BREEAM rating.

Environmental section	**Issue weighting**
Management	12%
Health & Wellbeing	15%
Energy	15%
Transport	9%
Water	7%
Materials	13.5%
Waste	8.5%
Land Use & Ecology	10%
Pollution	10%
Innovation	10%

3.0 Management

Management
Man 01 - Project brief and design

Number of credits available:	**4**
Number of credits achieved:	**3**
Minimum standards met?	**N/a**

Aim

To recognise and encourage an integrated design process that optimises building performance.

Credits

3 of 4 credits awarded.

	Credits awarded
Stakeholder consultation (project delivery)	1
Stakeholder consultation (third party)	0
Sustainability Champion (design)	1
Sustainability Champion (monitoring progress)	1

Assessor Comments / Notes

Prior to completion of RIBA Stage 2 all relevant parties and relevant bodies are identified and consulted with by the design team. The findings of the consultation influence the design and therefore must have been held before key and final design decisions were made. In addition a suitably qualified Sustainability Champion was appointed to monitor the design and construction phase.

Schedule of Evidence

No References Available

Management
Man 02 - Life cycle cost and service life planning

Number of credits available:	**4**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To deliver whole life value from investment and promote economic sustainability by recognising and encouraging the use of life cycle costing and service life planning to improve design, specification and through-life maintenance and operation.

Credits

1 of 4 credits awarded.

	Credits awarded
Elemental life cycle cost (LCC)	0
Component level LCC plan	0
Capital cost reporting	1

Assessor Comments / Notes

The capital cost for the development has been recorded as £13850 per m².

Schedule of Evidence

No References Available

Management
Man 03 - Responsible construction practices

Number of credits available:	**6**
Number of credits achieved:	**6**
Minimum standards met?	**Y**

Aim

To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner.

Credits

6 of 6 credits awarded.

	Credits awarded
Pre-Requisite	1
Environmental management	0
Sustainability Champion (construction)	1
Considerate construction	2
Monitoring of construction site impacts - Utility consumption	1
Monitoring of construction site impacts - Transport of construction materials & waste	1

Assessor Comments / Notes

Where all site timber used on the project is sourced in accordance with the UK Government's Timber Procurement Policy. Two credits are awarded where the Contractor registers the site under the Considerate Constructors Scheme and achieves a formal CCS score of 35 points or more. The chosen contractor will monitor and set targets for Electricity, Water and Transport to and from site.

Schedule of Evidence

No References Available

Management
Man 04 - Commissioning and handover

Number of credits available:	**4**
Number of credits achieved:	**5**
Minimum standards met?	**Y**

Aim

To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.

Credits

5 of 4 credits awarded.

	Credits awarded
Pre-Requisite (Excellent & Outstanding only)	1
Commissioning and testing schedule and responsibilities	1
Commissioning building services	1
Testing and inspecting building fabric	1
Handover	1

Assessor Comments / Notes

All commissioning activities will be carried out in accordance with current Building Regulations, BSRIA and CIBSE guidelines and/or other appropriate standards, where applicable. Where a building management system (BMS) is specified, refer to compliance note CN5 on BMS commissioning procedures

Building User Guides are provided and are appropriate to all users of the building (general users including staff and if applicable residents, as well as the non technical facilities management team/building manager).

Schedule of Evidence

No References Available

Management
Man 05 - Aftercare

Number of credits available:	**3**
Number of credits achieved:	**3**
Minimum standards met?	**Y**

Aim

To provide post-handover aftercare to the building owner/occupants during the first year of occupation to ensure the building operates and adapts, where relevant, in accordance with the design intend and operational demands.

Credits

3 of 3 credits awarded.

	Credits awarded
Aftercare support	1
Seasonal commissioning	1
Post occupancy evaluation	1

Assessor Comments / Notes

There is (or will be) operational infrastructure and resources in place to provide aftercare support to the building occupier(s). Seasonal commissioning responsibilities will be completed over a minimum 12 month period, once the building becomes occupied.

The client makes a commitment to carry out a Post Occupancy Evaluation (POE), carried out by an independent third party, one year after building occupation, to gain building performance feedback.

Schedule of Evidence

No References Available

4.0 Health & Wellbeing

Health & Wellbeing
Hea 01 - Visual Comfort

Number of credits available:	**4**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To ensure daylighting, artificial lighting and occupant controls are considered at the design stage to ensure best practice visual performance and comfort for building occupants.

Credits

2 of 4 credits awarded.

	Credits awarded

Glare control	1
Daylighting	0
View out	0
Internal and external lighting levels, zoning and control	1

Assessor Comments / Notes

The potential for disabling glare has been designed out of all relevant building areas either through building layout and/or building design. All positions within office areas are within 7m of a wall which has a window or permanent opening that provides an adequate view out.

Illuminance (lux) levels in all internal relevant building areas of the building are specified in accordance with the CIBSE Code for Lighting 2009.

For areas where computer screens are regularly used, the lighting design complies with CIBSE Lighting Guide 7 sections 3.3, 4.6, 4.7, 4.8 and 4.9.

In office areas, zones of no more than four workplaces and workstations adjacent to windows/ atria and other building areas separately zoned and controlled.

Illuminance levels for lighting in all external areas within the construction zone are specified in accordance with BS5489-1:2003+A2:2008 Lighting of roads and public amenity areas.

Schedule of Evidence

No References Available

Health & Wellbeing
Hea 02 - Indoor Air Quality

Number of credits available:	**5**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes

Credits

0 credits awarded.

	Credits awarded
Indoor air quality (IAQ) plan	0
Ventilation	0
Volatile organic compound (VOC) emission levels (products)	0
Volatile organic compound (VOC) emission levels (post construction)	0

Potential for natural ventilation	0

Assessor Comments / Notes

Credit not sought.

Schedule of Evidence

No References Available

Health & Wellbeing
Hea 04 - Thermal comfort

Number of credits available:	**3**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To ensure that appropriate thermal comfort levels are achieved through design and controls are selected to maintain a thermally comfortable environment for occupants within the building.

Credits

0 credits awarded.

	Credits awarded
Thermal modelling	0
Adaptability - for a projected climate change scenario	0
Thermal zoning and controls	0

Assessor Comments / Notes

Credits not sought.

Schedule of Evidence

No References Available

Health & Wellbeing
Hea 05 - Acoustic Performance

Number of credits available:	**3**
Number of credits achieved:	**3**
Minimum standards met?	**N/a**

Aim

To ensure the building's acoustic performance including sound insulation meet the appropriate standards for its purpose.

Credits

3 of 3 credits awarded.

	Credits awarded
Acoustic performance	3

Assessor Comments / Notes

A suitably qualified acoustician has been appointed to define a bespoke set of performance requirements for all function areas in the building using the three acoustic principles defined in criterion 1, setting out the performance requirements for each and the testing regime required.

Schedule of Evidence

No References Available

Health & Wellbeing
Hea 06 - Safety and Security

Number of credits available:	**2**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage effective design measures that promote low risk, safe and secure access to and use of the building.

Credits

0 credits awarded.

	Credits awarded
Safe access	0
Security of site and building	0

Assessor Comments / Notes

Credits not sought.

Schedule of Evidence

No References Available

5.0 Energy

Energy
Ene 01 - Reduction of energy use and carbon emissions

Number of credits available:	**12**
Number of credits achieved:	**10**
Minimum standards met?	**Y**

Aim

To recognise and encourage buildings designed to minimise operational energy demand, primary energy consumption and CO2 emissions.

Credits

10 of 12 credits awarded.

	Credits awarded
Energy performance	10

Assessor Comments / Notes

The calculated Energy Performance Ratio for both buildings has been calculated and 10 credits can be awarded

Schedule of Evidence

No References Available

Energy
Ene 02 - Energy Monitoring

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**Y**

Aim

To recognise and encourage the installation of energy sub-metering that facilitates the monitoring of operational energy consumption.

Credits

2 of 2 credits awarded.

	Credits awarded
Sub-metering of major energy consuming systems	1
Sub-metering of high energy load and tenancy areas	1

Assessor Comments / Notes

Major energy consuming systems are monitored using separate accessible energy sub-meters with a pulsed output to enable future connection to a BEMS.

Schedule of Evidence

No References Available

Energy
Ene 03 - External Lighting

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the specification of energy efficient light fittings for external areas of the development.

Credits

1 of 1 credits awarded.

	Credits awarded
External lighting	1

Assessor Comments / Notes

All external light fittings for the building, access ways and pathways have a luminous efficacy of at least 50 lamp lumens/circuit Watt when the lamp has a colour rendering index (Ra) greater than or equal to 60 OR 60 lamp Lumens / circuit Watt when the lamp has a colour rendering index (Ra) less than 60.
All external light fittings to car parking areas, associated roads and floodlighting has a luminous efficacy of at least 70 lamp lumens/circuit Watt when the lamp has a colour rendering index (Ra) greater than or equal to 60 OR 80 lamp Lumens / circuit Watts when the lamp has a colour rendering index (Ra) less than 60. All external light fittings for signs and up-lighting have a luminous efficacy of at least 60 lamp lumens/circuit Watt when the lamp wattage is greater than or equal to 25W OR 50 lamp lumens/circuit Watt when the lamp wattage is less than 25W.

External light fittings are controlled through a time switch, or daylight sensor, to prevent operation during daylight hours. Daylight sensor override on a manually switched lighting circuit is acceptable.

Schedule of Evidence

No References Available

Energy
Ene 04 - Low carbon design

Number of credits available:	**3**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To encourage the adoption of design measures, which reduce building energy consumption and associated carbon emissions and minimise reliance on active building services systems.

Credits

0 credits awarded.

	Credits awarded
Passive design - Passive design analysis	0
Passive design - Free cooling	0
Low and zero carbon technologies - LZC feasibility study	0

Assessor Comments / Notes

Credit not sought.

Schedule of Evidence

No References Available

Energy
Ene 05 - Energy Efficient Cold Storage

Number of credits available:	**2**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the installation of energy efficient refrigeration systems, therefore reducing operational greenhouse gas emissions resulting from the system's energy use.

Credits

0 credits awarded.

	Credits awarded
Refrigeration energy consumption	0
Indirect greenhouse gas emissions	0

Assessor Comments / Notes

Credit not sought.

Schedule of Evidence

No References Available

Energy
Ene 06 - Energy Efficient Transportation Systems

Number of credits available:	**3**
Number of credits achieved:	**3**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the specification of energy-efficient transportation systems.

Credits

3 of 3 credits awarded.

	Credits awarded
Energy consumption	1
Energy efficient features	2

Assessor Comments / Notes

An analysis of the transportation demand and usage patterns for the building has been carried out to determine the optimum number and size of lifts, escalators and/or moving walks.

The energy consumption has been calculated in accordance with BS EN ISO 25745 Energy performance of lifts, escalators and moving walks, Part 2 : Energy calculation and classification for lifts (elevators) and/or Part 3: Energy calculation and classification for escalators and moving walks.

In addition three energy efficiency measures have been specified.

Schedule of Evidence

No References Available

Energy
Ene 08 - Energy Efficient Equipment

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To recognise and encourage procurement of energy-efficient equipment to ensure optimum performance and energy savings in operation.

Credits

2 of 2 credits awarded.

	Credits awarded
Energy efficient equipment	2

Assessor Comments / Notes

The procurement of energy-efficient equipment will be carried out to ensure optimum performance and energy savings in operation.

Schedule of Evidence

No References Available

6.0 Transport

Transport
Tra 01 - Public Transport Accessibility

Number of credits available:	**5**
Number of credits achieved:	**4**
Minimum standards met?	**N/a**

Aim

To recognise and encourage development in proximity of good public transport networks, thereby helping to reduce transport related pollution and congestion

Credits

4 of 5 credits awarded.

	Credits

	awarded
Public transport accessibility	4

Assessor Comments / Notes

The public transport Accessibility Index (AI) for the assessed building has been calculated using the PTAL method and has confirmed that 4 credits can be achieved.

Schedule of Evidence

No References Available

Transport
Tra 02 - Proximity to amenities

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To encourage and reward a building location that facilitates easy access to local services and so reduces the environmental, social and economic impacts resulting from multiple or extended building user journeys, including transport related emissions and traffic congestion.

Credits

1 of 1 credits awarded.

	Credits awarded
Proximity to local amenities	1

Assessor Comments / Notes

The building is located within 500m to the following amenities:

- Grocery shop or food outlet
- Cash machine
- Post Box

Schedule of Evidence

No References Available

Transport

Number of credits available:	**2**

Tra 03 - Cyclist facilities

Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To encourage building users to cycle, so promoting exercise and helping reduce congestion and emissions, by ensuring adequate provision of cyclist facilities.

Credits

2 of 2 credits awarded.

	Credits awarded
Cycle storage	1
Cyclist facilities	1

Assessor Comments / Notes

Cycle facility requirements are to be provided for 10% of building occupants. Cycle racks are covered from the rain and lit in accordance with BS5489-1:2003+A2:2008 Lighting of roads and public amenity areas.

In addition adequate changing facilities and lockers have been provided for building staff.

Schedule of Evidence

No References Available

Transport
Tra 04 - Maximum Car Parking Capacity

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To encourage the use of alternative means of transport to the building other than the private car, thereby helping to reduce transport related emissions and traffic congestion associated with the building's operation.

Credits

2 of 2 credits awarded.

	Credits awarded
Maximum car parking capacity	2

Assessor Comments / Notes

No parking spaces are provided for the building and therefore both credits are achieved.

Schedule of Evidence

No References Available

Transport
Tra 05 - Travel Plan

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise the consideration given to accommodating a range of travel options for building users, thereby encouraging the reduction of user reliance on forms of travel that have the highest environmental impact.

Credits

1 of 1 credits awarded.

	Credits awarded
Travel plan	1

Assessor Comments / Notes

A travel plan has been developed as part of the feasibility and design stages.

A site specific travel assessment/statement has been undertaken to ensure the travel plan is structured to meet the needs of the particular site.

Schedule of Evidence

No References Available

7.0 Water

Water
Wat 01 - Water Consumption

Number of credits available:	**5**
Number of credits achieved:	**2**
Minimum standards met?	**Y**

Aim

To reduce the consumption of potable water for sanitary use in new buildings from all sources through the use of water efficient components and water recycling systems

Credits

2 of 5 credits awarded.

	Credits awarded
Water consumption	2

Assessor Comments / Notes

A 25% improvement beyond baseline consumption figures is achieved through following sanitary items:

- WCs – Level 4
- Toilet wash hand basin taps – Level 3
- Urinals - Level 2

Schedule of Evidence

No References Available

Water
Wat 02 - Water Monitoring

Number of credits available:	**1**
Number of credits achieved:	**2**
Minimum standards met?	**Y**

Aim

To ensure water consumption can be monitored and managed and therefore encourage reductions in water consumption.

Credits

2 of 1 credits awarded.

	Credits awarded
Pre-requisite (Good to Outstanding ONLY)	Y
Water monitoring	1

Assessor Comments / Notes

A pulsed water meter will be provided to the mains water supply of the building.

Schedule of Evidence

No References Available

Water
Wat 03 - Leak Detection

Number of credits available:	**2**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To reduce the impact of water leaks that may otherwise go undetected.

Credits

1 of 2 credits awarded.

	Credits awarded
Leak detection system	1
Flow control devices	0

Assessor Comments / Notes

A leak detection systems will be installed in line with the BREEAM criteria.

Schedule of Evidence

No References Available

8.0 Materials

Materials
Mat 01 - Life Cycle Impacts

Number of credits available:	**6**
Number of credits achieved:	**5**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.

Credits

5 of 6 credits awarded.

	Credits awarded
Life cycle impacts	5

Assessor Comments / Notes

13.86 points have been using the Mat01 calculator this equates to 5 of the standard BREEAM credits achieved plus one innovation credit

Schedule of Evidence

No References Available

Materials
Mat 02 - Hard Landscaping and Boundary Protection

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise and encourage the specification of materials for boundary protection and external hard surfaces that have a low environmental impact, taking account of the full life cycle of materials used

Credits

1 of 1 credits awarded.

	Credits awarded
Hard landscaping and boundary protection	1

Assessor Comments / Notes

At least 80% of all external hard landscaping and boundary protection (by area) achieves an A or A+ rating, as defined in the Green Guide to Specification.

Schedule of Evidence

No References Available

Materials

Number of credits available:	**4**
Number of credits achieved:	**4**

Mat 03 - Responsible Sourcing of Materials	Minimum standards met?	Y

Aim

To recognise and encourage the specification of responsibly sourced materials for key building elements.

Credits

4 of 4 credits awarded.

	Credits awarded
Pre-requisite	Y
Sustainable Procurement Plan	1
Responsible sourcing of materials (RSM)	2

Assessor Comments / Notes

36.67% of the available Mat03 responsible sourcing points are achieved, this equates to all four credits being achieved.

Schedule of Evidence

No References Available

Materials	Number of credits available:	1
	Number of credits achieved:	1
Mat 04 - Insulation	Minimum standards met?	N/a

Aim

To recognise and encourage the use of thermal insulation which has a low embodied environmental impact relative to its thermal properties.

Credits

1 of 1 credits awarded.

	Credits awarded
Embodied impact	1

Assessor Comments / Notes

The Insulation Index for the building insulation is greater than 2.5.

Schedule of Evidence

No References Available

Materials
Mat 05 - Designing for durability and resilience

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation.

Credits

1 of 1 credits awarded.

	Credits awarded
Protecting vulnerable parts of the building from damage & protecting exposed parts of the building from material degradation	1

Assessor Comments / Notes

Areas of the building have been identified (both internal and external) where vehicular, trolley and pedestrian movement occur. The design incorporates suitable durability and protection measures or design features/solutions to prevent damage to the vulnerable parts of the building.

Schedule of Evidence

No References Available

Materials
Mat 06 - Material efficiency

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage measures to optimise material efficiency in order to minimise environmental impact of material use and waste.

Credits

0 credits awarded.

	Credits awarded
Material efficiency	0

Assessor Comments / Notes

Credit not sought.

Schedule of Evidence

No References Available

9.0 Waste

Waste
Wst 01 - Construction Waste Management

Number of credits available:	**4**
Number of credits achieved:	**3**
Minimum standards met?	**Y**

Aim

To promote resource efficiency via the effective management and reduction of construction waste

Credits

3 of 4 credits awarded.

	Credits awarded
Construction resource efficiency	2
Diversion of resources from landfill	1

Assessor Comments / Notes

The contractor will produce a compliance SWMP and meet all relevant criteria to achieve all three of the four available credits.

Schedule of Evidence

No References Available

Waste

Number of credits available:	**1**

Wst 02 - Recycled Aggregates

Number of credits achieved:	0
Minimum standards met?	N/a

Aim

To recognise and encourage the use of recycled and secondary aggregates, thereby reducing the demand for virgin material and optimising material efficiency in construction

Credits

0 credits awarded.

	Credits awarded
Recycled aggregates	0

Assessor Comments / Notes

Credit not sought.

Schedule of Evidence

No References Available

Waste
Wst 03 - Operational Waste

Number of credits available:	1
Number of credits achieved:	1
Minimum standards met?	Y

Aim

To recognise and encourage the provision of dedicated storage facilities for a building's operational-related recyclable waste streams, so that this waste is diverted from landfill or incineration

Credits

1 of 1 credits awarded.

	Credits awarded
Operational waste	1

Assessor Comments / Notes

There is dedicated space(s) to cater for the segregation and storage of operational recyclable waste volumes generated by the assessed building/unit, its occupant(s) and activities.

Schedule of Evidence

No References Available

Waste
Wst 05 - Adaptation to climate change

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage measures taken to mitigate the impact of extreme weather conditions arising from climate change over the lifespan of the building.

Credits

0 credits awarded.

	Credits awarded
Adaptation to climate change – structural and fabric resilience	0

Assessor Comments / Notes

Credit not sought.

Schedule of Evidence

No References Available

Waste
Wst 06 - Functional adaptability

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage measures taken to plan for the change of use of the building over its lifespan.

Credits

0 credits awarded.

	Credits awarded

Functional adaptability	0

Assessor Comments / Notes

Credit not sought.

Schedule of Evidence

No References Available

10.0 Land Use & Ecology

Land Use & Ecology
LE 01 - Site Selection

Number of credits available:	**2**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To encourage the use of previously developed and/or contaminated land and avoid land which has not been previously disturbed.

Credits

1 of 2 credits awarded.

	Credits awarded
Previously occupied land	1
Contaminated land	0

Assessor Comments / Notes

At least 75% of the proposed development's footprint is on an area of land which has previously been occupied.

Schedule of Evidence

No References Available

Land Use & Ecology
LE 02 - Ecological Value of Site and Protection

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

of Ecological Features

Aim

To encourage development on land that already has limited value to wildlife and to protect existing ecological features from substantial damage during site preparation and completion of construction works.

Credits

2 of 2 credits awarded.

	Credits awarded
Ecological value of site	1
Protection of ecological features	1

Assessor Comments / Notes

There are no features of ecological value in or surrounding the construction zone and therefore both credits are achieved by default.

Schedule of Evidence

No References Available

Land Use & Ecology
LE 03 - Minimising impact on existing site ecology

Number of credits available:	**2**
Number of credits achieved:	**2**
Minimum standards met?	**Y**

Aim

To minimise the impact of a building development on existing site ecology.

Credits

2 of 2 credits awarded.

	Credits awarded
Change in ecological value	2

Assessor Comments / Notes

A neutral impact has occurred as a result of the development and therefore 2 credits have been achieved.

Schedule of Evidence

No References Available

Land Use & Ecology
LE 04 - Enhancing site ecology

Number of credits available:	**2**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To encourage actions taken to enhance the ecological value of the site as a result of development.

Credits

0 credits awarded.

	Credits awarded
Ecologist's report and recommendations	0
Increase in ecological value	0

Assessor Comments / Notes

Credits not sought.

Schedule of Evidence

No References Available

Land Use & Ecology
LE 05 - Long Term Impact on Biodiversity

Number of credits available:	**2**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To minimise the long term impact of the development on the site and the surrounding area's biodiversity.

Credits

0 credits awarded.

	Credits

	awarded
Long term impact on biodiversity	0

Assessor Comments / Notes

Credits not sought.

Schedule of Evidence

No References Available

11.0 Pollution

Pollution
Pol 01 - Impact of Refrigerants

Number of credits available:	**3**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To reduce the level of greenhouse gas emissions arising from the leakage of refrigerants from building systems.

Credits

0 credits awarded.

	Credits awarded
Impact of refrigerants	0

Assessor Comments / Notes

Credit not sought.

Schedule of Evidence

No References Available

Pollution
Pol 02 - NOx emissions

Number of credits available:	**3**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To contribute to a reduction in national NOx emission levels through the use of low emission heat sources in the building.

Credits

0 credits awarded.

	Credits awarded
NOx emission levels for heating and hot water	0

Assessor Comments / Notes

Credits not sought.

Schedule of Evidence

No References Available

Pollution
Pol 03 - Surface Water Run Off

Number of credits available:	**5**
Number of credits achieved:	**2**
Minimum standards met?	**N/a**

Aim

To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, therefore minimising the risk of localised flooding on and off site, watercourse pollution and other environmental damage.

Credits

2 of 5 credits awarded.

	Credits awarded
Flood resilience	0
Surface water run-off	2
Minimising watercourse pollution	0

Assessor Comments / Notes

Man-made impermeable area draining to the watercourse (natural or municipal) has decreased or remains unchanged post development, the peak and volume rate of run-off requirements for the surface water run-off credits are met by default.

Schedule of Evidence

No References Available

Pollution
Pol 04 - Reduction of Night Time Light Pollution

Number of credits available:	**1**
Number of credits achieved:	**1**
Minimum standards met?	**N/a**

Aim

To ensure that external lighting is concentrated in the appropriate areas and that upward lighting is minimised, reducing unnecessary light pollution, energy consumption and nuisance to neighbouring properties.

Credits

1 of 1 credits awarded.

	Credits awarded
Reduction of night time light pollution	1

Assessor Comments / Notes

The external lighting design is in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005, or where no external lighting is to be specified.

Schedule of Evidence

No References Available

Pollution
Pol 05 - Noise Attenuation

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To reduce the likelihood of noise arising from fixed installations on the new development affecting nearby noise-sensitive buildings.

Credits

0 credits awarded.

	Credits awarded
Reduction of noise pollution	0

Assessor Comments / Notes

Credit not sought.

Schedule of Evidence

No References Available

12.0 Innovation

Innovation
Man 03 - Responsible construction practices

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Considerate Construction: Exemplary performance	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation

Number of credits available:	**1**
Number of credits achieved:	**0**

Man 05 - Aftercare	Minimum standards met?	N/a

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Aftercare / monitoring: 3 years	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation	Number of credits available:	1
	Number of credits achieved:	0
Hea 01 - Visual Comfort	Minimum standards met?	N/a

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Daylighting: Exemplary levels	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Hea 02 - Indoor Air Quality

Number of credits available:	**2**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.

Credits

0 credits awarded.

	Credits awarded
VOC emissions (post construction): Exemplary levels	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Ene 01 - Reduction of energy use and carbon emissions

Number of credits available:	**5**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Zero regulated carbon / carbon negative	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Wat 01 - Water Consumption

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Water consumption: Exemplary levels	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Mat 01 - Life Cycle Impacts

Number of credits available:	**3**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Green Guide to Specification (elemental approach)	0
Compliant Life Cycle Assessment software tools (Whole Building approach)	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Mat 03 - Responsible Sourcing of Materials

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Exemplary performance: Responsible sourcing	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation

Number of credits available:	**1**
Number of credits achieved:	**0**

Wst 01 - Construction Waste Management	Minimum standards met?	N/a

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Resource efficiency / Diversion of waste from landfill: Exemplary performance	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation	Number of credits available:	1
	Number of credits achieved:	0
Wst 02 - Recycled Aggregates	Minimum standards met?	N/a

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Recycled aggregates: Exemplary performance	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
Wst 05 - Adaptation to climate change

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded
Responding to adaptation to climate change	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

Innovation
AI - Approved Innovation

Number of credits available:	**1**
Number of credits achieved:	**0**
Minimum standards met?	**N/a**

Aim

To provide additional recognition for a procurement strategy, design feature, management process or technological development that innovates in the field of sustainability, above and beyond the level that is currently recognised and rewarded within standard BREEAM issues.

Credits

0 credits awarded.

	Credits awarded

Innovation application approved by BRE Global	0

Assessor Comments / Notes

No assessor comments / notes

Schedule of Evidence

No References Available

13.0 References Table

Document Ref.	Originator	Document Type	Document Title	Document No.	Version	Date
1	W Hiles Partnerhsip	Report	Man1 - Responsibilites Schedule			January 2014
2	W Hiles Partnerhsip	Email	Man2 - Capital Cost			7th September 2015
3	W Hiles Partnerhsip	Letter	Man3 - Site Timber			September 2015
4	W Hiles Partnerhsip	Letter	Man3 - CCS			September 2015
5	W Hiles Partnerhsip	Letter	Man4 - BUG & Training Schedule			September 2015
6	Lamont Environmental Projects ltd	Letter	Man4 - Commisioning			Sept 2015
7	Phelan Construction Ltd	Letter	Man3 - Construction Site Impacts			Nov 2014
8	W Hiles Partnerhsip	Letter	Man05 - Aftercare Support			September 2015
9	W Hiles Partnerhsip	Letter	Man05 - Post occupancy Evaluation			September 2015
10	Lockyer Technical Services	Letter	BREEAM Lighting			Oct 2015
11	Panter Hudspith Architects	Architectural Drawing	Proposed Ground Floor Plan	001		Oct 2014
12	Panter Hudspith Architects	Architectural Drawing	Projection Mezzanine Level	002		Oct 2014
13	Panter Hudspith Architects	Architectural Drawing	First Floor Plan	003		Oct 2014
14	Panter Hudspith Architects	Architectural Drawing	Second Floor Plan			Oct 2014
15	Anderson Acoustics	Report	Acoustic Report - Previous Development			June 2012
16	Sharps Redmore	Letter	Hea5 - Acoustic Performance			Sept 2015
17	GreenBuild Consult	Report	Ener1 - Brukl Output Report			Oct 2014
18	Lockyer Technical Services	Drawing	Ground Floor Small Power	E05		Jan 2015
19	KONE Lifts	Calculation	Ene6 - Energy Consumption			Sept 2015
20	KONE Lifts	Report	Ene6 - Energy Calculation Report			Sept 2015
21	W Hiles Partnerhsip	Letter	Ene08 - Confirmation Letter			Sept 2015
22	Motion	Report	PTAL Report			Oct 2014
23	Panter Hudspith Architects	Scaled Map	Tra2 - Amenity Locations			Sept 2015
24	Panter Hudspith Architects	Architectural Specification	Fixtures & Fittings			Sept 2014
25	Panter Hudspith Architects	Product Information	Lockers			Sept 2015
26	Panter Hudspith Architects	Architectural Specification	Cycle Stands			Sept 2014
27	Motion	Report	Travel Plan			Sept 2012
28	GreenBuild Consult	Calculator Tool	Wat1 Calculator			Oct 2015
29	Panter Hudspith Architects	Architectural Specification	Wat1 - Sanitaryware			Sept 2014
30	Twyford	Product Information	WC's			Undated
31	Twyford	Product Information	Automatic Urinal Cisterns			Undated

32	Grohe	Product Information	Taps			Undated
33	GreenBuild Consult	Calculator Tool	Mat1 Calculator			Oct 2015
34	Panter Hudspith Architects	Report	Mat1 - Information			Oct 2015
35	Panter Hudspith Architects	Architectural Drawing	Section AA			Sept 2014
36	Panter Hudspith Architects	Architectural Drawing	Section B B			Sept 2015
37	Panter Hudspith Architects	Architectural Drawing	Block Plan	PL/02		Sept 2014
38	GreenBuild Consult	Calculator Tool	Mat3 Calculator Tool			Oct 2015
39	Phelan Construction Ltd	Letter	Mat3 - Materials			Oct 2014
40	Phelan Construction Ltd	Plan	Sustainable Procurment Policy			Jan 2015
41	Panter Hudspith Architects	Report	Mat5 - Protecting From Degredation			August 2015
42	Panter Hudspith Architects	Report	Mat5 - Durability Statement			August 2015
43	Phelan Construction Ltd	Letter	Wst1 - SWMP			Oct 2015
44	Panter Hudspith Architects	Architectural Drawing	Operational Waste Plan	GA-039		July 2015
45	Price & Myers	Report	Pol3 - Surface Water			Oct 2015
46	Panter Hudspith Architects	Architectural Drawing	Existing Floor Plan	EX 01		Sept 2014
47	GreenBuild Consult	Checklist	BREEAM Ecology Checklist			2nd Nov 2015
48	GreenBuild Consult	Calculator Tool	Le3 - Calculator			2nd Nov 2015
49	Lamont Environmental Projects ltd	Mechanical Drawing	GF Incoming Water & Leak Detection	47615-09		Oct 2015
50	W Hiles Partnerhsip	Letter	BREEAM AP Appointment			July 2014
51	Panter Hudspith Architects	Report	Flood Risk			August 2015



GreenBuild Consult

Design and Management of Sustainable Construction

29 Bocam Park

Old Field Road

Pencoed

Bridgend

CF35 5LJ

01656 865605

enquiries@greenbuildconsult.co.uk