

Criteria

2.163 One credit is available as follows:

Credits	Headline Requirement
1	Where evidence provided demonstrates that a water meter with a pulsed output will be installed on the mains supply to each building/unit.

2.164 The requirements of this credit will be accommodated within the M&E specification.

2.165 One credit is awarded on a predictive basis for both the offices and

Innovation Credit

Credits	Headline Requirement
1	<p>"Where sub meters are fitted to allow individual water-consuming plant or building areas to be monitored such as cooling towers, car washes, catering areas, etc. If the building does not have any major water consuming plant this exemplar credit is not available.</p> <p>Each sub meter has a pulsed output to enable connection to a Building Management System (BMS) for the monitoring of water consumption.</p> <p>In addition to the above, for sites with multiple departments e.g. large health centres or acute hospitals, separate pulsed sub meters are fitted on the supply to the following areas where present:</p> <ul style="list-style-type: none"> a. Staff and public areas b. Clinical areas and wards c. Letting areas: On the water supply to each tenant unit d. Laundries e. Main production kitchen f. Hydrotherapy pools g. Laboratories h. CSSD/HSDU, pathology, pharmacy, mortuary and any other major process water user."

2.166 It is unlikely the water use in this development will be suitable for this innovation credit to be pursued at the detailed design stage.

Wat 3: Major Leak DetectionAim

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

Criteria

2.168 One credit is available as follows.

Credits	Headline Requirement
1	Where evidence provided demonstrates that a leak detection system is specified or installed on the buildings water supply.

2.169 This credit is unlikely to be pursued. It is therefore withheld on a predictive basis for both the offices and multi-residential scheme elements.

Wat 4: Sanitary Supply Shut OffAim

2.170 To reduce the risk of minor leaks in toilet facilities.

Criteria

2.171 One credit is available as follows.

Credits	
1	Where evidence provided demonstrates that proximity detection shut-off is provided to the water supply to all toilet areas.

2.172 This credit only applies to the offices element of the proposed development. The requirements of this credit will be included in the M&E specification.

2.173 One credit is awarded on a predictive basis.

Wat 6: Irrigation SystemsAim

2.174 To reduce the consumption of potable water for ornamental planting and landscape irrigation.

Criteria

2.175 One credit is available as follows.

Credits	
1	One credit where evidence provided demonstrates that a low-water irrigation strategy/system has been installed, or where planting and landscaping is irrigated via rainwater or reclaimed water.

2.176 There are no landscaped areas within the construction zone of the assessed building. This credit is therefore screened out of the assessment.

Materials

Materials Overview

- 2.177 The embodied environmental impact of materials, such as raw material extraction, processing, manufacture, haulage and packaging, takes up 19% of the UK's eco-footprint (Bio-regional, 2005).

Mat 1: Materials Specification (Major Building Elements)

Aim

- 2.178 To recognise and encourage the use of construction materials with a low environmental impact over the full life cycle of the building.

Criteria

- 2.179 Up to two credits are available as follows.

Credits	Headline Requirement
6	Up to six credits are available. The credits are determined using the <i>Green Guide to Specification</i> ratings for the major building elements.

- 2.180 A formal BREEAM assessment uses a calculator tool into which the relevant areas in m² of the specification types are entered.

- 2.181 The materials covered are as follows:

- External walls
- Windows
- Roof
- Upper floor slabs
- Internal walls
- Floor finishes / coverings

- 2.182 The architect is to assess the relevant materials against their green guide spec and provide their ratings, datasheets and areas as evidence as the design progresses. The architect and contractor are to further explore sustainable materials for the site, though propose at the present time that 4 credits are the target for achievement for both the offices and multi-residential scheme elements.

Innovation Criteria

Credits	Headline Requirement
1	<p>"One exemplary BREEAM credit can be awarded as follows:</p> <p>a. Where assessing four or more applicable building elements, the building achieves at least two points additional to the total points required to achieve maximum credits under the standard BREEAM requirements.</p> <p>b. Where assessing fewer than four applicable building elements, the building achieves at least one point additional to the total points required to achieve maximum credits under the standard BREEAM requirements."</p>

- 2.183 It will not be possible to determine if this innovation credit could be met until the formal materials assessment is performed. It is possible that an extra credit could be gained here, but in the interests of being conservative, it is currently withheld.

Mat 2: Hard Landscaping and Boundary ProtectionAim

- 2.184 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.

Criteria

- 2.185 One credit is available as follows:

Credits	Headline Requirement
1	Where evidence provided demonstrates that at least 80% of the combined area of external hard landscaping and boundary protection specifications achieve an A or A+ rating, as defined by the <i>Green Guide to Specification</i> .

- 2.186 There is an existing 1.5m hard landscaped area surrounding the building within the site perimeter. 80% if not more is going to be left in situ and reused.
- 2.187 The credit is awarded on a predictive basis for both the offices and the multi-residential building elements.

Mat 3: Re-use of Building FaçadeAim

2.188 To recognise and encourage the in-situ reuse of existing building façades.

Criteria

2.189 One credit is available as follows:

Credits	Headline Requirement
1	Where evidence provided demonstrates that at least 50% of the total final façade (by area) is reused in situ and at least 80% of the reused façade (by mass) comprises in-situ reused material.

2.190 The building façade will be retained and it is considered that the additional development to the top floor of the building will not compromise the 50% rule.

2.191 The credit is awarded for both the offices and multi-residential scheme elements.

Mat 4: Re-use of Building StructureAim

2.192 To recognise and encourage the reuse of existing structures that previously occupied the site.

Criteria

2.193 One credit is available as follows:

Credits	Headline Requirement
1	Where evidence provided demonstrates that a design reuses at least 80% of an existing primary structure and, for part refurbishment and part new build, the volume of the reused structure comprises at least 50% of the final structure's volume.

2.194 The design will reuse 100% of the existing structure, and the additional development to the top floor of the building will not compromise the 50% rule.

2.195 The credit is awarded for both the offices and multi-residential scheme elements.

Mat 5: Responsible Sourcing of MaterialsAim

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

Criteria

- 2.197 Up to three credits are available as follows.

Credits	Headline Requirement
3	<p>Up to 3 credits are available where evidence provided demonstrates that 80% of the assessed materials in the following building elements are responsibly sourced:</p> <p>Structural Frame</p> <p>Ground floor</p> <p>Upper floors (including separating floors)</p> <p>Roof</p> <p>External walls</p> <p>Internal walls</p> <p>Foundation/substructure</p> <p>Staircase</p> <p>Additionally 100% of any timber must be legally sourced.</p>

- 2.198 This development is to be built under a design and build contract which should enable the contractor to gain an early start in collecting this information and sourcing relevant suppliers. At least two credits are considered achievable for both the offices and multi-residential scheme elements.

Innovation Credit

Credits	Headline Requirement
1	Where, in addition to the standard BREEAM requirements, 95% of the applicable materials, comprised within the applicable building elements, have been responsibly sourced.

- 2.199 Achievement of the innovation credit can only be determined at a detailed design stage.

Mat 6: InsulationAim

- 2.200 To recognise and encourage the use of thermal insulation which has a low embodied environmental performance relative to its thermal properties and has been responsibly sourced.

Criteria

- 2.201 Up to two credits are available as follows.

Credits	Headline Requirement
1	Where evidence provided demonstrates that thermal insulation products used in the building have a low embodied impact relative to their thermal properties, determined by the Green Guide to Specification ratings.
1	Where evidence provided demonstrates that thermal insulation products used in the building have been responsibly sourced.

- 2.202 For the offices and multi-residential elements the design team are confident the new build elements can meet the requirements, but are uncertain about the performance of the refurbishment element.
- 2.203 Credits are awarded for both the new build offices and multi-residential elements but not for the refurbished elements on a predictive basis.

Mat 7: Designing For RobustnessAim

- 2.204 To recognise and encourage adequate protection of exposed parts of the building and landscape, therefore minimising the frequency of use of replacement materials.

Criteria

- 2.205 One credit is available as follows.

Credits	Headline Requirement
1	Where protection is given to vulnerable parts of the building such as areas exposed to high pedestrian traffic, vehicular and trolley movements.

- 2.206 Discussions regarding robustness have already been considered with regards to upgrading the student staircase and banisters and the design team are confident that the further requirements of this credit can be met.
- 2.207 One credit is awarded on a predictive basis for both the offices and multi-residential scheme elements.

Mat 8: Designing For Robustness

Aim

- 2.208 To recognise and encourage the specification of responsibly sourced materials for key finishing elements.

Criteria

- 2.209 Two credits are available as follows.

Credits	Headline Requirement
2	<p>Up to 2 credits are available where evidence provided demonstrates that 80% of the assessed materials in the following finishing elements are responsibly sourced:</p> <ul style="list-style-type: none"> a. Stairs (including handrails, balustrades, banisters, other guarding rails but excluding staircase) b. Window (including sub-frames, frames, boards and sills) c. External and internal door (including sub-frames, frames, linings and door) d. Skirting (including architrave, skirting board and rails) e. Panelling (including any other trim) f. Furniture (including fitted kitchen, bedroom and bathroom) g. Facias (soffit boards, bargeboards, gutter boards, others) h. Any other significant use. <p>Additionally 100% of any timber must be legally sourced.</p>

- 2.210 This credit applies only to the multi-residential element of the proposed development. The design team consider that it is likely that both credits can be achieved within a formal assessment.

Waste

Waste Overview

- 2.211 The UK produces around 330 million tonnes of waste annually (Environment Agency, 2008b), a quarter of which is from households and business. The rest comes from construction and demolition, sewage sludge, farm waste and spoil from mines and dredging of rivers. The way in which developments handle waste is an important contribution to how the waste hierarchy is followed i.e. reduce, reuse, recycle, energy recovery, dispose.

Wst 1: Construction Site Waste Management

Aim

- 2.212 To promote resource efficiency via the effective and appropriate management of construction site waste.

Criteria

- 2.213 Up to four credits are available as follows:

Credits	Headline Requirement
3	Up to three credits are available where evidence provided demonstrates that the amount of non-hazardous construction waste ($m^3/100m^2$ or tonnes/100m ²) generated on site by the development is the same as or better than good or best practice levels.
1	Where evidence provided demonstrates that a significant majority of non-hazardous construction waste generated by the development will be diverted from landfill and reused or recycled.

- 2.214 The design team have confirmed that this requirement will be passed onto the contractor. Three credits are considered achievable at the current time.
- 2.215 Of the four available credits, three are awarded on a predictive basis for both the offices and multi-residential scheme elements.