



Our ref: EN6490/C/001SW  
Your ref:

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Date: 17 November 2006

Jim McCarthy  
Arup  
13 Fitzroy Street  
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**BY POST & EMAIL**

Dear Jim

**Re: Kings Cross Station Enhancements – Preliminary BREEAM Rating**

Following our recent meetings with Network Rail and the design team, I write to confirm the preliminary BREEAM rating for the Kings Cross Station enhancements.

**Approach for Kings Cross Station BREEAM Assessment**

As you are aware, there is often insufficient information available in order to complete a full BREEAM assessment at this relatively early stage in the design process. Given that the assessment has been requested by the London Borough of Camden at the planning stage, it has been necessary to adopt a two staged approach:

- Stage 1 comprises an initial review of the scheme against bespoke criteria developed by the Building Research Establishment (BRE) before the design, specifications and cost plan are finalised; and
- Stage 2 comprises the formal BREEAM assessment which is undertaken on completion of the detailed design.

**Stage 1: Work Undertaken to Date**

Given that railway station developments cannot be assessed against the standard BREEAM methodologies that have been developed by BRE, it was necessary for them to develop criteria that are specific to this development. The draft criteria were reviewed at a design team meeting to establish whether or not they were appropriate, given certain design objectives and constraints and the client's specific requirements. The opportunity has also been taken to assess the current design against the draft criteria, to give an indication of how the development might perform in a full BREEAM assessment. Comments on the criteria were then collated and fed back to BRE. We are therefore, currently awaiting the final criteria and spreadsheet tool from them.

At this stage, a preliminary rating based on the draft criteria is available. However, it should be noted that this could potentially change once the final criteria are available. For your information, a summary of the BREEAM credits that the design team are currently aiming to achieve is enclosed with this letter. The preliminary score currently stands at 69 credits out of the 109 credits that are available. When the environmental weighting is applied to this score, the development achieves 64.47%; which is comfortably within a 'Very Good' BREEAM rating, the range being 55% - 70%. The building performs very well in the Health and Wellbeing; Energy; Land Use and Ecology; and Pollution categories.

**Stage 1: Work to be Completed**

Once we have received the final BREEAM criteria from BRE, we will re-run the exercise and establish the predicted BREEAM rating for Kings Cross Station. We then propose to produce a short report that summarises the development's performance and provides an indicative BREEAM rating. This will be forwarded to the Council in order to demonstrate that the environmental sustainability of the scheme has



been considered and that the design is capable of obtaining the 'Very Good' rating being targeted.

I trust that this letter sets out clearly, the current situation with respect to the Bespoke BREEAM assessment for Kings Cross Station and the future work proposed. However, if you have any queries or require any further information, please do not hesitate to contact me.

Yours sincerely

*Sarah Waterhouse*

**Sarah Waterhouse**  
**For and on Behalf of Waterman Environmental**

Enc. Summary of BREEAM Credits Likely to be Achieved



**SUMMARY OF BREEAM CREDITS LIKELY TO BE ACHIEVED**  
(ref. Meeting of 7<sup>th</sup> November 2006)

Credit Reference	Credit Title	Potential Credits	Credits Available
<b>Management Category</b>			
M1	Commissioning	2	2
M4	Considerate Constructors	1	2
M5	Construction Site Impacts	3	4
M8	Consultation	2	2
M12	Building User Guide	1	1
M14	Publication of Building Information	0	1
M21	Whole Life Costing	0	2
<b>Health and Wellbeing Category</b>			
HW1	Daylighting	1	1
HW2	View Out	1	1
HW3	Glare Control	1	1
HW4	High Frequency Lighting	1	1
HW5	Internal & External Lighting Levels	1	1
HW6	Lighting Zones	1	1
HW8	Potential for Natural Ventilation	1	1
HW9	Internal Air Pollution	1	1
HW10	Indoor Air Quality	0	1
HW11	Ventilation Rates	1	1
HW14	Thermal Comfort	1	1
HW15	Thermal Zoning	1	1
HW16	Microbial Contamination	1	1
HW17	Acoustic Performance - Internal Noise Levels	1	1
	Acoustic Performance - Reverberation Times	1	1
HW19	Safer Parking	1	1
HW27	Acoustic Insulation	1	1
<b>Energy Category</b>			
E1	Reduction of CO2 Emissions	10	15
E2	Sub Metering of Substantial Energy Uses	0	1
E3	Sub Metering of Areas / Tenancy	1	1
E4	External Lighting	1	1
<b>Transport Category</b>			
T5	Cyclist Facilities	0	2
T6	Pedestrian & Cyclist Safety	0	1
T8	Travel Plan	0	2
T9	Maximum Car Parking Capacity	1	1
T10	Travel Information Space	1	1
T12	Deliveries & Manoeuvring	1	1

Credit Reference	Credit Title	Potential Credits	Credits Available
T14	Motorcyclist facilities	0	1
<b>Water Category</b>			
W1	Water Consumption	1	3
W2	Water Meter	1	1
W3	Major Leak Detection	1	1
W4	Sanitary Supply Shut Off	1	1
W5	Water Recycling	0	1
W6	Irrigation Systems	1	1
<b>Materials &amp; Waste Category</b>			
MW1	Materials Specification - Major Building Elements	0	7
MW2	Hard Landscaping & Boundary Protection	0	1
MW5	Reuse of Building Façade	1	1
MW6	Reuse of Building Structure	1	1
MW7	Recycled Aggregates	0	1
MW8	Responsible Sourcing of Materials	1	3
MW10	Designing for Robustness	1	1
MW12	Storage of Recyclable Waste	1	1
MW13	Compactor / Baler	1	1
<b>Land Use and Ecology Category</b>			
LE1	Reuse of Land	1	1
LE2	Contaminated Land	0	1
LE3	Ecological Value of Land & Protection of Ecological Features	1	1
LE4	Mitigating Ecological Impact	2	2
LE5	Enhancing Site Ecology	1	3
LE6	Long Term Impact on Biodiversity	2	2
<b>Pollution Category</b>			
P1	Refrigerant GWP - Building Services	0	1
P2	Preventing Refrigerant Leaks	2	2
P4	Insulant GWP	1	1
P6	Nox Emissions of Heating Source	2	3
P7	Flood Risk / Water Run Off	2	3
P8	Minimising Watercourse Pollution	0	1
P11	Renewable & Low Emission Energy	2	3
P12	Reduction of Night Time Light Pollution	1	1
P13	Noise Attenuation	1	1
<b>TOTALS</b>		<b>69</b>	<b>106</b>