

**BREEAM PRE-ASSESSMENT REVIEW  
PLANNING STAGE (v3)**

FOR

**PROPOSED OFFICE CONVERSION AND EXTENSION WITH  
RESIDENTIAL UNITS**

On behalf of

1921 Mortimer Investments Ltd

AT

**ARTHUR STANLEY HOUSE,  
TOTTENHAM STREET, LONDON W1**

## INTRODUCTION

The development proposal includes the major refurbishment of an existing building and conversion to a commercial office use along with the construction of a new residential block. The option for a D1 use for a medical centre is also reviewed.

The development is located within the London Borough of Camden, close to the Westminster boundary.

## PLANNING POLICY

Current LB Camden planning policy is noted to include a requirement to meet a BREEAM “excellent” rating. This requires a minimum score of 70% to be achieved along with a set of mandatory credits.

The policy also requires a minimum score to be achieved in three categories. This requires a minimum 60% of the credits to be achieved in the energy and water categories and a minimum 40% of the credits to be achieved in the materials category.

### BREEAM REVIEW

A pre-assessment exercise was carried out on the office scheme proposals. This was reviewed in a full design team workshop held on 02 May 2017 at which the client was also represented.

The principles of the BREEAM schemes were reviewed along with the BREEAM processes and scoring requirements.

The need for a separate BREEAM assessment was confirmed should the D1 medical centre proposal proceed. This would be reviewed under the BREEAM "Healthcare" scheme. This D1 space, if progressed, would be limited to a maximum floor area of 600m<sup>2</sup> which is a small proportion of the overall scheme.

The office pre-assessment was reviewed with the design team and the pre-assessment updated to allow for team comments and client feedback.

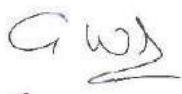
The final pre-assessment schedule is attached – see sheets 1 to 4 inclusive.

The BREEAM score at this stage was confirmed to be 73.38%. The credits included under the water, energy and materials categories were confirmed to meet the minimum criteria required by LB Camden for each of these categories.

### CONCLUSIONS

The planning stage scheme proposals are able to meet the planning policy requirements in respect of BREEAM.

Signed



Gavin Walker – Director  
B.Eng C.Eng MICE. MStructE. LCC. BREEAM AP.



KEY
Mandatory Requirements
Time limitations

SUBJECT	CREDITS		Requirement	Comment
	AVAILABLE	TARGET		
<b>MANAGEMENT (0.57)</b>				
Man 01	1	1	Stakeholder consultation - project delivery	To RIBA stage 2 - Including contractor
	1	1	Stakeholder consultation - third party	Existing community partnerships and networks, including feedback
	1	1	Accredited professional - design stage	
	1	1	Accredited professional - monitoring progress	
Man 02	2	0	Elemental life cycle cost analysis	
	1	0	Component level life cycle cost analysis	
	1	1	Capital cost reporting	
Man 03	1	1	Environmental management - EMS	
	1	1	Accredited professional - construction stage	
	2	1	CCS Scheme	35 minimum score with 7 per section required for 2nd credit
	2	1	Monitoring construction site impacts	Energy and water. Transportation monitoring required for 2nd credit
Man 04	1	1	Commissioning / testing / responsibilities sch.	Schedule, appoint team member, allow budget and programme
	1	1	Commissioning building services	Specialist commissioning manager
	1	0	Testing and inspecting building fabric	Thermal survey and air test
	1	1	Handover	BUG and compliant training schedule
Man 05	1	1	Aftercare support	Meeting, FM training, one month support, help line and nominated individual, resources for 12 month monitoring of energy and water
	1	1	Seasonal commissioning	Including occupant interviews, recommissioning and update of O and Ms as required
	1	0	Post occupancy evaluation	By independent third party 12 months from PC. - by occupier ?
<b>HEALTH AND WELLBEING (0.88)</b>				
Hea 01	1	1	Glare control	
	1	0	Daylighting	
	1	0	View out	95% of floor is within 7m of adequate opening (opening is 20% of wall area)
	1	1	internal and external lighting	light levels, zoning and controls
Hea 02	1	1	Indoor air quality plan	
	1	0	Ventilation	air intakes/exhausts, external pollution sources, filtration on HVAC, CO2 sensors
	1	0	VOC emission levels - products	compliant testing
	1	0	VOC emission levels - post construction	Adequate cross flow with thermal comfort required to be demonstrated, with user control
	1	0	Potential for natural ventilation	

Hea 03	Safe containment in Laboratories	n/a				DSM software to CIBSE AM11, meets cibse guide A, and both PMV and PPD are reported ditto
Hea 04	Thermal comfort	1	1	1	Thermal modelling	
		1	1	1	Climate change adaptability	
		1	1	1	Zoning and controls strategy	
Hea 05	Acoustic performance	1	1	1	Sound insulation	
		1	1	1	indoor ambient noise levels	
		1	1	1	reverberation times	
Hea 06	Safety and security	1	1	1	safe access	Cycle paths, footpaths, ped crossings, parking turning deliveries etc
		1	1	1	security of site and building	Specialist input during RIBA stage 2 and incorporated recommendations
<b>ENERGY (0.65)</b>						
Ene 01	Reduction of energy use and CO2 emissions	12	8	8	Energy Performance Ratio	compliant SBEM
Ene 02	Energy monitoring	1	1	1	All major systems sub metered and monitored	first submetering credit - 90% assigned to end use category identifiable to building user, energy monitoring and management system in place
		1	1	1	Submetering of high loads and tenants areas	management system or submeters to suit
Ene 03	External lighting	1	1	1	Energy efficient lighting	60 lumens per circuit watt - including signage, auto controls
Ene 04	Low carbon design	1	1	1	Passive design	RIBA stage 2 design analysis for passive opportunities, and meaningful (5%) reduction in energy demand achieved
		1	0	0	Free cooling	no active cooling or mech vent
		1	1	1	LZC feasibility study	By RIBA stage 2, technology employed and 5% demand met
Ene 05	Energy efficient cold storage	n/a				Vertical transport analysis, energy demand assessed, lowest demand system employed, three specific features specified
Ene 06	Energy efficient transportation systems	3	3	3		
Ene 07	Energy efficient laboratory systems	n/a				
Ene 08	Energy efficient equipment	2	2	2	Meaningful reduction in unregulated energy load	Tenant control - select appropriate equipment to meet ECA scheme or other compliant scheme criteria
Ene 09	Drying space	n/a				
<b>TRANSPORT (1.0)</b>						
Tra 01	Public transport accessibility	3	3	3		TRA 01 Calc required with full PT info
		1	0	0	Dedicated bus service	
Tra 02	Proximity to amenities	1	1	1		Assumed food outlet and post box and cash machine 500 m compliant
Tra 03	Cyclist facilities	1	1	1	Compliant spaces	1 per 10 staff -
		1	1	1	Compliant facilities	2 of 4 required
Tra 04	Maximum parking capacity	2	2	2		1 space per "6" building users max (AI assumed > 8)
Tra 05	Travel plan	1	1	1	Compliant travel plan provided	

<b>WATER (0.78)</b>									
Wat 01	Water consumption	1	1	1	12.5% reduction in consumption				One credit
		1	1	1	25% reduction in consumption				
		1	1	1	40% reduction in consumption				
		1	1	1	50% reduction in consumption				
		1	0	0	55% reduction in consumption				
Wat 02	Water monitoring	1	1	1	Meters and sub meters				critierion 1 only - water meter on mains supply to each building
Wat 03	Water leak detection	1	1	1	Leak detection system				
		1	1	1	Flow control devices to all WC facility areas				
Wat 04	Water efficient equipment	1	0	0	Demonstrate reduction in unregulated demand				irrigation and wash down - Low demand planting -
<b>MATERIALS (1.04)</b>									
Mat 01	Life Cycle Impacts	5	3		Measures external walls, windows, roof, upper floors, and floor finishes and coverings				
		2 left	0		ditto				
Mat 02	Hard landscaping and boundary protection	1	1	1	ext. hard landscaping and boundary protection				80 % required to meet A or A+
Mat 03	Responsible sourcing of materials	1	1	1	Sustainable procurement plan				critierion 1 only - legally harvested and traded timber for all timber and timber based products
		1	1	1	Achieve 18 % points score				
		1	1	1	Achieve 36 % points score				Full design stage assessment required
		1	0	0	Achieve 54 % points score				
Mat 04	Insulation	1	1	1	Embodied impact - insulation index				Ins Index greater than 2.5
Mat 05	Designing for durability and resilience	1	1	1					Protecting vulnerable and exposed parts, and against material degradation (table 50)
Mat 06	Material efficiency	1	0	0	Identify and implement appropriate measures				Involving all parties, and at all stages
<b>WASTE (0.94)</b>									
Wst 01	Construction waste management	1	1	1	waste generation limited to 13.3 m3 / 100m2 floor				Construction waste only
		1	1	1	waste generation limited to 7.5 m3 / 100m2 floor				
		1	0	0	waste generation limited to 3.4 m3 / 100m2 floor				70 % by volume non demolition waste AND 80% by volume demolition waste (excludes excavations)
		1	1	1	Diversion of resources from landfill				Subject to contractor supply chain required within a 30 km radius of site
Wst 02	Recycled aggregates	1	0	0	25 % of all agg required to comply; frame, founds, pipe bedding, road surfaces, granular fill				
Wst 03	Operational waste	1	1	1	Compliant dedicated space				Tenant zone - show area only
Wst 04	Speculative floor and ceiling finishes	1	1	1					RIBA Stage 2 - Hazard identification, risk estimation and management
Wst 05	Adaption to climate change	1	1	1	Appraisal of sstructure and fabric resilience				
Wst 06	Functional adaptability	1	1	1	Strategy study				

LAND USE AND ECOLOGY (1.0)					
LE 01	Site selection	1	1	1	Previously occupied land
		1	0	0	Contaminated land
LE 02	Ecological value of site and protection of ecological features	1	1	1	Ecological value of site
		1	1	1	Protection of ecological features
LE 03	Minimising impact on existing site ecology	1	1	1	No negative change in ecological value
		1	1	1	Minimal change in ecological value
LE 04	Enhancing site ecology	1	1	1	Qualified ecologist report required
		1	1	1	Increase in ecological value
LE 05	Long term impact on biodiversity	1	1	1	Mandatory ecology criteria, landscape and habitat plan, and 2 additional criteria
		1	1	1	4 additional criteria
<b>POLLUTION (0.77)</b>					
Pol 01	Impact of refrigerants	1	0	0	1000 kgCO2 eq/kw cooling plus compliance requirements
		1	0	0	100 kgCO2 eq/kw cooling (or GWP of all refrigerants is less than 10)
		1	0	0	No refrigerants used in building
Pol 02	NOx emissions	1	0	0	NOx emissions less than 100 mg/kWh
		1	0	0	NOx emissions less than 70 mg/kWh
		1	0	0	NOx emissions less than 40 mg/kWh
Pol 03	Surface water run off	1	1	1	Flood risk - FRA flood risk and resilience strategy
		1	1	1	Flood risk - zone one
		1	1	1	Surface water run off - peak run off limited to pre developed level (1 in 100 year)
		1	1	1	Building flooding avoided on local drainage system failure
		1	0	0	Minimising water course pollution
Pol 04	Reduction of night time light pollution	1	1	1	External lighting design including signage
Pol 05	Reduction of noise pollution	1	1	1	Noise impact assessment required
<b>INNOVATION</b>					
Inn 01	Innovations	10	0	0	Included within above

MINIMUM SCORE REQUIRED	70
RECOMMENDED SCORE REQUIRED	72.1

**PREDICTED SCORE (from above) 73.38**

60% energy and water	Y / Y
40% materials	Y