

Eco Impact Checklist

Title of report: South Bristol Light Industrial Workspace

Report author: Oliver Roberts

Anticipated date of key decision: 14th July 2020 Cabinet

Summary of proposals:

The development site is at 601 Whitchurch Lane. The site is Council owned, with an existing building which has reached the end of its economic life and would benefit from replacement. The site is directly adjacent to the Bottle Yard Studios. The Development will be light industrial business units, comprising of a total of 1740m² ground floor area, with potential for an additional 870m² of mezzanine space. Overall 14 light industrial business units will be developed with built-in adaptability to provide the potential for tenants to combine units where they require more space. The ground floor area of each business unit will typically be 120m² (excluding mezzanines) but with some units varying between 70m² and 160m². It is proposed that the business units will be developed to a 'shell and core' specification with the tenant undertaking the fit-out, which may include mezzanine floors in units where these are not provided as part of the base build. It is proposed that access between the sites will provide connectivity for businesses providing film and TV production support functions as well as access to available facilities, such as meeting and training space.

Will the proposal impact on...	Yes/No	+ive or -ive	If Yes...	
			Briefly describe impact	Briefly describe Mitigation measures
Emission of Climate Changing Gases?	Yes	-ive	<p>During construction there will be direct emissions from construction vehicles and staff travel and indirect emissions through energy consumption.</p> <p>Embodied carbon in building materials.</p> <p>The development will lead to an intensification of the site and therefore during operation there may be increased indirect emissions from energy consumption and occupier travel, visitor travel, generation of waste to landfill.</p>	<p>A Construction Management Plan (CMP) will be developed for the project, which will identify appropriate environmental management measures to minimise waste and the impacts of construction traffic.</p> <p>The development will consider opportunities to reduce embodied carbon in the materials used for construction, including a study to consider engineered timber framing in place of the steel framing presently proposed.</p> <p>A Travel Plan will be produced to encourage and maximise use of public transport and active travel for occupiers and visitors to the business units. The development will provide secure cycle parking. The site is well connected to the existing public transport network located at Hengrove Park, including</p>

		+ve	Improved energy efficiency of buildings	<p>the Metro Bus route. It is expected that some units will be occupied by businesses providing support functions to the Bottle Yard Studios, therefore by having direct access to that site reducing the requirement for travel between sites.</p> <p>The new buildings will have greater levels of insulation and energy efficiency than the existing building. The development will explore opportunities to reduce carbon emissions in accordance with the citywide carbon neutrality target and will achieve a minimum of BREEAM 'Very Good' and will investigate the potential of achieving BREEAM Excellent. The assessment includes consideration of construction materials used and the energy efficiency of the building. It is proposed to provide good natural day light and natural ventilation to reduce in operation energy requirements.</p> <p>Due to the varied nature and requirements of the future occupants the fit out of mechanical ventilation, cooling and heating systems will be left to the future occupants to fit out. It is proposed not to connect gas to the development, to avoid tenants installing gas boilers, as the most familiar option.</p>
Bristol's resilience to the effects of climate change?	Y	+ve	Development of Brownfield land	The development will be on Brownfield, rather than Greenfield land and will intensify the use of the site, making better use of available land resources.
		-ve	<p>The site presently has very low vegetation and tree cover.</p> <p>The proposed development as a more</p>	<p>Landscaping across the site will increase levels of planting, in particular tree cover, which will also provide shading.</p> <p>The fit out of the business units will</p>

			<p>intensive use will likely increase mains water and energy consumption.</p> <p>Flooding</p>	<p>be by tenants, who will be encouraged to use water and energy efficient technology, including low carbon options for any heating and cooling requirements.</p> <p>The development is not in a flood risk area and will look at improvements to storm water management within the site.</p>
Consumption of non-renewable resources?	Y	-ve	<p>In the short-term, there is potential for the consumption of fossil fuels and other non-renewable materials arising through the use of energy and materials during the construction works.</p> <p>In the long-term, there will be consumption of fossil fuels for heating and power, and also for travel to and from the site.</p> <p>Most new and existing businesses occupying units will be linked to business support programmes, including advice to use resources more efficiently.</p>	<p>Sustainability of building materials will be considered in the design and reflected in the BREEAM assessment.</p> <p>A Travel Plan will be developed for the development</p> <p>Reduction in consumption of non-renewable resources will be investigated through on-site renewable energy generation through a photovoltaic array. The project will meet all building regulation and planning requirements, such as 20% reduction in carbon emissions through the use of on-site renewables.</p> <p>Advice / support / grants given to adopt or increase EBRE measures. Positive policies and advocacy by BCC & delivery partners.</p>
Production, recycling or disposal of waste	Y	-ve	<p>Waste will arise from construction works.</p> <p>Waste will arise from the normal operation of the site.</p>	<p>Waste Management Plans will be created for the Construction and Operational Phases of each development to minimise the level of waste produced and maximise the amount of waste that is reused, recycled and diverted from landfill.</p>
		+ve	<p>Adaptability of business units to avoid future waste</p>	<p>The units will be developed to ensure future adaptability, including combining units to expand workspace, with minimal levels of works and waste. They will include allowance to add mezzanine floor space to increase floor areas.</p>

The appearance of the city?	Y	+ve	Developing higher quality work space	The existing building is of low quality and at the end of its economic life. The replacement business units will be developed to a higher quality design including tree planting as part of the landscaping proposals.
Pollution to land, water, or air?	Y	+ve	Contamination	The developments are located on brownfield sites; the proposals will assess the risk of any potential contamination, including for asbestos in the existing building and put in place suitable remedial measures.
		-ve	<p>There is a risk of hazardous materials (e.g. fuels or paints) being accidentally released during construction works.</p> <p>Construction works may generate mud, dust and noise.</p> <p>Once operational, the site will be connected to the sewage network.</p> <p>An increase in traffic will potentially impact on air quality within the city.</p>	<p>Construction environmental management arrangements will be produced and documented, which will include detailed controls and measures for the Control Of Substances Hazardous to Health (COSHH); and for minimising and mitigating the resulting effects of construction activity, such as the generation of mud, dust and noise.</p> <p>It is expected that during the construction phase the site(s) will be registered to the Considerate Constructors Scheme. Measures for engagement with local community and stakeholders will ensure that any arising issues are quickly identified and dealt with.</p> <p>The site is in close proximity to existing public transport and cycle path networks, including multiple bus routes. A Travel Plan will be developed to maximise use of these forms of travel over car use.</p>
Wildlife and habitats?		+ive	The site has very low vegetation cover, which will be increased by new planting.	Landscape proposals will increase vegetation cover, in particular trees which should provide an overall positive benefit.
		-ve	Destruction of any existing wildlife / habitats	There is potential for the loss of some existing vegetation along the boundary, which would be replaced with alternative planting. An

				ecological survey will be completed for the site to check for roosting bats or birds, etc. There are limited opportunities for these to be present, however if identified suitable mitigation measures will be put in place, including securing any required licences.
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Consulted with: 2. At a project/design level, proposals have been developed in collaboration with internal teams, including Strategic Property, Economic Development, Major Projects and Culture - including the Bottle Yard Studios.

The Council's Environmental Performance Team have reviewed this assessment and provided comments.

Summary of impacts and Mitigation - to go into the main Cabinet/ Council Report

The significant impacts of this proposal are the creation of waste through site clearance and demolition works. Consumption of non-renewable resources and emission of Climate Changing Gases associated with the construction and operation of the business units.

The proposals include the following measures to mitigate the impacts.

The development will replace an existing poor quality building with a low level of insulation and energy efficiency. Construction impacts will be reduced through design measures, including measures to achieve a minimum of BREEAM 'Very Good' and Construction Management Planning. The new building will be constructed to higher environmental standards and will be designed for future adaptability to minimise waste with future changes. The development of a more intensive use of a brownfield site will improve the use of land resources and decrease development pressures elsewhere. The provision of workspace in this location will reduce distance of travel for businesses operating in South Bristol and in particular providing services related to the Bottle Yard Studios. The proposals are expected to have a positive effect on quality of the built environment, including through providing a greener site.

The net effects of the proposals are negative in the short term for Consumption of non-renewable resources and emission of Climate Changing Gases associated with the construction, but positive in the longer term through the benefits of well-designed and more energy efficient building stock and more efficient land use, reducing development pressure in other parts of the city and/or greenfield sites outside of the city.

Checklist completed by:

Name:	Oliver Roberts
Dept.:	Major Projects
Extension:	x 74179
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Verified by Environmental Performance Team	

