

Environmental Impact Assessment [version 1.0]

Proposal title: Coach House Asset Transfer		
Project stage and type: 🛛 Initial Idea Mandate	Outline Business Case	☑ Full Business Case
Policy Strategy Function Service	🗆 New	🗵 Changing
☑ Other [please state]	Already exists / review	
Directorate: Growth and Regeneration	Lead Officer name: Pete And	derson and Alex Hearn
Service Area: Property and Economic Development	Lead Officer role: Service Dir	rectors – Assets, Property &
	Infrastructure and Economy	of Place

Step 1: What do we want to do?

The purpose of this Environmental Impact Assessment is to help you develop your proposal in a way that is compliant with the council's policies and supports the council's strategic objectives under the <u>One City Climate</u> <u>Strategy</u>, the <u>One City Ecological Emergency Strategy</u> and the latest <u>Corporate Strategy</u>.

This assessment should be started at the beginning of the project proposal process by someone with a good knowledge of the project, the service area that will deliver it, and sufficient influence over the proposal to make changes as needed.

It is good practice to take a team approach to completing the Environmental Impact Assessment. See further <u>guidance</u> on completing this document. Please contact the <u>Sustainable City and Climate Change Service</u> early for advice and feedback.

1.1 What are the aims and objectives/purpose of this proposal?

Briefly explain the purpose of the proposal and why it is needed. Please use <u>plain English</u>, avoiding jargon and acronyms.

Approve the grant of a 125 year Lease and Service Agreement at a peppercorn rent to the Black South West Network charity for the management and operation of the Coach House buildings in St Paul's, to provide a Centre which, will serve the Black and Racially Minoritized communities of Bristol and the wider region.

1.2 Will the proposal have an environmental impact?

Could the proposal have either a positive or negative effects for the environment now or in the future? If 'No' explain why you are sure there will be no environmental impact, then skip steps 2-3 and request review by the <u>Sustainable City and Climate Change Service</u>.

If 'Yes' complete the rest of this assessment.

🗌 No

🛛 Yes

[please select]

1.3 If the proposal is part of an options appraisal, has the environmental impact of each option been assessed and included in the recommendation-making process?

If 'Yes' please ensure that the details of the environmental impacts of each option are made clear in the pros and cons section of the <u>project management options appraisal document</u>.

□ Yes □ No ⊠ Not applicable [please select]]
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If 'No' explain why environmental impacts have not been considered as part of the options appraisal process.

BSWN (the tenant) has carried out an environmental / energy design options appraisal with its architect. As an external organisation, they have not used the internal BCC appraisal form. Given the phased nature of the proposed refurbishment, it is important to note that the BREEAM Excellent and other environmental standards required by Local Plan policy and own environmental sustainability objectives can only be delivered as a result of Phases 1, 2 and 3 of the refurbishment, which requires raising the necessary additional capital funding.

Step 2: What kinds of environmental impacts might the project have?

Analysis of impacts must be rigorous. Please demonstrate your analysis of any impacts of the proposal in this section, referring to evidence you have gathered. See detailed <u>guidance documents</u> for advice on identifying potential impacts.

2.1 Does the proposal create any benefits for the environment, or have any adverse impacts?

Outline any potential benefits of the proposal and how they can be maximised. Identify how the proposal will support <u>our corporate environmental objectives</u> and the wider One City Climate and Ecological Emergency strategies.

Consider how the proposal creates environmental impacts in the following categories, both now and in the future. **Reasonable efforts should be made to quantify stated benefit or adverse impacts wherever possible.**

Where the proposal is likely to have a beneficial impact, consider what actions would enhance those impacts. Where the proposal is likely to have a harmful impact, consider whether actions would mitigate these impacts.

Enhancements or mitigation actions are only required when there is a likely impact identified. Remember that where enhancements or mitigation actions are listed, they should be assigned to staff and appropriately resourced.

GENERAL COMMENTS (highlight any potential issues that might impact all or many categories)		
The lease is for 125 years. The	Coach Hous	e is outside of flood risk planning zones.
ENV1 Carbon neutral:		Once refurbished, the property is likely to have lower operational CO2
Emissions of climate		emissions due to replacement of heating and ventilation systems and
changing gases		thermal upgrades to the fabric.
BCC has committed to achieving net zero emissions for its direct activities by 2025, and to support the city in achieving net zero by	Benefits	The increased use and increased floor space of the property will result in higher occupancy of the building, which will negate some of the energy savings from the energy efficiency measures. However, the tenant organisation will in future deliver all its activities from this building, rather than from two separate sites.
2030. Will the proposal involve transport, or the use of energy in buildings? Will the proposal involve the purchase of goods or services? If the answer is yes to either of these questions, there will be a carbon	Enhancing actions	Commitment - The property will be refurbished in accordance with plans that include: - Improvements to the thermal performance of the external envelope of the existing building beyond that required by current Building Regulations to reduce energy use - replacing all heating, cooling and air handling plant and lights. - Improvements to the energy efficiency and flexibility of the mechanical heating and ventilation systems. This will reduce the amount of energy needed to heat, cool and light the premises in the future
impact. Consider the scale and timeframe of the impact,		Commitment - The property will be refurbished to achieve a BREEAM non –domestic refurbishment 'excellent' rating, which requires CO2 reduction in line with best practice and a specific target CO2

particularly if the proposal will lead to ongoing emissions beyond the 2025 and 2030 target dates. Further guidance No impact		reduction to aim for, steps to reduce the risk and lower the impact of refrigerant leakage, together with wider sustainability criteria. Reasonable endeavour - In refurbishing the building, the impacts of the whole lifecycle of the proposal will be considered – i.e. the selection of materials, the construction process, the operation & maintenance & refurbishment of the building during its lifetime & what happens to the building at the end of its life including whether any of the building elements can be re-used/recycled. Reasonable endeavours will be made to aim for a carbon neutral development in accordance with the Mayor's Climate Emergency Action Plan target for BCC property to be carbon neutral by 2030, noting that this lease is likely to be the ONLY opportunity BCC have to secure CO2 reduction measures in this building before 2030.
	Persistence of	of effects: \Box 1 year or less \Box 1 – 5 years \Box 5+ years
	Adverse impacts	 Works - This is an old property that has not seen any major investment since the 1980s. The new tenant has developed comprehensive plans for a full refurbishment of the building. The refurbishment works have potential to generate CO2 emissions through transport of materials to site, construction processes etc. Use - CIBSE TM65 suggests that VRF systems (such as the one originally proposed) can leak 6% of their refrigerant gases per year. The Hybrid VRF heating and cooling system now proposed will use far less refrigerant, since water will be used in its place for all the internal pipework to the individual units. It is therefore unlikely to leak much refrigerant gas.
	Mitigating actions	Commitment - The property will be refurbished to achieve a BREEAM non –domestic refurbishment 'excellent' rating, which requires CO2 reduction in line with best practice and a specific target CO2 reduction to aim for, steps to reduce the risk and lower the impact of refrigerant leakage, together with wider sustainability criteria. A refrigerant management plan to completely comply with all the topics included in 6.50-6.53 in the <i>Draft Policy NZC3: Embodied carbon,</i> <i>materials and waste</i> will be implemented. See the end of this document for the relevant policy section.
	Persistence	of effects: 🗌 1 year or less 🖾 1 – 5 years 🗌 5+ years
		If a groop roof is able to be incorporated into the project, it will
ENV2 Ecological recovery: Wildlife and habitats BCC has committed to 30% of its land being managed for nature and to halve its use of pesticides by 2030.	Benefits	provide biodiversity net gain in a part of the city with relatively little green space.
Consider how your proposal can support increased space for nature, reduced use of pesticides, reduce pollution to waterways, and reduce	Enhancing actions	Reasonable endeavour - Include a green roof on suitable roof areas to provide biodiversity net gain.
consumption of products	Persistence	of effects: 🗌 1 year or less 🗌 1 – 5 years 🖾 5+ years

that undermine ecosystems around the world. If your proposal will directly lead to a reduction in habitat within Bristol, then consider	Adverse impacts					
how your proposed mitigation can lead to a biodiversity net gain. Be sure to refer to quantifiable changes wherever possible.	Mitigating actions					
Further guidance	Persistence	of effects:	□ 1 year or les	is l	🗆 1 – 5 years	□ 5+ years
			rofurbiched	oportu	have hatter wast	constation
	Benefits	Use - The facilities t building v possible. End-of-lif separatio refurbish	refurbished province of the separate vill be separate e - Material choose of the separate of t	operty will level of recy d and prepa bices or con ts for reuse d-of-life sho	have better waste ycling; all waste in ared for recycling struction methoc or recycling easi puld be adopted w	e separation I the new as much as Is that make er during future vhere feasible.
ENV3 A cleaner, low-waste city: Consumption of resources and generation of waste	Enhancing actions	Commitm enable th produced	nent - More effi e new tenant to at the premise	cient and p o reduce the s.	urpose-built recy e amount of resic	cling facilities will lual waste
	Persistence	of effects:	\Box 1 year or less	s	🗌 1 – 5 years	⊠ 5+ years
Consider what resources will be used as a result of the proposal, how they can be minimised or swapped for less impactful ones, where they will be sourced from, and what will happen to any waste generated	Adverse impacts	Works - F resources Use - The renewabl systems a Increased in energy End-of-lif separatio refurbish	efurbishment v and produce v refurbished pro e resources due and thermal upg l occupancy of t consumption a e - Material cho n of componen ments or at end	works are lik vaste. operty is lik e to replace grades to th the building and waste p bices or con ts for reuse d-of-life sho	kely to consume i rely to consume le ment of heating ne fabric. g may result in an roduction. struction methoc or recycling hard ould be avoided, v	non-renewable ess non- and ventilation overall increase ls that make ler during future where feasible.
Further guidance	Mitigating actions	Commitm with a low BREEAM Commitm will not in Reasonat re-use wh (as above complian Council co	nent - The use o v environmenta criteria. nent - Mitigatio nclude gas to re nere possible, co). Where waste t contractors ar	f local mate al impact wi n measures duce fossil The waste onsidering t e needs to b re used (Bris that waste p	erials wherever p ill be specified in as listed above, p fuel consumption hierarchy will be the whole life-cyc be disposed of ensistol Waste are the paperwork is obta	ossible and those line with olus the building applied, ensuring le of the building sure legally e Bristol City ained.

		Reasonat will be ch recycling possible.	le endeavour - Ma osen to make sepa during future refur	terial choices or construct ration of components for bishments or at end-of-lif	tion methods reuse or e as easy as
	Persistence	of effects:	1 year or less	🗌 1 – 5 years	⊠ 5+ years
ENV4 Climate resilience: Bristol's resilience to the effects of climate change	Benefits	Use - The mitigate o ensure a	refurbishment of t overheating risk in comfortable intern	the building will include m both the current and futu al environment.	easures to re climate to
changing, and increasingly frequent instances of extreme weather will become more likely over time.	Enhancing actions				
Consider how the proposal	Persistence	of effects:	\Box 1 year or less	🗌 1 – 5 years	🛛 5+ years
will perform during periods of extreme weather (particularly heat and flooding).	Adverse impacts	Use - Incr use.	eased building occ	upancy is likely to increase	e potable water
Consider if the proposal will reduce or increase risk to people and assets during extreme weather events.	Mitigating actions	Commitm specified	nent - To mitigate t – e.g. low flow tap	his water efficiency measu s, showers, toilets etc.	ures will be
-	Persistence	of effects:	\Box 1 year or less	🗌 1 – 5 years	🛛 5+ years
Statutory duty: Prevention of Pollution to air, water, or land	Benefits				
Consider how the proposal will change the likelihood of	Enhancing actions				
pollution occurring to air,	Persistence	of effects:	□ 1 year or less	□ 1 – 5 years	5+ years
water, or land and what steps will be taken to prevent pollution occurring. Adverse impacts Works - Construction work may cause noise, dust, odou pollution. There is a risk of hazardous materials (e.g. fue being accidentally released during construction works. Works - Some asbestos containing materials are presen building.		our, or light uels or paints) ent in the			
Further guidance	Mitigating actions	Committe will be pr controls a Health (C	ed - Construction e oduced and docum and measures for th OSHH); and for min	nvironmental managemer nented, which will include he Control of Substances H nimising and mitigating the	it arrangements detailed Hazardous to e resulting

e	effects of and noise	construction act	ivity, such as the genera	ation of mud, dust
(5 1 6	Committe site(s) wil Measures ensure th	ed - It is expected I be registered to for engagement at any arising iss	I that during the constru- the Considerate Const with local community ues are quickly identifie	uction phase the ructors Scheme. and stakeholders will d and dealt with.
	Committe detailed d commenc	ed - An asbestos demolition surve sing to ensure all	survey has been carried y will be undertaken pri ACMs are safely remov	out and a more or to works ed or encapsulated.
Persistence of	effects:	⊠ 1 year or less	🗌 1 – 5 years	□ 5+ years

Step 3: Actions

3.1 Action Plan

Use this section summarise and assign responsibility for any actions you have identified to improve data, enhance beneficial, or mitigate negative impacts. Actions identified in section two can be grouped together if named responsibility is under the same person.

This action plan should be updated at each stage of the project. Please be aware that the Sustainable City and Climate Change Service may use this action plan as an audit checklist during the project's implementation or operation.

Enhancing / mitigating action required	Besponsible Officer	Timescale
Linian units the tenent (DCM/N) to ensure the timely completion of	Lohn Dog / Dohin	
Liaise with the tenant (BSWN) to ensure the timely completion of		By the end of phase
the actions below.	McDowell	3 in 2027.
Committed - Improvements to the thermal performance of the	Mina Drobna –	All Phases within the
external envelope of the existing building beyond that required by	Operations Manager	scope of the planned
current Building Regulations to reduce energy use		works for each
- replacing all heating, cooling and air handling plant and lights.		Phase. Final
- Improvements to the energy efficiency and flexibility of the		achievement by end
mechanical heating and ventilation systems.		of Phase 3
Committed - The property will be refurbished to achieve a BREEAM	Mina Drobna –	All Phases within the
non –domestic refurbishment 'excellent' rating.	Operations Manager	scope of the planned
6	- 0	works for each
		Phase, Final
		achievement by end
		of Phase 3
Committed More officient and nurness huilt recycling facilities	Mina Drohna	All Phases within the
will enable the new tenant to reduce the amount of residual waste	Operations Manager	All Flidses within the
will enable the new tenant to reduce the amount of residual waste	Operations wanager	scope of the plained
produced at the premises.		
		Phase. Final
		achievement by end
		of Phase 3
Committed - The use of local materials wherever possible and	Mina Drobna –	All Phases
those with a low environmental impact will be specified in line with	Operations Manager	
BREEAM criteria. A refrigerant management plan to completely		
comply with all the topics included in 6.50-6.53 in the Draft Policy		
NZC3: Embodied carbon, materials and waste will be implemented.		
Mitigation measures as listed above, plus the building will not		
include gas to reduce fossil fuel consumption.		
Committed - To mitigate this water efficiency measures will be	Mina Drobna –	Phase 1 for new
specified – e.g. low flow taps, showers, toilets etc.	Operations Manager	downstairs toilet
	,	block. Phase 2 and 3
		for other areas.

Enhancing / mitigating action required	Responsible Officer	Timescale
Liaise with the tenant (BSWN) to ensure the timely completion of	John Bos / Robin	By the end of phase
the actions below.	McDowell	3 in 2027.
Committed - Documented construction site management plans will	Mina Drobna –	All Phases
be implemented. They will include compliance with COSHH	Operations Manager	
regulations and minimising and mitigating mud, dust, noise and		
waste. This will include registration with the Considerate		
Constructors Scheme.		
Committed - An asbestos survey has been carried out and a more	Mina Drobna –	Survey to be
detailed demolition survey will be undertaken prior to works	Operations Manager	undertaken prior to
commencing to ensure all ACMs are safely removed or		Phase 1 to
encapsulated.		determine in which
		Phase asbestos
		removal works
		needs to be
		undertaken
Reasonable endeavours will be made to aim for a carbon neutral	Mina Drobna –	All Phases within the
development in accordance with the Mayor's Climate Emergency	Operations Manager	scope of the planned
Action Plan target for BCC property to be carbon neutral by 2030,		works for each
noting that this agreement to lease is likely to be the ONLY		Phase. Final
opportunity BCC have to secure CO2 reduction measures in this		achievement by end
building before 2030.		of Phase 3
Reasonable endeavour - In refurbishing the building, the impacts of	Mina Drobna –	All Phases
the whole lifecycle of the proposal will be considered.	Operations Manager	
Reasonable endeavour - The waste hierarchy will be applied,	Mina Drobna –	All Phases
ensuring re-use where possible, considering the whole lifecycle of	Operations Manager	
the building (as above). Where waste needs to be disposed of		
ensure legally compliant contractors are used (Bristol Waste are		
the Bristol City Council contractor) and that waste paperwork is		
obtained.		
Reasonable endeavour - Material choices or construction methods	Mina Drobna –	All Phases
will be chosen to make separation of components for reuse or	Operations Manager	
recycling during future refurbishments or at end-of-life as easy as		
possible.		
Reasonable endeavour - Reasonable endeavours should be made	Mina Drobna –	Phase 3
to include a green root on suitable root areas to provide cooling	Operations Manager	
benefits and reduction in surface water run-off.		

Step 4: Review

The Sustainable City and Climate Change Service need at least five working days to comment and feedback on your impact assessment. Assessments should only be marked as reviewed when they provide sufficient information for decision-makers on the environmental impact of the proposal. Please seek feedback and review from the <u>Sustainable City and Climate Change Service</u> before final submission of your decision pathway documentation¹.

Where impacts identified in this assessment are deemed significant, they will be summarised here and included on the cover sheet of the decision pathway documentation.

Summary of significant beneficial impacts and opportunities to support the Climate, Ecological and Corporate Strategies (ENV1,2,3,4):

¹ Review by the Sustainable City and Climate Change Service confirms there is sufficient analysis for decision makers to consider the likely environmental impacts at this stage. This is not an endorsement or approval of the proposal.

Long term in-use impacts from the refurbished building will include lower greenhouse gas emissions following the HVAC and thermal envelope upgrades, allowing the tenant to move all their staff to this site instead of being split over two sites, will have better waste separation to promote recycling and will include measures to mitigate the risk of overheating and ensure comfort in a future warmer climate. **Significant long-term benefits with limited opportunities to enhance these further.**

Summary of significant adverse impacts and how they can be mitigated:

Short term impacts from the construction works and transport will include greenhouse gas emissions, generate waste and may cause noise, dust, odour, light pollution, or the release of hazardous materials (asbestos containing materials are on site, fuels, paints, etc.). Not significant, since mitigated by long term benefits (unless a serious unplanned release of pollution or hazardous materials occurs).

Long term in-use impacts from the refurbished building include higher occupancy reducing energy and water savings, producing more waste and being more likely to leak refrigerant gases from the proposed VRF system. **Not significant, since mitigated by long term benefits**

Environmental Performance Team Reviewer:	Submitting author:
Giles Liddell, Environmental Performance Co-ordinator	Robin McDowell,
	Enterprise & Business Support Manager
Date: 31/08/2023 (one action updated 17/10/2023)	Date: 29/08/2023

The part of *Draft Policy NZC3: Embodied carbon, materials and waste* that refers to refrigerants:

Refrigerants

6.50 Many refrigerants used in fixed building services like heating and cooling systems have the potential to make significant contributions towards global warming and climate change if released to the atmosphere. Refrigerants often have a global warming potential considerably higher than that of CO2. For reference, R32 has a global warming potential 675 times that of CO2 and R410A is a greenhouse gas 2,088 times more potent than CO2.

6.51 As heat pumps become more common in the transition to a zero carbon society, it is becoming increasingly important to consider the climate impact of the refrigerants they use.

6.52 The potential global warming impact of refrigerants should be minimised by:

- Minimising the volume and mass of refrigerants by:
 - Minimising or eliminating the need for heating or cooling systems through energy efficient design.
 - Avoiding the use of systems that have high refrigerant charge per kW capacity, such as systems that use refrigerant as the distribution medium to emitters.
- Minimising the potential impact of the refrigerant used by selecting equipment that uses refrigerants with the lowest available global warming potential.
- Minimising the risk of refrigerant leakage through:
 - Avoiding the use of systems that use refrigerant as a distribution medium, particularly where refrigerant is distributed to emitters.
 - Specifying leak detection and monitoring systems in accordance with industry best practice.
 - Regular maintenance.
 - Ensuring that installation, maintenance, decommissioning and disposal of all appliances using refrigerants is only ever undertaken by suitably qualified persons.

6.53 Where a developer proposes using a system with refrigerants with a global warming potential greater than 750, full justification will be required including numerical whole-life carbon modelling.