

Appendix 4

Will the decision/proposal impact...	Impact	If an impact or potential impacts are identified			
		Describe impacts or potential impacts on emissions from the Council and its contractors.	Describe impact or potential impacts on emissions across Rotherham as a whole.	Describe any measures to mitigate emission impacts	Outline any monitoring of emission impacts that will be carried out
Emissions from non-domestic buildings?	<p>Increases emissions during construction.</p> <p>Reduces emissions during operation.</p>	<p>The final development will reduce emissions from the operation of the Council-led Markets and Libraries services.</p> <p>The development will refurbish the 1970s indoor market, extending its useable lifespan and improving environmental performance, such as more effective passive heating/ cooling.</p> <p>The existing outdoor market and surrounding buildings will be demolished and rebuilt, resulting in an increase in emissions during construction. In operation the new buildings will generate less emissions than the existing. The markets building currently runs off gas heaters, which will be switched for air-source heat pumps</p>	<p>Overall effect on emissions from non-domestic buildings across the borough is too complex to estimate. Main emission benefits have been accounted for in this document.</p>	<p>The design brief for the buildings includes measures to maximise energy efficiency and reduce emissions including for example BREEAM rating and travel plans, low energy lighting, passive heating/ cooling, clean fuel sources (switching from gas to electric) and thermal efficiency. The buildings have been designs so that renewable energy systems (such as solar PV panels) can be added once funding has been secured.</p> <p>Through reusing existing structures where possible and upgrading functionality, significant carbon emission savings will be made.</p>	<p>The main contractor will ensure compliance with all building regs and relevant legislation. This will be monitored by RMBC.</p> <p>During the award and construction stages regular workshops will be held to ensure the entire design and construction teams know their responsibilities in terms of BREEAM scoring.</p> <p>After completion and handover further client/ construction team liaison will be required for items such as seasonal commissioning which should be a targeted credit in terms of both BREEAM but also energy in use during all times of the year. Post occupancy</p>

		which are powered by electricity.			reviews and measurement/targeting of energy use will also assist.
Emissions from transport?	Increases emissions during construction. Reduces emissions during operation.	During the construction phase, there will be an increase in traffic and machinery on site, having an impact on emissions.	The site is well connected to public transport links. The public realm will be revitalised to encourage walking and cycling. We envisage the revitalised and better-connected library site and public realm will reduce reliance on cars for shopping and leisure.	The site is within walking distance of the bus interchange, tram train and railway station and the design brief for the scheme includes consideration of measures to enhance pedestrian connectivity with key arrival points including public transport nodes across the town centre. Active travel will be built into the scheme, including cycle parking and facilities.	The main contractor appointed will be required to abide by standards to minimise emissions. Once in operation, RMBC may monitor active travel more generally and the impact of the project on this.
Emissions from waste, or the quantity of waste itself?	Increases emissions during construction. No impact on emissions during operation.	Increased emissions due to demolition, site clearing works and waste from construction.	Increased emissions due to demolition, site clearing works and waste from construction.	Waste Management Plan to be prepared and be in place as part of planning condition requirements before operations on site can commence and impacts experienced. In line with Part H of building regs., waste will be kept to a minimum, with reuse and recycling wherever possible.	As above the main contractor will be responsible for compliance, which will be monitored by RMBC. Prior to any work commencing on site (including demolition), a Construction Environmental Management Plan (CEMP) was submitted to Planning by the

				Reuse of the existing indoor markets building reduces waste significantly compared with new construction.	main contractor, to promote sustainable development.
Emissions from housing and domestic buildings?	No impact	N/A	N/A	N/A	N/A
Emissions from construction and/or development?	<p>Increases emissions during construction.</p> <p>Reduces emissions during operation.</p>	<p>The proposed construction works will have a direct impact on emissions. This includes, traveling to site, operation of vehicles on site, operation of any other vehicles needed to construct/dig proposed components, and the use of local power generation (generators) until permanent power is available.</p> <p>The embodied energy required to produce construction materials will increase emissions.</p>	<p>The works will be designed to minimise the impact on the town centre and surrounding areas, including reuse of existing buildings where possible and sustainable/ low-carbon design.</p>	<p>Compliance with relevant building regs will ensure emissions and waste are kept to an absolute minimum.</p> <p>The proposal for the redevelopment of the Central Library aspires to achieve BREEAM Very Good and has achieved this ambition at the design stage pre-assessments.</p> <p>The scheme has been future-proofed to allow for renewables to be installed once funding has been secured.</p>	<p>RMBC will monitor works and ensure that the main contractor is complying with all relevant regulations and BREEAM targets.</p> <p>The BREEAM tracker is updated periodically to reflect any design changes, and an updated BREEAM assessment will be conducted following the conclusion of the RIBA Stage 4 design.</p>

Carbon capture (e.g. through trees)?	No impact	The final development arrangement does not have any quantifiable impact on carbon capture.		The development will provide new soft landscaping and planting, but not significantly increase carbon capture.	Captured through Borough/Region wide indicators and monitoring – no site-specific monitoring proposed.
--------------------------------------	-----------	--	--	--	--

Identify any emission impacts associated with this decision that have not been covered by the above fields:

The information in this Appendix will be updated as the more detailed design is developed and agreed.

Please provide a summary of all impacts and mitigation/monitoring measures:

The scheme is designed to promote a healthier and more active Rotherham town centre, with improved public realm, landscaping and leisure spaces. By reusing the existing indoor market building and improving its environmental performance, the waste and emissions related to demolition and rebuild have been prevented for this part of the development. The new buildings will ensure much improved energy efficiency in the operation of the library, gallery/event space and café. The gas fuelled heating and cooling system in the existing indoor market building will be replaced with air source heat pumps which are powered by electricity, and all new buildings will be heated and cooled by renewable fuel sources.

We will ensure emission reducing measures are implemented wherever feasible in the design, construction, operation and maintenance of the building and public realm.

When appointed, the main contractor will be responsible for compliance with relevant building regs and other relevant legislation, which RMBC will monitor carefully.

Supporting information:	
Completed by: (Name, title, and service area/directorate).	Eleanor Bainbridge, Project Manager, Regeneration and Environment
Please outline any research, data, or information used to complete this [form].	Stage 3 design information, Building Regs Part L compliance

If quantities of emissions are relevant to and have been used in this form please identify which conversion factors have been used to quantify impacts.	
Tracking [to be completed by Policy Support / Climate Champions]	Tracking Reference: CIA 220 Arthur King Principal Climate Change Officer Strategic Asset Management Finance and Customer Services