

Appendix 4 - Carbon Impact Assessment

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?	Increases emissions during construction. Reduces emissions during operation.	The proposal does not involve Council buildings.	This project replaces old non-domestic buildings (to erect 6 light industry units) and introduces two new F&B units on site. Operation of these buildings is anticipated to create a net decrease in emissions, however, the 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>The new/refurbished buildings will be designed to present day standards.</p> <p>While RMBC will have no control over the future occupancy of the units, which might potentially impact the emissions levels depending on the use, the key improvement consideration is that as a new building it will be compliant with the Building Regulations and relevant standards for the energy performance of new buildings (Part L of the Building Regulations).</p> <p>The proposal includes a significant level of landscaping, with the intention of creating a more pleasant environment, including the mitigation or combatting of said emissions.</p>	<p>Possible occupancy reviews and measurement/targeting energy use could be carried out.</p> <p>The main contractor will ensure compliance with all building regs and relevant legislation. This will be monitored by RMBC.</p>

Appendix 4 - Carbon Impact Assessment

Emissions from transport?	Increase emissions	During the construction stage there is going to be a likely increase in emissions due to the increased number of vehicles on site (including the construction machinery and contractors' vehicles).	The addition of a series of new businesses may attract a larger number of vehicles on site. The site has however been chosen for its proximity to the new tram/train stop and cycle ways along Sheffield Road and a new accessible pathway will be created providing a safe and pleasant connection and encouraging the use of cycling and public transport.	Wider improvements to the area, i.e. new segregated cycle tracks extending the existing route from the Sheffield City boundary near to the Magna Science Adventure Centre on the A6178 through to Rotherham Town Centre aim at promoting active travel to site (note: phase 1 – from the borough boundary to Bessemer Way is complete, remaining section to Rotherham will be under construction until the summer). There is a provision of 5 twin EV charging points within the scheme, and also ducting to enable installation of a greater number of EV chargers at a later stage. The provision of EV charging is a planning condition in the interest of supporting and encouraging low emission vehicles and in the interest of air quality enhancement. Public realm works are designed to encourage active modes of travel.	The main contractor appointed will be required to abide by standards to minimise emissions.
Emissions from waste, or the quantity of waste itself?	Increase quantity	Contractors will be appointed by the Council and whilst in construction phase, the project will generate waste given the		Promotion of waste segregation and diversion from landfill during the construction process and adherence with local waste	Statutory reporting requirements during construction. Submitting and getting an approval for a

Appendix 4 - Carbon Impact Assessment

		site's previous use and current condition.		management practice during operation.	Construction Environmental Management Plan to the Local Planning Authority prior to the commencement of the development is a planning condition, which, among other things covers waste storage, collection, recycling and removal.
Emissions from housing and domestic buildings?	No impact	N/A	N/A	N/A	N/A
Emissions from construction and/or development?	Increases emissions	The proposed scheme would include a demolition and a significant amount of construction works that will have a direct impact on emissions. These include, traveling to site, operation of vehicles on site, operation of any other vehicles needed to construct/dig proposed components, the use of local power generation (generators) until permanent power is available will likely affect emissions also. The embodied energy required to produce construction materials will increase emissions.	The works will be designed to minimise the impact on the surrounding areas	<p>Seek to achieve permanent power connections as early in the programme as practical to avoid the use of generators.</p> <p>The new construction works will use Modern Methods of Construction designed to reduce waste and improve efficiency.</p> <p>Look to promote active travel and reduce single occupancy car journeys.</p>	RMBC will monitor works and ensure that the main contractor is complying with all relevant regulations.

Appendix 4 - Carbon Impact Assessment

Carbon capture (e.g., through trees)?	Reduce emissions		Included in the proposal is a significant amount of landscaping, some existing and some proposed to add/extend the existing amount. There will be a number of trees planted along the south end of the site, facing Sheffield Road. The extra landscaping/vegetation will reduce emissions on site. Biodiversity net gain: the current proposals result in a net unit change for the area habitats of +0.27 , which correlates to a gain of +14.29% in biodiversity units. The net unit change for the hedgerows on site is calculated at +0.12 which correlates to a gain of +58.48% in biodiversity units. Therefore, the development meets the DEFRA recommended 10% net gain in biodiversity units, and no additional habitats have been recommended in the BNG report.	Planting of trees and other vegetation to mitigate the effects on emissions the site would have.	To maintain the positive impact of the landscaping scheme post development, a relevant planning condition requires setting out the details of the responsibility for maintenance and a schedule of operations for the lifetime of the development, including replacement planting, that will be carried out for a period of 5 years after completion of the planting scheme.
Identify any emission impacts associated with this decision that have not been covered by the above fields:					

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

To summarise, it is expected that the project will, in the construction phase start to negatively affect levels of emissions on the surrounding environment and the net emission levels of Rotherham as a whole. The project will have relevant mitigation strategies in place to counter the increase in emission levels. As the project moves to completion it will replace existing old and inefficient buildings with new buildings leading to a long term positive impact. The project also

Appendix 4 - Carbon Impact Assessment

factors it into the proposal the addition of vegetation/landscaping to create a green belt in order to mitigate/reduce the levels of emissions generated by this site.

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

Once 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).	Tanya Shvab, Regeneration, RIDO
Please outline any research, data, or information used to complete this [form].	Initial information was provided by the appointed architects AHR in consultation with their Environmental experts. Stage 4 design information. Planning decision notice for the development is used for reference.
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]	25 th November 2024