

Climate Impact Assessment, Appendix 4, DELEGATED OFFICER DECISION REPORT - Proposed implementation of 30mph speed limit including traffic calming (Road Humps) – Sheffield Road

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 the Borough 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?	None	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance
Emissions from transport?	Unknown	There is expected to be very minimal additional emissions associated with the development of this scheme.	The lower speed limit could result in a 0-10% reduction in emissions depending how vehicles react to the new speed limit. However, this is likely to be partly offset by an increase in emissions from vehicles braking and accelerating over the road humps.	Not applicable in this instance	Not applicable in this instance
Emissions from waste, or the quantity of waste itself?	Increase	A minor one off increase is expected due to excavations and site clearance, including removal of existing road markings.	Not applicable in this instance	The Council's Direct Services Organisation will be expected to work with contractors to ensure carbon emissions are minimised as far as practicable, including actively seeking opportunities to cut emissions from existing operation.	Not applicable in this instance

Emissions from housing and domestic buildings?	None	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance	Not applicable in this instance
Emissions from construction and/or development?	Increase (Slight)	All highway schemes have construction emissions arising from the supply, installation, maintenance, and operation of the schemes. Thermoplastic road markings have a greenhouse gas emissions factor of 5.7 tCO ₂ e per tonne. They are also a leading source of ocean plastic pollution. The scale of this is expected to be minimal on this occasion given the scale of works involved.	No impact expected beyond the contribution from RMBC and its contractors.	The Council's Direct Services Organisation will be expected to work with contractors to ensure carbon emissions are minimised as far as practicable, including actively seeking opportunities to cut emissions from existing operation.	Not applicable in this instance
Carbon capture (e.g. through trees)?	None	The proposed scheme does not include Carbon Capture measures due to the nature of works involved	No impact expected.	Not applicable in this instance	Not applicable in this instance
Identify any emissions impacts associated with this decision which have not been covered by the above fields:					
None					

Will the proposal affect Council services' resilience to climate change, or the capacity of people living in the Borough to adapt to climate change?

There will be no effect on the Council's services or residents' resilience to climate change or their ability to adapt to climate change in the future.

Provide a summary of all impacts and mitigation/monitoring measures:

Increases associated with the development, construction, maintenance and operation reflect the systemic nature of the carbon emissions problem; whilst the energy and construction systems are emitters of carbon, any additional activity utilising these systems can be expected to result in no increases in emissions.

The proposal relates to the introduction of a 30mph speed and installation of two road humps on Sheffield Road, Fence. This could result in an increase in carbon emissions due to braking and acceleration at the road humps. There will be 'one off' carbon impacts from contractor transport and the construction of the road humps, associated signage and additional road markings. These impacts are understood to be small in the context of overall transport emissions in Rotherham, the Council's Net Zero targets and remaining carbon budgets.

Supporting information:

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Please outline any research, data or information used to complete this Climate Impact Assessment.	Fondzenyuy, S.K., Turner, B.M., Burlacu, A.F., Jurewicz, C., Usami, D.S., Feudjio, S.L.T. & Persia, L. 2024. The Impact of Speed Limit Change on Emissions: A Systematic Review of Literature. <i>Sustainability</i> . [Online]. 16 (17), article no. 7712 [no pagination]. Accessed 31 July 2026. Available from: https://doi.org/10.3390/su16177712
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.	
Validation	Tracking Reference: CIA 681 Arthur King Principal Climate Change Officer