Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Environmental Statement
Volume 2: Appendices

Appendix 9.16: Air Quality Operational Phase Back-Up CHP Emissions Assessment - Ecological Receptor Results

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Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 Regulation 14

This document forms a part of the Environmental Statement for the Hinckley National Rail Freight Interchange project.

Tritax Symmetry (Hinckley) Limited (TSH) has applied to the Secretary of State for Transport for a Development Consent Order (DCO) for the Hinckley National Rail Freight Interchange (HNRFI).

To help inform the determination of the DCO application, TSH has undertaken an environmental impact assessment (EIA) of its proposals. EIA is a process that aims to improve the environmental design of a development proposal, and to provide the decision maker with sufficient information about the environmental effects of the project to make a decision.

The findings of an EIA are described in a written report known as an Environmental Statement (ES). An ES provides environmental information about the scheme, including a description of the development, its predicted environmental effects and the measures proposed to ameliorate any adverse effects.

Further details about the proposed Hinckley National Rail Freight Interchange are available on the project website:

http://www.hinckleynrfi.co.uk/

The DCO application and documents relating to the examination of the proposed development can be viewed on the Planning Inspectorate's National Infrastructure Planning website:

https://infrastructure.planninginspectorate.gov.uk/projects/east-midlands/hinckley-national-rail-freight-interchange/

APPENDIX 6.2.9.16: AIR QUALITY OPERATIONAL PHASE BACK-UP CHP EMISSIONS ASSESSMENT – ECOLOGICAL RECEPTOR RESULTS

The results of the Critical Level and Nitrogen Critical Load assessments are provided for Blaby District Council for the transects modelled in ADMS-Roads.

Critical Level Assessment

Background pollutant concentrations were obtained from the latest Defra background concentration maps[1], which are provided for the UK as 1km x1km grid network. The latest maps are based on 2018 monitoring and meteorological data. Background concentrations of NOx were obtained for the grid squares covering the ecological receptor locations for 2026 and 2036. 2030 data was used for the 2036 scenarios as this is the latest year for which background mapped concentrations were derived by Defra at the time of assessment.

Exceedances of the annual mean NOx air quality objective are shown in bold.

Table 16.1: Blaby District Council critical level assessment in Opening Year 2026.

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T1_15m	11.3	12.8	12.8	+0.1
Burbage LNR_T1_25m	11.3	12.6	12.6	+0.1
Burbage LNR_T1_35m	11.3	12.4	12.5	+0.1
Burbage LNR_T1_45m	11.3	12.3	12.4	+0.1

[1] Defra (2020) background pollutant concentration maps [https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2018]

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T1_55m	11.3	12.2	12.3	+0.1
Burbage LNR_T1_65m	11.3	12.2	12.3	+0.1
Burbage LNR_T1_75m	11.3	12.1	12.2	+0.1
Burbage LNR_T1_85m	11.3	12.1	12.2	+0.1
Burbage LNR_T1_95m	11.3	12.1	12.1	+0.1
Burbage LNR_T1_105m	11.3	12.1	12.1	+0.1
Burbage LNR_T1_115m	11.3	12.0	12.1	+0.1
Burbage LNR_T1_125m	11.3	12.0	12.1	+0.1
Burbage LNR_T1_135m	11.3	12.0	12.1	+0.1
Burbage LNR_T1_145m	11.3	12.0	12.0	+0.1
Burbage LNR_T1_155m	11.3	12.0	12.0	+0.1

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T1_165m	11.3	12.0	12.0	+0.1
Burbage LNR_T1_175m	11.3	11.9	12.0	+0.1
Burbage LNR_T1_185m	11.4	12.1	12.1	+0.1
Burbage LNR_T1_195m	11.3	11.9	12.0	+0.1
Burbage LNR_T2_42m	11.0	12.0	12.0	0.0
Burbage LNR_T2_52m	11.0	11.9	11.9	0.0
Burbage LNR_T2_62m	11.0	11.8	11.8	0.0
Burbage LNR_T2_72m	11.0	11.8	11.8	0.0
Burbage LNR_T2_82m	11.0	11.7	11.8	0.0
Burbage LNR_T2_92m	11.0	11.7	11.7	0.0
Burbage LNR_T2_102m	11.0	11.7	11.7	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T2_112m	11.0	11.7	11.7	0.0
Burbage LNR_T2_122m	11.0	11.7	11.7	0.0
Burbage LNR_T2_132m	11.0	11.6	11.7	0.0
Burbage LNR_T2_142m	11.0	11.6	11.7	0.0
Burbage LNR_T2_152m	11.0	11.6	11.6	0.0
Burbage LNR_T2_162m	11.0	11.6	11.6	0.0
Burbage LNR_T2_172m	11.0	11.6	11.6	0.0
Burbage LNR_T2_182m	11.0	11.6	11.6	0.0
Burbage LNR_T2_192m	11.0	11.6	11.6	0.0
Burbage LNR_T2_202m	11.0	11.6	11.6	0.0
Burbage LNR_T3_76m	11.0	11.7	11.9	+0.1

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T3_86m	11.0	11.7	11.8	+0.1
Burbage LNR_T3_96m	11.0	11.7	11.8	+0.1
Burbage LNR_T3_106m	11.0	11.7	11.8	+0.1
Burbage LNR_T3_116m	11.0	11.7	11.8	+0.1
Burbage LNR_T3_126m	11.0	11.6	11.7	+0.1
Burbage LNR_T3_136m	11.0	11.6	11.7	+0.1
Burbage LNR_T3_146m	11.0	11.6	11.7	+0.1
Burbage LNR_T3_156m	11.0	11.6	11.7	+0.1
Burbage LNR_T3_166m	11.0	11.6	11.7	+0.1
Burbage LNR_T3_176m	11.0	11.6	11.7	+0.1
Burbage LNR_T3_186m	11.0	11.6	11.7	+0.1

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T3_196m	11.0	11.6	11.6	+0.1
Freeholt Wood AW_T1_55m	13.6	15.6	15.6	+0.1
Freeholt Wood AW_T1_65m	13.6	15.4	15.5	+0.1
Freeholt Wood AW_T1_75m	13.6	15.4	15.4	0.0
Freeholt Wood AW_T1_85m	13.6	15.3	15.3	0.0
Freeholt Wood AW_T1_95m	13.6	15.2	15.2	0.0
Freeholt Wood AW_T1_105m	13.6	15.1	15.2	0.0
Freeholt Wood AW_T1_115m	13.6	15.1	15.1	0.0
Freeholt Wood AW_T1_125m	13.6	15.0	15.1	0.0
Freeholt Wood AW_T1_135m	13.6	15.0	15.0	0.0
Freeholt Wood AW_T1_145m	13.6	15.0	15.0	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Freeholt Wood AW_T1_155m	13.6	14.9	15.0	0.0
Freeholt Wood AW_T1_165m	13.6	14.9	14.9	0.0
Freeholt Wood AW_T1_175m	13.6	14.9	14.9	0.0
Freeholt Wood AW_T1_185m	13.6	14.9	14.9	0.0
Freeholt Wood AW_T1_195m	13.6	14.9	14.9	0.0
Aston Firs SSSI_T1_7m	11.7	14.0	14.1	0.0
Aston Firs SSSI_T1_17m	11.7	13.4	13.5	0.0
Aston Firs SSSI_T1_27m	11.7	13.1	13.2	0.0
Aston Firs SSSI_T1_37m	11.7	13.0	13.0	0.0
Aston Firs SSSI_T1_47m	11.7	12.9	12.9	0.0
Aston Firs SSSI_T1_57m	11.7	12.8	12.8	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Aston Firs SSSI_T1_67m	11.7	12.7	12.7	0.0
Aston Firs SSSI_T1_77m	11.7	12.7	12.7	0.0
Aston Firs SSSI_T1_87m	11.7	12.6	12.7	0.0
Aston Firs SSSI_T1_97m	11.7	12.6	12.6	0.0
Aston Firs SSSI_T1_107m	11.7	12.6	12.6	0.0
Aston Firs SSSI_T1_117m	11.7	12.6	12.6	0.0
Aston Firs SSSI_T1_127m	11.7	12.5	12.6	0.0
Aston Firs SSSI_T1_137m	11.7	12.5	12.5	0.0
Aston Firs SSSI_T1_147m	11.7	12.5	12.5	0.0
Aston Firs SSSI_T1_157m	11.7	12.5	12.5	0.0
Aston Firs SSSI_T1_167m	11.7	12.5	12.5	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Aston Firs SSSI_T1_177m	11.7	12.5	12.5	0.0
Aston Firs SSSI_T1_187m	11.7	12.5	12.5	0.0
Aston Firs SSSI_T1_197m	11.7	12.5	12.5	0.0
Aston Firs SSSI_T2_0m	11.7	14.6	14.6	0.0
Aston Firs SSSI_T2_10m	11.7	13.7	13.7	0.0
Aston Firs SSSI_T2_20m	11.7	13.3	13.4	0.0
Aston Firs SSSI_T2_30m	11.7	13.1	13.2	0.0
Aston Firs SSSI_T2_40m	11.7	13.0	13.0	0.0
Aston Firs SSSI_T2_50m	11.7	12.9	12.9	0.0
Aston Firs SSSI_T2_60m	11.7	12.8	12.9	0.0
Aston Firs SSSI_T2_70m	11.7	12.8	12.8	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Aston Firs SSSI_T2_80m	11.7	12.7	12.8	0.0
Aston Firs SSSI_T2_90m	11.7	12.7	12.7	0.0
Aston Firs SSSI_T2_100m	11.7	12.7	12.7	0.0
Aston Firs SSSI_T2_110m	11.7	12.6	12.7	0.0
Aston Firs SSSI_T2_120m	11.7	12.6	12.6	0.0
Aston Firs SSSI_T2_130m	11.7	12.6	12.6	0.0
Aston Firs SSSI_T2_140m	11.7	12.6	12.6	0.0
Aston Firs SSSI_T2_150m	11.7	12.6	12.6	0.0
Aston Firs SSSI_T2_160m	11.7	12.6	12.6	0.0
Aston Firs SSSI_T2_170m	11.7	12.5	12.6	0.0
Aston Firs SSSI_T2_180m	11.7	12.5	12.6	0.0

Ecological Receptor	Defra NOx Background Concentration 2026 (µg.m^{-3})	2026 With Development (µg.m^{-3})	2026 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Aston Firs SSSI_T2_190m	11.7	12.5	12.5	0.0
Aston Firs SSSI_T2_200m	11.7	12.5	12.5	0.0
Narborough Bogs SSSI_127m	15.9	19.0	19.0	0.0
Narborough Bogs SSSI_137m	15.9	18.8	18.8	0.0
Narborough Bogs SSSI_147m	15.9	18.7	18.7	0.0
Narborough Bogs SSSI_157m	15.9	18.6	18.6	0.0
Narborough Bogs SSSI_167m	15.9	18.5	18.5	0.0
Narborough Bogs SSSI_187m	15.9	18.3	18.3	0.0
Narborough Bogs SSSI_177m	15.9	18.4	18.4	0.0
Narborough Bogs SSSI_197m	15.9	18.2	18.2	0.0

**Discrepancies in changes due to rounding effects*

Table 16.2: Blaby District Council critical level assessment in Future Year 2036.

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T1_15m	10.5	11.5	11.5	+0.1
Burbage LNR_T1_25m	10.5	11.3	11.4	+0.1
Burbage LNR_T1_35m	10.5	11.2	11.3	+0.1
Burbage LNR_T1_45m	10.5	11.2	11.2	+0.1
Burbage LNR_T1_55m	10.5	11.1	11.2	+0.1
Burbage LNR_T1_65m	10.5	11.1	11.1	+0.1
Burbage LNR_T1_75m	10.5	11.0	11.1	+0.1
Burbage LNR_T1_85m	10.5	11.0	11.1	+0.1
Burbage LNR_T1_95m	10.5	11.0	11.1	+0.1
Burbage LNR_T1_105m	10.5	11.0	11.0	+0.1

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T1_115m	10.5	11.0	11.0	+0.1
Burbage LNR_T1_125m	10.5	11.0	11.0	+0.1
Burbage LNR_T1_135m	10.5	10.9	11.0	+0.1
Burbage LNR_T1_145m	10.5	10.9	11.0	+0.1
Burbage LNR_T1_155m	10.5	10.9	11.0	+0.1
Burbage LNR_T1_165m	10.5	10.9	11.0	+0.1
Burbage LNR_T1_175m	10.5	10.9	11.0	+0.1
Burbage LNR_T1_185m	10.5	11.0	11.0	+0.1
Burbage LNR_T1_195m	10.5	10.9	11.0	+0.1
Burbage LNR_T2_42m	10.2	10.9	10.9	0.0
Burbage LNR_T2_52m	10.2	10.8	10.8	0.0

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T2_62m	10.2	10.7	10.8	0.0
Burbage LNR_T2_72m	10.2	10.7	10.7	0.0
Burbage LNR_T2_82m	10.2	10.7	10.7	0.0
Burbage LNR_T2_92m	10.2	10.7	10.7	0.0
Burbage LNR_T2_102m	10.2	10.6	10.7	0.0
Burbage LNR_T2_112m	10.2	10.6	10.7	0.0
Burbage LNR_T2_122m	10.2	10.6	10.7	0.0
Burbage LNR_T2_132m	10.2	10.6	10.6	0.0
Burbage LNR_T2_142m	10.2	10.6	10.6	0.0
Burbage LNR_T2_152m	10.2	10.6	10.6	0.0
Burbage LNR_T2_162m	10.2	10.6	10.6	0.0

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T2_172m	10.2	10.6	10.6	0.0
Burbage LNR_T2_182m	10.2	10.6	10.6	0.0
Burbage LNR_T2_192m	10.2	10.6	10.6	0.0
Burbage LNR_T2_202m	10.2	10.6	10.6	0.0
Burbage LNR_T3_76m	10.2	10.7	10.8	+0.1
Burbage LNR_T3_86m	10.2	10.7	10.8	+0.1
Burbage LNR_T3_96m	10.2	10.7	10.8	+0.1
Burbage LNR_T3_106m	10.2	10.6	10.7	+0.1
Burbage LNR_T3_116m	10.2	10.6	10.7	+0.1
Burbage LNR_T3_126m	10.2	10.6	10.7	+0.1
Burbage LNR_T3_136m	10.2	10.6	10.7	+0.1

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Burbage LNR_T3_146m	10.2	10.6	10.7	+0.1
Burbage LNR_T3_156m	10.2	10.6	10.7	+0.1
Burbage LNR_T3_166m	10.2	10.6	10.7	+0.1
Burbage LNR_T3_176m	10.2	10.6	10.7	+0.1
Burbage LNR_T3_186m	10.2	10.6	10.7	+0.1
Burbage LNR_T3_196m	10.2	10.6	10.6	+0.1
Freeholt Wood AW_T1_55m	12.0	13.4	13.4	+0.1
Freeholt Wood AW_T1_65m	12.0	13.3	13.3	+0.1
Freeholt Wood AW_T1_75m	12.0	13.2	13.2	0.0
Freeholt Wood AW_T1_85m	12.0	13.2	13.2	0.0
Freeholt Wood AW_T1_95m	12.0	13.1	13.1	0.0

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Freeholt Wood AW_T1_105m	12.0	13.1	13.1	0.0
Freeholt Wood AW_T1_115m	12.0	13.0	13.1	0.0
Freeholt Wood AW_T1_125m	12.0	13.0	13.0	0.0
Freeholt Wood AW_T1_135m	12.0	13.0	13.0	0.0
Freeholt Wood AW_T1_145m	12.0	12.9	13.0	0.0
Freeholt Wood AW_T1_155m	12.0	12.9	13.0	0.0
Freeholt Wood AW_T1_165m	12.0	12.9	12.9	0.0
Freeholt Wood AW_T1_175m	12.0	12.9	12.9	0.0
Freeholt Wood AW_T1_185m	12.0	12.9	12.9	0.0
Freeholt Wood AW_T1_195m	12.0	12.9	12.9	0.0
Aston Firs SSSI_T1_7m	10.6	12.2	12.3	0.0

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Aston Firs SSSI_T1_17m	10.6	11.8	11.9	0.0
Aston Firs SSSI_T1_27m	10.6	11.6	11.7	0.0
Aston Firs SSSI_T1_37m	10.6	11.5	11.6	0.0
Aston Firs SSSI_T1_47m	10.6	11.5	11.5	0.0
Aston Firs SSSI_T1_57m	10.6	11.4	11.4	0.0
Aston Firs SSSI_T1_67m	10.6	11.4	11.4	0.0
Aston Firs SSSI_T1_77m	10.6	11.3	11.4	0.0
Aston Firs SSSI_T1_87m	10.6	11.3	11.3	0.0
Aston Firs SSSI_T1_97m	10.6	11.3	11.3	0.0
Aston Firs SSSI_T1_107m	10.6	11.3	11.3	0.0
Aston Firs SSSI_T1_117m	10.6	11.3	11.3	0.0

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Aston Firs SSSI_T1_127m	10.6	11.2	11.3	0.0
Aston Firs SSSI_T1_137m	10.6	11.2	11.3	0.0
Aston Firs SSSI_T1_147m	10.6	11.2	11.3	0.0
Aston Firs SSSI_T1_157m	10.6	11.2	11.2	0.0
Aston Firs SSSI_T1_167m	10.6	11.2	11.2	0.0
Aston Firs SSSI_T1_177m	10.6	11.2	11.2	0.0
Aston Firs SSSI_T1_187m	10.6	11.2	11.2	0.0
Aston Firs SSSI_T1_197m	10.6	11.2	11.2	0.0
Aston Firs SSSI_T2_0m	10.6	12.6	12.6	0.0
Aston Firs SSSI_T2_10m	10.6	12.0	12.1	0.0
Aston Firs SSSI_T2_20m	10.6	11.8	11.8	0.0

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Aston Firs SSSI_T2_30m	10.6	11.6	11.7	0.0
Aston Firs SSSI_T2_40m	10.6	11.6	11.6	0.0
Aston Firs SSSI_T2_50m	10.6	11.5	11.5	0.0
Aston Firs SSSI_T2_60m	10.6	11.4	11.5	0.0
Aston Firs SSSI_T2_70m	10.6	11.4	11.4	0.0
Aston Firs SSSI_T2_80m	10.6	11.4	11.4	0.0
Aston Firs SSSI_T2_90m	10.6	11.4	11.4	0.0
Aston Firs SSSI_T2_100m	10.6	11.3	11.4	0.0
Aston Firs SSSI_T2_110m	10.6	11.3	11.3	0.0
Aston Firs SSSI_T2_120m	10.6	11.3	11.3	0.0
Aston Firs SSSI_T2_130m	10.6	11.3	11.3	0.0

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Aston Firs SSSI_T2_140m	10.6	11.3	11.3	0.0
Aston Firs SSSI_T2_150m	10.6	11.3	11.3	0.0
Aston Firs SSSI_T2_160m	10.6	11.3	11.3	0.0
Aston Firs SSSI_T2_170m	10.6	11.3	11.3	0.0
Aston Firs SSSI_T2_180m	10.6	11.2	11.3	0.0
Aston Firs SSSI_T2_190m	10.6	11.2	11.3	0.0
Aston Firs SSSI_T2_200m	10.6	11.2	11.3	0.0
Narborough Bogs SSSI_127m	14.0	16.1	16.1	0.0
Narborough Bogs SSSI_137m	14.0	16.0	16.0	0.0
Narborough Bogs SSSI_147m	14.0	15.9	15.9	0.0

Ecological Receptor	Defra NOx Background Concentration 2030 (µg.m^{-3})	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Concentration Change* (µg.m^{-3})
Narborough Bogs SSSI_157m	14.0	15.9	15.9	0.0
Narborough Bogs SSSI_167m	14.0	15.8	15.8	0.0
Narborough Bogs SSSI_177m	14.0	15.7	15.7	0.0
Narborough Bogs SSSI_187m	14.0	15.7	15.7	0.0
Narborough Bogs SSSI_197m	14.0	15.6	15.6	0.0

**discrepancies in changes due to rounding effects*

Critical Load Assessment

The level of nitrogen deposition calculated across the transect points within the designated ecological sites were compared to the lower critical load value to determine whether changes in nitrogen deposition were greater than 1% of the critical load. The dispersion model was run assuming 10% operation of the back-up CHP, as designed within the HNRFI, and also at 30% operation per year to demonstrate that the back-up CHP could operate up to 30% of the year with no change in nitrogen deposition greater than 1% of the lower critical load.

2026 Opening Year

Table 16.3: Blaby District Council critical load assessment in Opening Year 2026 at 10% Operation per Year.

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T1_15m	10 – 15	8.7	23.4	26.1	26.1	0.0	+0.2
Burbage LNR_T1_25m	10 – 15	8.7	23.4	26.0	26.1	0.0	+0.2
Burbage LNR_T1_35m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_45m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T1_55m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_65m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_75m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_85m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_95m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_105m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_115m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_125m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_135m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T1_145m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_155m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_165m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_175m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_185m	10 – 15	8.8	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T1_195m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.2
Burbage LNR_T2_42m	10 – 15	8.5	23.4	25.9	26.0	0.0	+0.1
Burbage LNR_T2_52m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T2_62m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_72m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_82m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_92m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_102m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_112m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_122m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_132m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_142m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T2_152m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_162m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_172m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_182m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_192m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T2_202m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.1
Burbage LNR_T3_76m	10 – 15	8.5	23.4	25.9	26.0	0.0	+0.3
Burbage LNR_T3_86m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.3

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T3_96m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.3
Burbage LNR_T3_106m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.3
Burbage LNR_T3_116m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.3
Burbage LNR_T3_126m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.3
Burbage LNR_T3_136m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T3_146m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.3
Burbage LNR_T3_156m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T3_166m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T3_176m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T3_186m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T3_196m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Freeholt Wood AW_T1_55m	10 – 20	10.4	46.3	49.6	49.6	0.0	+0.2
Freeholt Wood AW_T1_65m	10 – 20	10.4	46.3	49.6	49.6	0.0	+0.2
Freeholt Wood AW_T1_75m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_85m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Freeholt Wood AW_T1_95m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_105m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_115m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_125m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_135m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_145m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Freeholt Wood AW_T1_155m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_165m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_175m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_185m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Freeholt Wood AW_T1_195m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.1
Aston Firs SSSI_T1_7m	15 - 20	9.0	45.7	48.6	48.6	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T1_17m	15 - 20	9.0	45.7	48.5	48.5	0.0	0.0
Aston Firs SSSI_T1_27m	15 - 20	9.0	45.7	48.5	48.5	0.0	0.0
Aston Firs SSSI_T1_37m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_47m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_57m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_67m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_77m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T1_87m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T1_97m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T1_107m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T1_117m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T1_127m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T1_137m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T1_147m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_157m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T1_167m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T1_177m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T1_187m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_197m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_0m	15 - 20	9.0	45.7	48.6	48.6	0.0	+0.1
Aston Firs SSSI_T2_10m	15 - 20	9.0	45.7	48.5	48.5	0.0	+0.1
Aston Firs SSSI_T2_20m	15 - 20	9.0	45.7	48.5	48.5	0.0	+0.1
Aston Firs SSSI_T2_30m	15 - 20	9.0	45.7	48.5	48.5	0.0	+0.1
Aston Firs SSSI_T2_40m	15 - 20	9.0	45.7	48.4	48.5	0.0	+0.1
Aston Firs SSSI_T2_50m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_60m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T2_70m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_80m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_90m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_100m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_110m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_120m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_130m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_140m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T2_150m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_160m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_170m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_180m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_190m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Aston Firs SSSI_T2_200m	15 - 20	9.0	45.7	48.4	48.4	0.0	0.0
Narborough Bogs SSSI_127m	10 - 20	12.0	48.5	52.3	52.3	0.0	0.0
Narborough Bogs SSSI_137m	10 - 20	12.0	48.5	52.3	52.3	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Narborough Bogs SSSI_147m	10 - 20	12.0	48.5	52.3	52.3	0.0	0.0
Narborough Bogs SSSI_157m	10 - 20	12.0	48.5	52.3	52.3	0.0	0.0
Narborough Bogs SSSI_167m	10 - 20	12.0	48.5	52.2	52.2	0.0	0.0
Narborough Bogs SSSI_177m	10 - 20	12.0	48.5	52.2	52.2	0.0	0.0
Narborough Bogs SSSI_187m	10 - 20	12.0	48.5	52.2	52.2	0.0	0.0
Narborough Bogs SSSI_197m	10 - 20	12.0	48.5	52.2	52.2	0.0	0.0

Table 16.4 Blaby District Council critical load assessment in Opening Year 2026 at 30% Operation per Year.

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T1_15m	10 – 15	8.7	23.4	26.1	26.1	+0.1	+0.6
Burbage LNR_T1_25m	10 – 15	8.7	23.4	26.0	26.1	+0.1	+0.6
Burbage LNR_T1_35m	10 – 15	8.7	23.4	26.0	26.1	+0.1	+0.6
Burbage LNR_T1_45m	10 – 15	8.7	23.4	26.0	26.1	+0.1	+0.6
Burbage LNR_T1_55m	10 – 15	8.7	23.4	26.0	26.1	+0.1	+0.6
Burbage LNR_T1_65m	10 – 15	8.7	23.4	26.0	26.1	+0.1	+0.6
Burbage LNR_T1_75m	10 – 15	8.7	23.4	26.0	26.1	+0.1	+0.6

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T1_85m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.6
Burbage LNR_T1_95m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.6
Burbage LNR_T1_105m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.5
Burbage LNR_T1_115m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.5
Burbage LNR_T1_125m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.5
Burbage LNR_T1_135m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.5
Burbage LNR_T1_145m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.5
Burbage LNR_T1_155m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.5

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T1_165m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.5
Burbage LNR_T1_175m	10 – 15	8.7	23.4	26.0	26.0	+0.1	+0.5
Burbage LNR_T1_185m	10 – 15	8.8	23.4	26.0	26.0	0.0	+0.5
Burbage LNR_T1_195m	10 – 15	8.7	23.4	26.0	26.0	0.0	+0.5
Burbage LNR_T2_42m	10 – 15	8.5	23.4	25.9	26.0	0.0	+0.2
Burbage LNR_T2_52m	10 – 15	8.5	23.4	25.9	26.0	0.0	+0.2
Burbage LNR_T2_62m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_72m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_82m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T2_92m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_102m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_112m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_122m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_132m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_142m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_152m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_162m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T2_172m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_182m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_192m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T2_202m	10 – 15	8.5	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T3_76m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+1.0
Burbage LNR_T3_86m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.9
Burbage LNR_T3_96m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.9
Burbage LNR_T3_106m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.9
Burbage LNR_T3_116m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.8

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Burbage LNR_T3_126m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.8
Burbage LNR_T3_136m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.6
Burbage LNR_T3_146m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.8
Burbage LNR_T3_156m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.7
Burbage LNR_T3_166m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.7
Burbage LNR_T3_176m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.7
Burbage LNR_T3_186m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.6
Burbage LNR_T3_196m	10 – 15	8.5	23.4	25.9	26.0	+0.1	+0.5

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Freeholt Wood AW_T1_55m	10 – 20	10.4	46.3	49.6	49.6	+0.1	+0.6
Freeholt Wood AW_T1_65m	10 – 20	10.4	46.3	49.6	49.6	+0.1	+0.5
Freeholt Wood AW_T1_75m	10 – 20	10.4	46.3	49.5	49.6	0.0	+0.2
Freeholt Wood AW_T1_85m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Freeholt Wood AW_T1_95m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Freeholt Wood AW_T1_105m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Freeholt Wood AW_T1_115m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Freeholt Wood AW_T1_125m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Freeholt Wood AW_T1_135m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Freeholt Wood AW_T1_145m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Freeholt Wood AW_T1_155m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Freeholt Wood AW_T1_165m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Freeholt Wood AW_T1_175m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Freeholt Wood AW_T1_185m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Freeholt Wood AW_T1_195m	10 – 20	10.4	46.3	49.5	49.5	0.0	+0.2
Aston Firs SSSI_T1_7m	15 - 20	9.0	45.7	48.6	48.6	0.0	+0.1
Aston Firs SSSI_T1_17m	15 - 20	9.0	45.7	48.5	48.5	0.0	+0.1
Aston Firs SSSI_T1_27m	15 - 20	9.0	45.7	48.5	48.5	0.0	+0.1
Aston Firs SSSI_T1_37m	15 - 20	9.0	45.7	48.4	48.5	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T1_47m	15 - 20	9.0	45.7	48.4	48.5	0.0	+0.2
Aston Firs SSSI_T1_57m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.2
Aston Firs SSSI_T1_67m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.2
Aston Firs SSSI_T1_77m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_87m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_97m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_107m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_117m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T1_127m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_137m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_147m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.2
Aston Firs SSSI_T1_157m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_167m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_177m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T1_187m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.2
Aston Firs SSSI_T1_197m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.2
Aston Firs SSSI_T2_0m	15 - 20	9.0	45.7	48.6	48.6	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T2_10m	15 - 20	9.0	45.7	48.5	48.5	0.0	+0.2
Aston Firs SSSI_T2_20m	15 - 20	9.0	45.7	48.5	48.5	0.0	+0.2
Aston Firs SSSI_T2_30m	15 - 20	9.0	45.7	48.5	48.5	0.0	+0.2
Aston Firs SSSI_T2_40m	15 - 20	9.0	45.7	48.4	48.5	0.0	+0.2
Aston Firs SSSI_T2_50m	15 - 20	9.0	45.7	48.4	48.5	0.0	+0.2
Aston Firs SSSI_T2_60m	15 - 20	9.0	45.7	48.4	48.5	0.0	+0.2
Aston Firs SSSI_T2_70m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.2
Aston Firs SSSI_T2_80m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T2_90m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_100m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_110m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_120m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_130m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_140m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_150m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_160m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_170m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Aston Firs SSSI_T2_180m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_190m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_200m	15 - 20	9.0	45.7	48.4	48.4	0.0	+0.1
Narborough Bogs SSSI_127m	10 - 20	12.0	48.5	52.3	52.3	0.0	0.0
Narborough Bogs SSSI_137m	10 - 20	12.0	48.5	52.3	52.3	0.0	0.0
Narborough Bogs SSSI_147m	10 - 20	12.0	48.5	52.3	52.3	0.0	0.0
Narborough Bogs SSSI_157m	10 - 20	12.0	48.5	52.3	52.3	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha^{-1} kg^{-1})	NO_2 Defra Background 2026 ($\mu g.m^{-3}$)	Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	2026 With Development ($\mu g.m^{-3}$)	2026 With Development and Back-up CHP ($\mu g.m^{-3}$)	Change in Nitrogen Deposition (kg N ha^{-1} $year^{-1}$)	Percentage Change of Lower Critical Load
Narborough Bogs SSSI_167m	10 - 20	12.0	48.5	52.2	52.2	0.0	0.0
Narborough Bogs SSSI_177m	10 - 20	12.0	48.5	52.2	52.2	0.0	0.0
Narborough Bogs SSSI_187m	10 - 20	12.0	48.5	52.2	52.2	0.0	0.0
Narborough Bogs SSSI_197m	10 - 20	12.0	48.5	52.2	52.2	0.0	0.0

2036 Future Year

Table 16.5: Blaby District Council critical load assessment in Future Year 2036 at 10% Operation per Year.

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T1_15m	10 – 15	8.1	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T1_25m	10 – 15	8.1	23.4	25.9	25.9	0.0	+0.2
Burbage LNR_T1_35m	10 – 15	8.1	23.4	25.8	25.9	0.0	+0.2
Burbage LNR_T1_45m	10 – 15	8.1	23.4	25.8	25.9	0.0	+0.2
Burbage LNR_T1_55m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_65m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_75m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T1_85m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_95m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_105m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_115m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_125m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_135m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_145m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_155m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_165m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T1_175m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_185m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T1_195m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T2_42m	10 – 15	7.9	23.4	25.8	25.8	0.0	+0.1
Burbage LNR_T2_52m	10 – 15	7.9	23.4	25.8	25.8	0.0	+0.1
Burbage LNR_T2_62m	10 – 15	7.9	23.4	25.8	25.8	0.0	+0.1
Burbage LNR_T2_72m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.1
Burbage LNR_T2_82m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T2_92m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_102m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_112m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_122m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_132m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_142m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_152m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_162m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_172m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T2_182m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_192m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T2_202m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.1
Burbage LNR_T3_76m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.3
Burbage LNR_T3_86m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.3
Burbage LNR_T3_96m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.3
Burbage LNR_T3_106m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.3
Burbage LNR_T3_116m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.3

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T3_126m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.3
Burbage LNR_T3_136m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T3_146m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.3
Burbage LNR_T3_156m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T3_166m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T3_176m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T3_186m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T3_196m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Freeholt Wood AW_T1_55m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_65m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_75m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1
Freeholt Wood AW_T1_85m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1
Freeholt Wood AW_T1_95m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1
Freeholt Wood AW_T1_105m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Freeholt Wood AW_T1_115m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1
Freeholt Wood AW_T1_125m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1
Freeholt Wood AW_T1_135m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1
Freeholt Wood AW_T1_145m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1
Freeholt Wood AW_T1_155m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1
Freeholt Wood AW_T1_165m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Freeholt Wood AW_T1_175m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.1
Freeholt Wood AW_T1_185m	10 – 20	9.2	46.3	49.1	49.2	0.0	+0.1
Freeholt Wood AW_T1_195m	10 – 20	9.2	46.3	49.1	49.2	0.0	+0.1
Aston Firs SSSI_T1_7m	15 - 20	8.2	45.7	48.3	48.3	0.0	0.0
Aston Firs SSSI_T1_17m	15 - 20	8.2	45.7	48.3	48.3	0.0	0.0
Aston Firs SSSI_T1_27m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T1_37m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T1_47m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_57m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_67m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_77m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T1_87m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T1_97m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T1_107m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T1_117m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T1_127m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T1_137m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T1_147m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_157m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T1_167m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T1_177m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T1_187m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_197m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_0m	15 - 20	8.2	45.7	48.4	48.4	0.0	+0.1
Aston Firs SSSI_T2_10m	15 - 20	8.2	45.7	48.3	48.3	0.0	+0.1
Aston Firs SSSI_T2_20m	15 - 20	8.2	45.7	48.3	48.3	0.0	+0.1
Aston Firs SSSI_T2_30m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_40m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_50m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T2_60m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_70m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_80m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_90m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_100m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_110m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_120m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T2_130m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_140m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_150m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_160m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_170m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_180m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T2_190m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Aston Firs SSSI_T2_200m	15 - 20	8.2	45.7	48.2	48.2	0.0	0.0
Narborough Bogs SSSI_127m	10 - 20	10.6	48.5	51.9	51.9	0.0	0.0
Narborough Bogs SSSI_137m	10 - 20	10.6	48.5	51.9	51.9	0.0	0.0
Narborough Bogs SSSI_147m	10 - 20	10.6	48.5	51.9	51.9	0.0	0.0
Narborough Bogs SSSI_157m	10 - 20	10.6	48.5	51.9	51.9	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Narborough Bogs SSSI_167m	10 - 20	10.6	48.5	51.8	51.8	0.0	0.0
Narborough Bogs SSSI_177m	10 - 20	10.6	48.5	51.8	51.8	0.0	0.0
Narborough Bogs SSSI_187m	10 - 20	10.6	48.5	51.8	51.8	0.0	0.0
Narborough Bogs SSSI_197m	10 - 20	10.6	48.5	51.8	51.8	0.0	0.0

Table 16.6: Blaby District Council critical load assessment in Future Year 2036 at 30% Operation per Year.

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T1_15m	10 – 15	8.1	23.4	25.9	25.9	+0.1	+0.6
Burbage LNR_T1_25m	10 – 15	8.1	23.4	25.9	25.9	+0.1	+0.6
Burbage LNR_T1_35m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.6
Burbage LNR_T1_45m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.6
Burbage LNR_T1_55m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.6
Burbage LNR_T1_65m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.6
Burbage LNR_T1_75m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.6
Burbage LNR_T1_85m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.6

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T1_95m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.6
Burbage LNR_T1_105m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.5
Burbage LNR_T1_115m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.5
Burbage LNR_T1_125m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.5
Burbage LNR_T1_135m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.5
Burbage LNR_T1_145m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.5
Burbage LNR_T1_155m	10 – 15	8.1	23.4	25.8	25.9	+0.1	+0.5
Burbage LNR_T1_165m	10 – 15	8.1	23.4	25.8	25.8	+0.1	+0.5
Burbage LNR_T1_175m	10 – 15	8.1	23.4	25.8	25.8	+0.1	+0.5

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T1_185m	10 – 15	8.1	23.4	25.8	25.9	0.0	+0.5
Burbage LNR_T1_195m	10 – 15	8.1	23.4	25.8	25.8	0.0	+0.5
Burbage LNR_T2_42m	10 – 15	7.9	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T2_52m	10 – 15	7.9	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T2_62m	10 – 15	7.9	23.4	25.8	25.8	0.0	+0.2
Burbage LNR_T2_72m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T2_82m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T2_92m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T2_102m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T2_112m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T2_122m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T2_132m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T2_142m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T2_152m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T2_162m	10 – 15	7.9	23.4	25.7	25.8	0.0	+0.2
Burbage LNR_T2_172m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.2
Burbage LNR_T2_182m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T2_192m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.2
Burbage LNR_T2_202m	10 – 15	7.9	23.4	25.7	25.7	0.0	+0.2
Burbage LNR_T3_76m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+1.0
Burbage LNR_T3_86m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.9
Burbage LNR_T3_96m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.9
Burbage LNR_T3_106m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.9
Burbage LNR_T3_116m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.8
Burbage LNR_T3_126m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.8

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Burbage LNR_T3_136m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.6
Burbage LNR_T3_146m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.8
Burbage LNR_T3_156m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.7
Burbage LNR_T3_166m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.7
Burbage LNR_T3_176m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.7
Burbage LNR_T3_186m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.6
Burbage LNR_T3_196m	10 – 15	7.9	23.4	25.7	25.8	+0.1	+0.5
Freeholt Wood AW_T1_55m	10 – 20	9.2	46.3	49.2	49.3	+0.1	+0.6

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Freeholt Wood AW_T1_65m	10 – 20	9.2	46.3	49.2	49.3	+0.1	+0.5
Freeholt Wood AW_T1_75m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_85m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_95m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_105m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_115m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Freeholt Wood AW_T1_125m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_135m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_145m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_155m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_165m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2
Freeholt Wood AW_T1_175m	10 – 20	9.2	46.3	49.2	49.2	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Freeholt Wood AW_T1_185m	10 – 20	9.2	46.3	49.1	49.2	0.0	+0.2
Freeholt Wood AW_T1_195m	10 – 20	9.2	46.3	49.1	49.2	0.0	+0.2
Aston Firs SSSI_T1_7m	15 - 20	8.2	45.7	48.3	48.4	0.0	+0.1
Aston Firs SSSI_T1_17m	15 - 20	8.2	45.7	48.3	48.3	0.0	+0.1
Aston Firs SSSI_T1_27m	15 - 20	8.2	45.7	48.2	48.3	0.0	+0.1
Aston Firs SSSI_T1_37m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2
Aston Firs SSSI_T1_47m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2
Aston Firs SSSI_T1_57m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T1_67m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2
Aston Firs SSSI_T1_77m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_87m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_97m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_107m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_117m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_127m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T1_137m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_147m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2
Aston Firs SSSI_T1_157m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_167m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_177m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T1_187m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T1_197m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2
Aston Firs SSSI_T2_0m	15 - 20	8.2	45.7	48.4	48.4	0.0	+0.2
Aston Firs SSSI_T2_10m	15 - 20	8.2	45.7	48.3	48.3	0.0	+0.2
Aston Firs SSSI_T2_20m	15 - 20	8.2	45.7	48.3	48.3	0.0	+0.2
Aston Firs SSSI_T2_30m	15 - 20	8.2	45.7	48.2	48.3	0.0	+0.2
Aston Firs SSSI_T2_40m	15 - 20	8.2	45.7	48.2	48.3	0.0	+0.2
Aston Firs SSSI_T2_50m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2
Aston Firs SSSI_T2_60m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T2_70m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.2
Aston Firs SSSI_T2_80m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_90m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_100m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_110m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_120m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_130m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T2_140m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_150m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_160m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_170m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_180m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Aston Firs SSSI_T2_190m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Aston Firs SSSI_T2_200m	15 - 20	8.2	45.7	48.2	48.2	0.0	+0.1
Narborough Bogs SSSI_127m	10 - 20	10.6	48.5	51.9	51.9	0.0	0.0
Narborough Bogs SSSI_137m	10 - 20	10.6	48.5	51.9	51.9	0.0	0.0
Narborough Bogs SSSI_147m	10 - 20	10.6	48.5	51.9	51.9	0.0	0.0
Narborough Bogs SSSI_157m	10 - 20	10.6	48.5	51.9	51.9	0.0	0.0
Narborough Bogs SSSI_167m	10 - 20	10.6	48.5	51.8	51.9	0.0	0.0

Ecological Receptor	Critical Load Range (kg N ha-1 kg-1)	NO2 Defra Background 2030 (µg.m-3)	Nitrogen Deposition (kg N ha-1 year-1)	2036 With Development (µg.m^{-3})	2036 With Development and Back-up CHP (µg.m^{-3})	Change in Nitrogen Deposition (kg N ha-1 year-1)	Percentage of Lower Critical Load
Narborough Bogs SSSI_177m	10 - 20	10.6	48.5	51.8	51.8	0.0	0.0
Narborough Bogs SSSI_187m	10 - 20	10.6	48.5	51.8	51.8	0.0	0.0
Narborough Bogs SSSI_197m	10 - 20	10.6	48.5	51.8	51.8	0.0	0.0