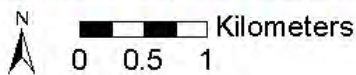
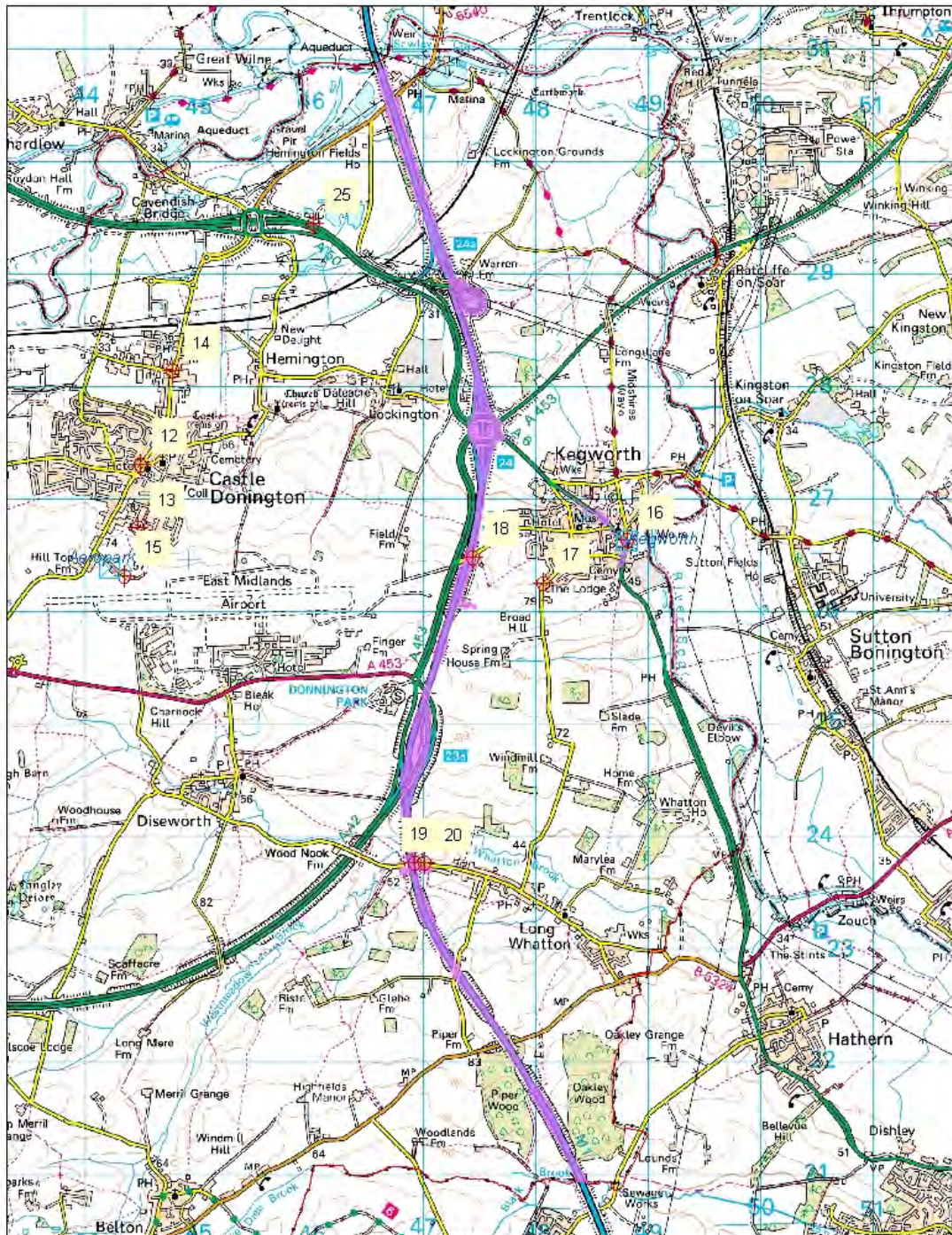


**Appendix 1: The Six AQMAs within NWLDC – including the location and No. of NO<sub>2</sub> tubes within the AQMAs.**

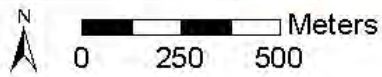
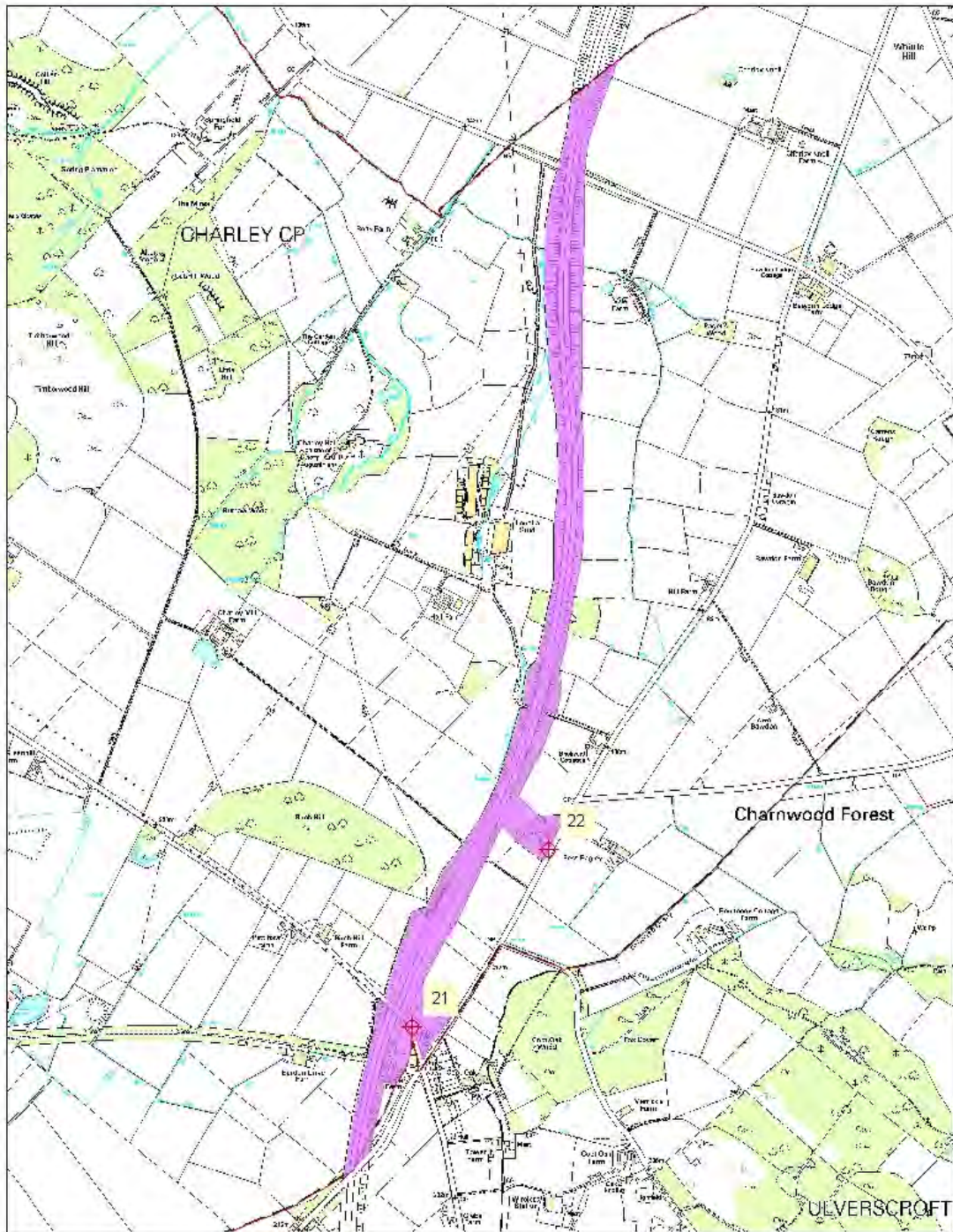
**AQMA 1: Vicinity of the M1 (North-bound)**



**M1 North**

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North West Leicestershire District Council.  
LA078832, 2002.

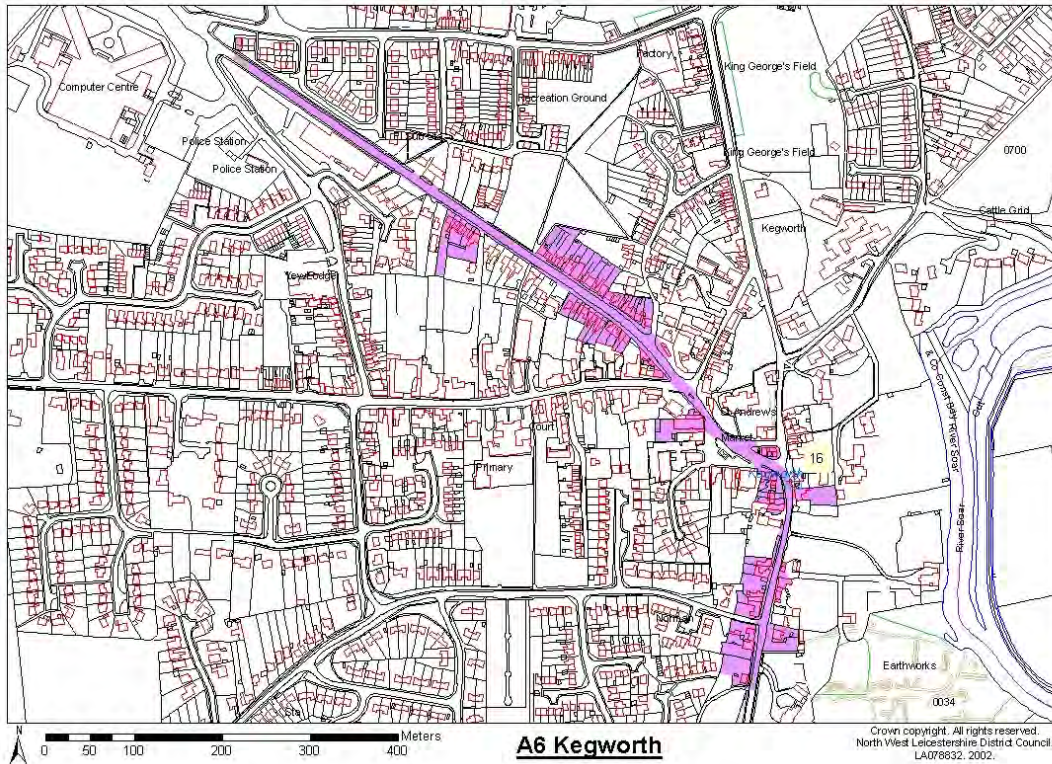
# AQMA 1: Vicinity of M1 (South-bound)



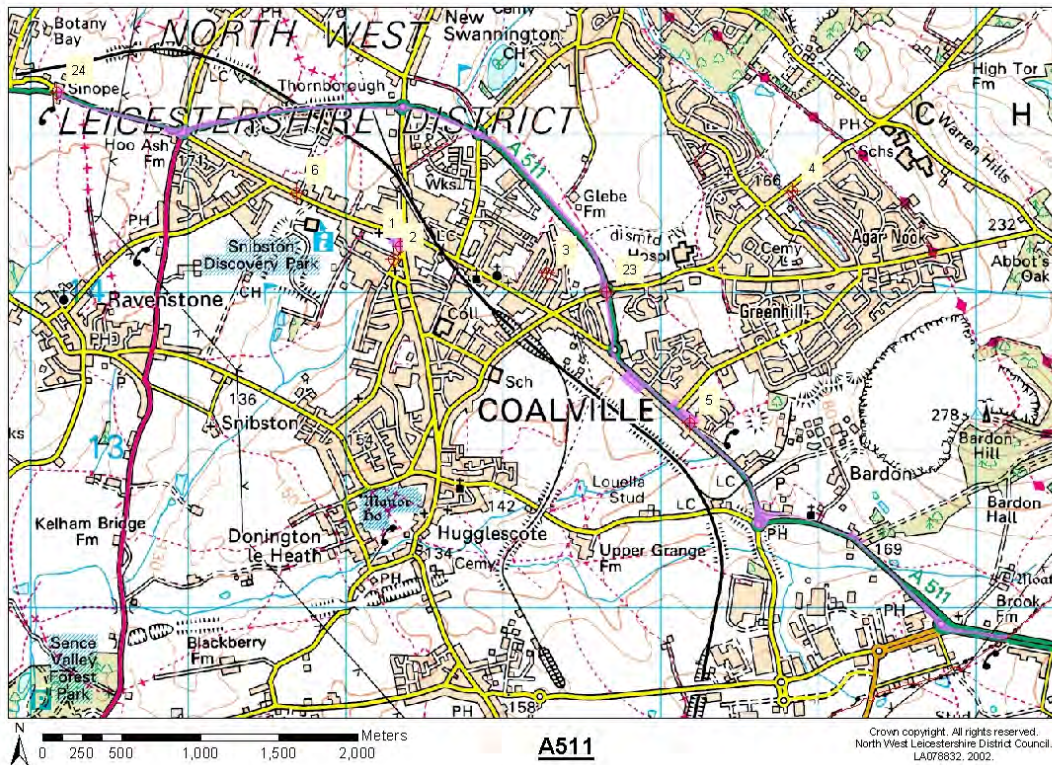
**M1 South**

Crown copyright. All rights reserved.  
North West Leicestershire District Council.  
LA078832. 2002.

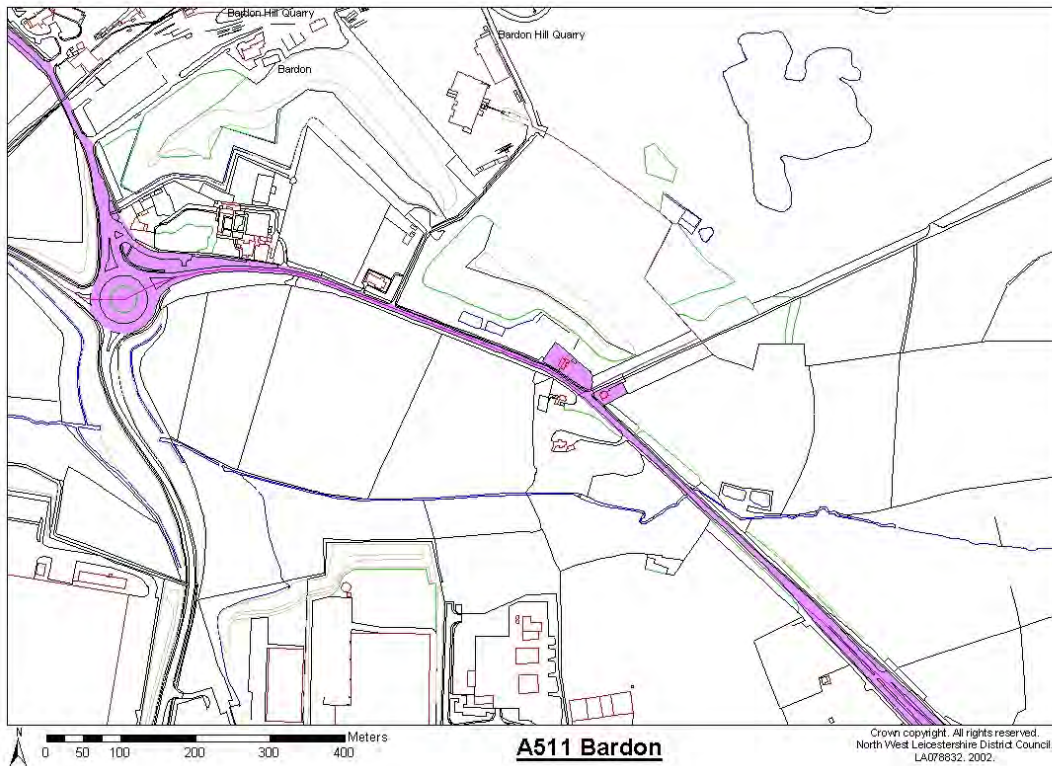
**AQMA 2: Kegworth A6**



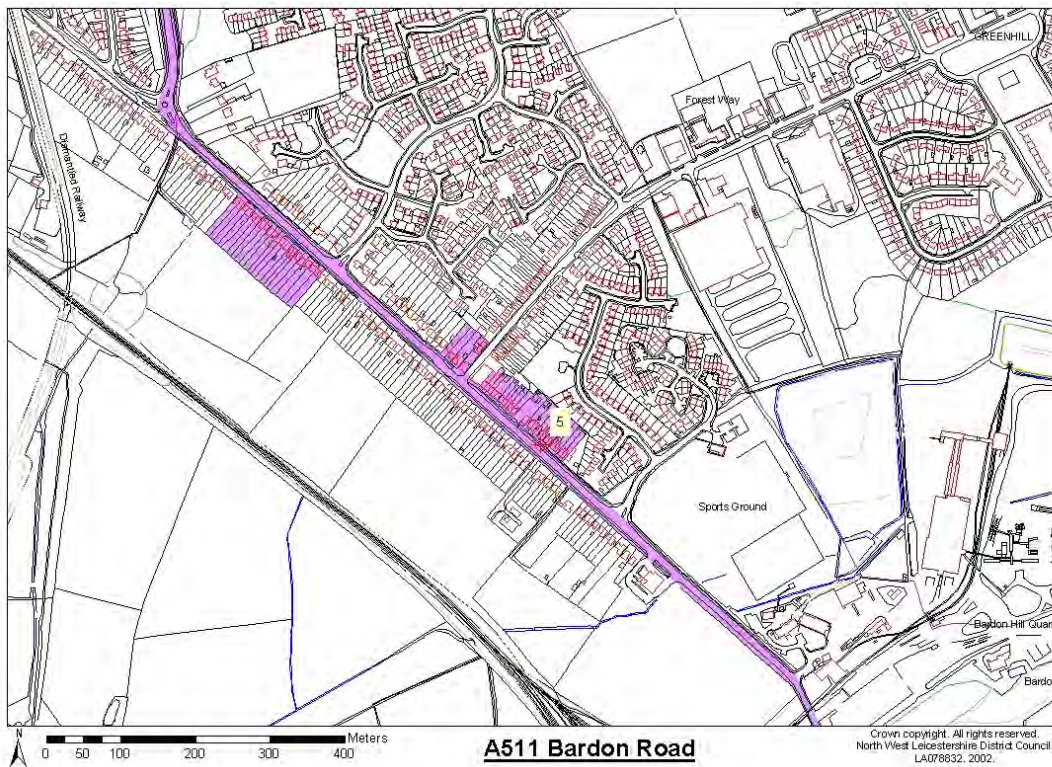
**AQMA 3: A511 – the plan below depicts the whole of this AQMA**



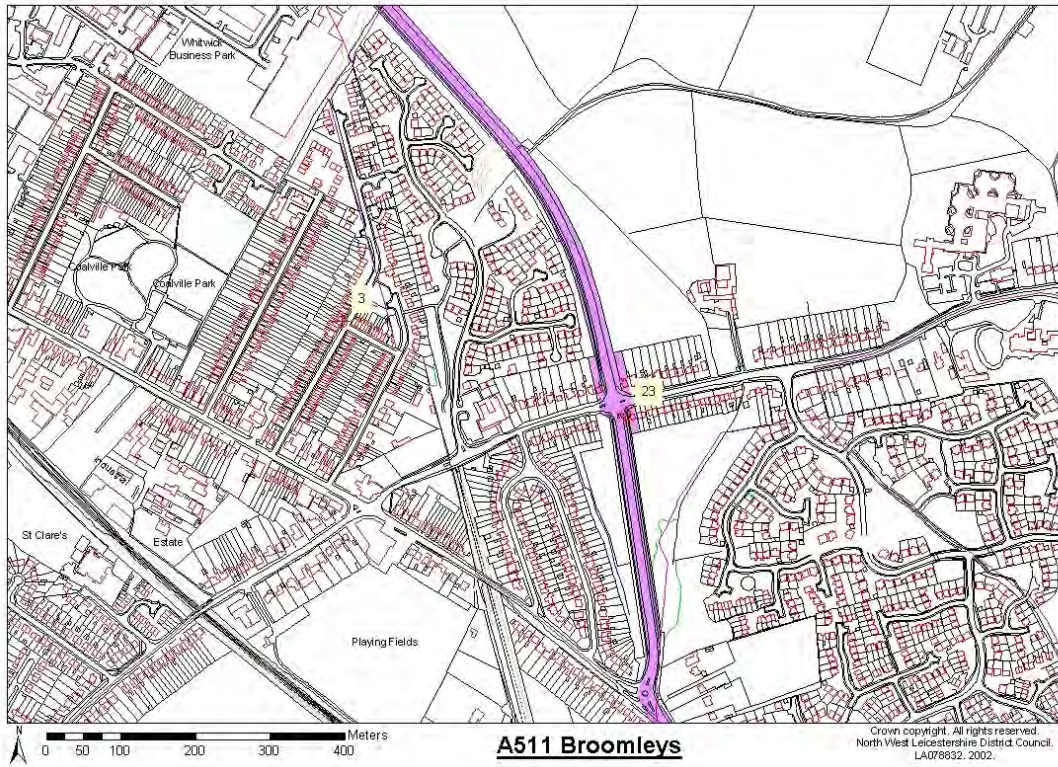
### AQMA 3: A511 – The Bardon Hill Section



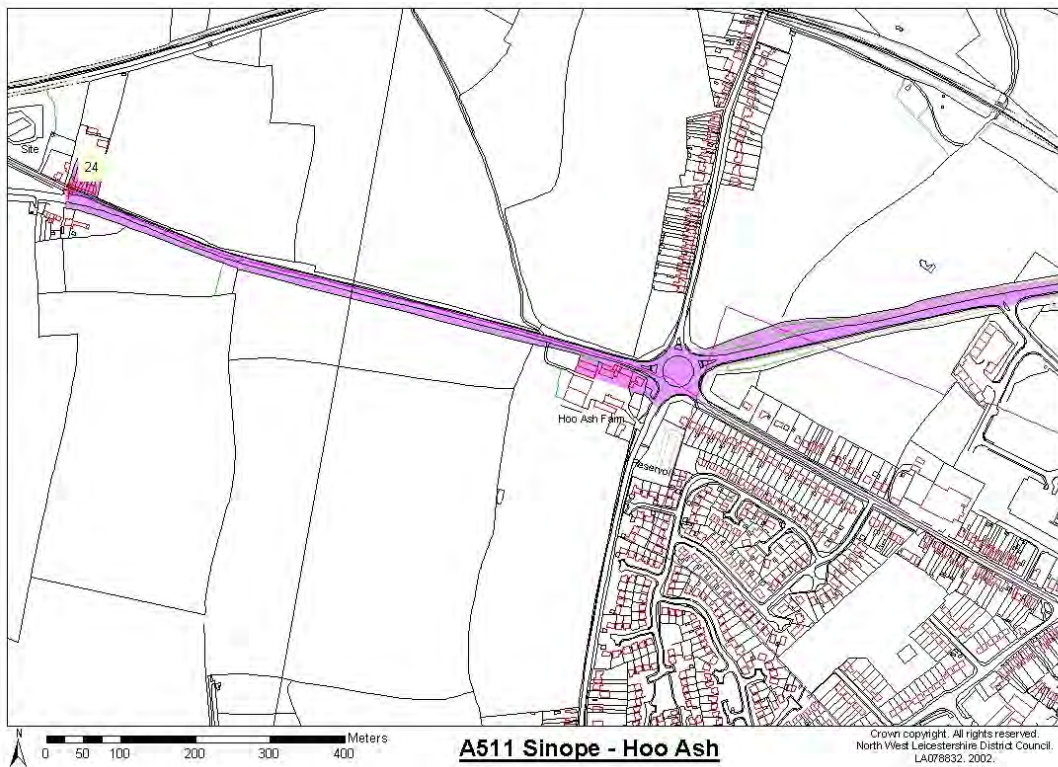
### AQMA 3: A511 - The Bardon Road Section



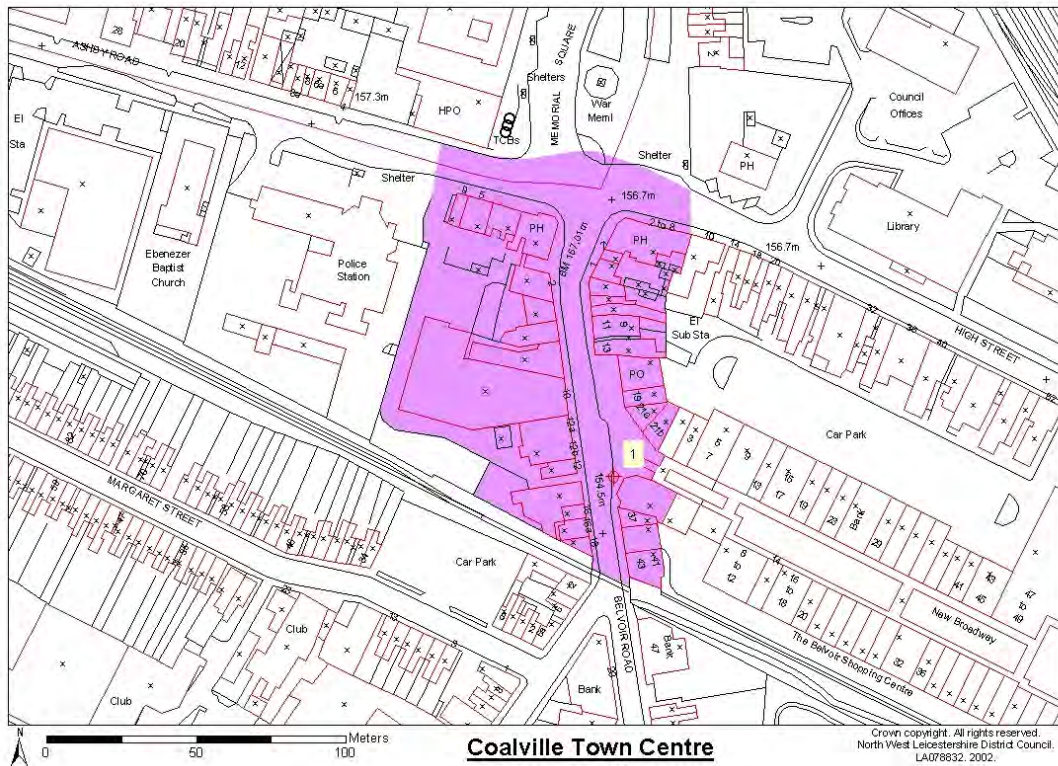
### AQMA 3: A511 – The Broomleys Section



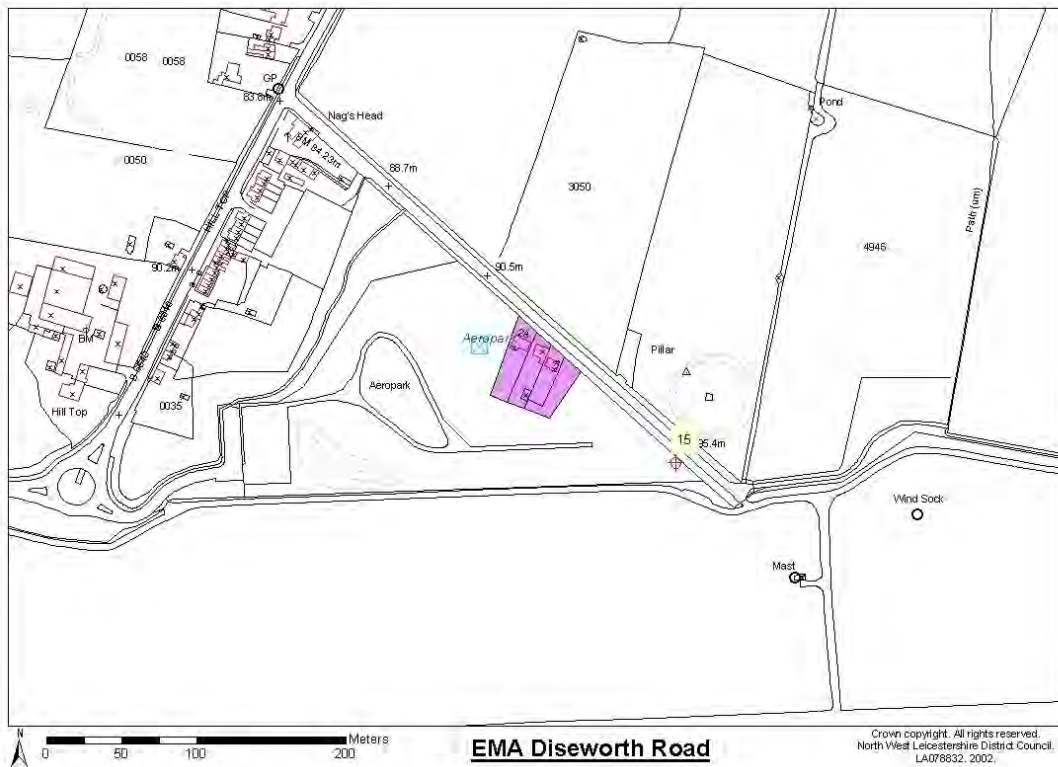
### AQMA 3: A511 – The Sinope –Hoo Ash Section



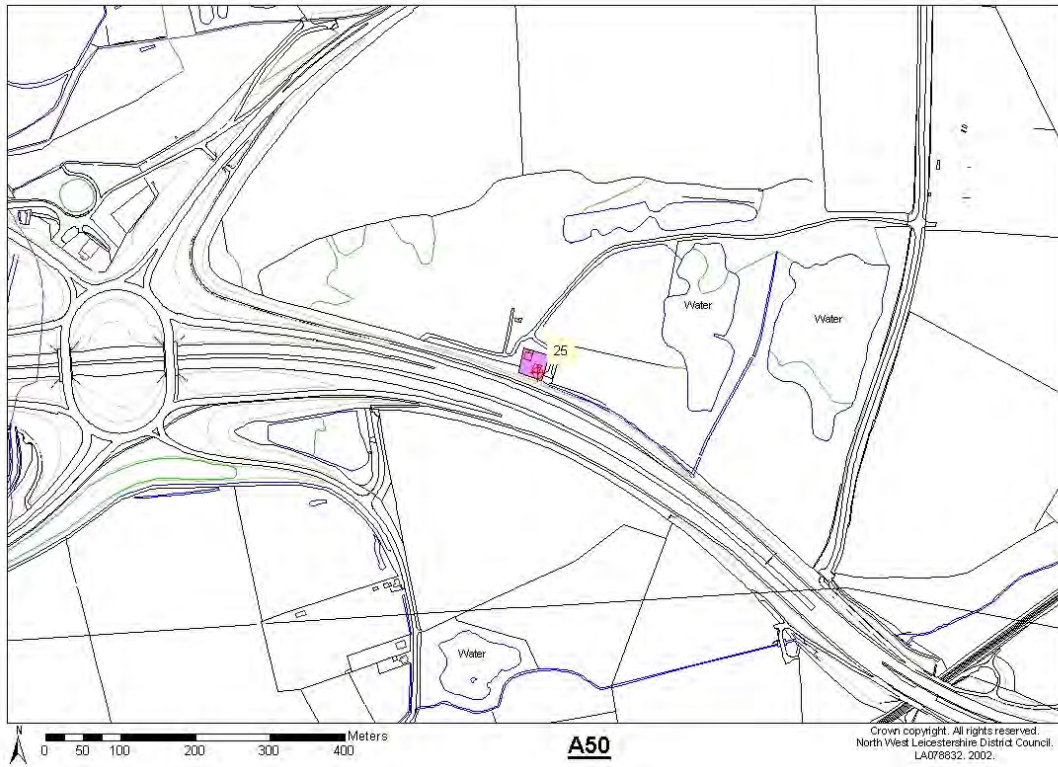
## AQMA 4: Belvoir Road Coalville



## AQMA 5: Castle Donington, Diseworth Road



**AQMA 6: Vicinity of A50**



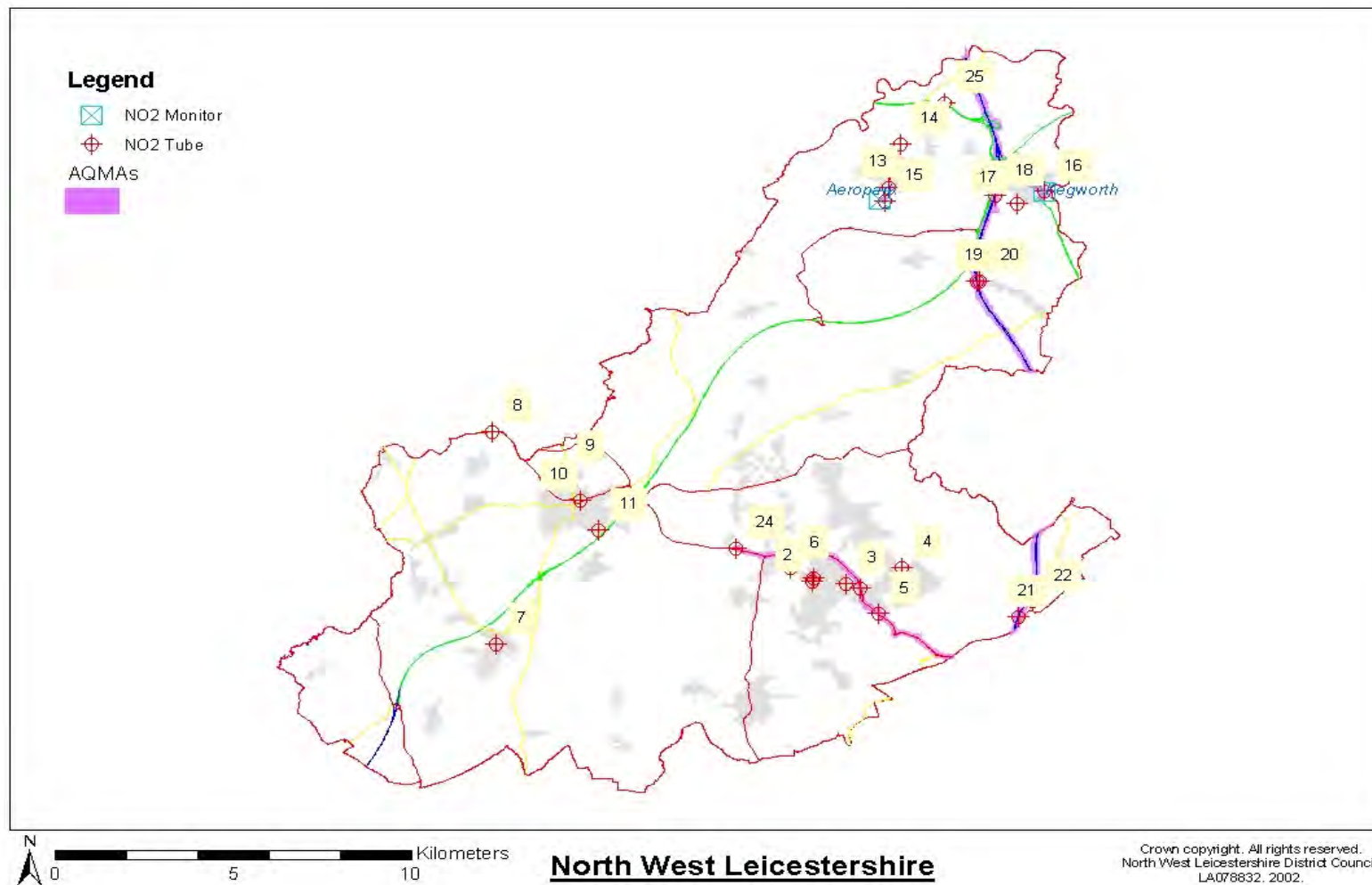
Appendix 2: Monthly average diffusion tube results for 2002 ( $\mu\text{g}/\text{m}^3$ ) – Tubes Highlighted in yellow are located in AQMAs

Table A2 Monthly average diffusion tube results for 2002 ( $\mu\text{g}/\text{m}^3$ )																
Tube No.	Tube Name	Easting	Northing	Jan 02	Feb 02	Mar 02	Apr 02	May 02	June 02	July 02	Aug 02	Sep 02	Oct 02	Nov 02	Dec 02	Site Average
1	Coalville Belvoir	442351	314293	34.39	23.46	21.87	22.87	17.73		16.71	15.91	5.29	20.87	44.14	36.60	23.26
2	Coalville Jackson	442309	314205	33.14	25.13	19.19	9.03	14.77	29.08	26.52	20.40		26.40	40.57	33.82	25.28
3	Coalville Oxford St	443279	314121	34.39	22.34	19.19	16.85	13.93		22.47		33.48		29.43	34.37	25.16
4	Coalville Abbott Oak	444841	314639	30.02	15.64	16.51	7.22	12.24	14.83	13.37		60.32	20.27		22.72	21.31
5	Bardon Road C/V	444189	313169	30.64	23.46	21.42	25.28	16.46	33.08	21.84	0.76	58.78	28.25	50.83	39.36	29.35
6	All Saints C/V	444689	314627	26.76	19.53	14.69	22.97	15.57	15.39		20.85	61.64	22.79		29.94	25.54
7	Measham High	433451	312207	31.69	23.53	0.45	35.62	12.64	13.68	21.30	19.15	62.66	21.55	27.65	31.53	25.12
8	Boundary	433358	318972		15.13	13.35	18.13	12.63	9.69	19.58	16.60	19.91	23.42	25.87	25.43	18.16
9	Ashby Marlborough	435386	317692		22.98	14.69	12.09	15.57	10.26	15.35	13.95	22.19		37.48	34.81	19.94
10	Ashby Market St	435835	316778	41.63	27.46	26.26	32.66		19.95	15.86	12.39	24.50	1.23		36.45	23.84
11	Ashby A42	436340	315837	34.17	19.62	17.80	16.95	14.72	19.95	15.24	11.25	47.98	21.60	36.13	33.67	24.09
12	C/Don High St	444493	327304	31.64	25.14	32.13	25.88	29.97	30.79	35.67	17.52	29.21	23.35		33.79	28.64



<b>13</b>	<b>C/Don EMA</b>	444477	326735	26.67	12.85	17.40	14.45	8.44	14.82	13.97	11.08	16.71	19.04	33.88	26.60	<b>17.99</b>
<b>14</b>	<b>C/Don Stat Rd</b>	444784	328125	41.56	20.67	24.54	7.83	16.04	27.94	28.84	14.30	18.18	19.05	46.37	37.66	<b>25.25</b>
<b>15</b>	<b>C/Don Diseworth</b>	444355	326311	22.95	10.62	13.83	17.47	10.55	15.39	15.05	12.84	51.37	20.26	30.32	30.48	<b>20.93</b>
<b>16</b>	<b>Kegworth A6</b>	448818	326625	35.36	32.42	18.74	25.30	16.46	29.07	38.78	32.32	59.36	39.32	38.82	35.42	<b>33.45</b>
<b>17</b>	<b>Whatton Rd Kegworth</b>	448070	326249	28.54	20.68	13.38	14.46	9.71	22.80	21.23	16.96		33.21	33.92	25.45	<b>21.85</b>
<b>18</b>	<b>Keg Molehill Farm</b>	447445	326476	42.80	46.38	28.56	25.30	20.68	41.62	54.25	29.39	50.98	44.64	45.51	39.84	<b>39.16</b>
<b>19</b>	<b>M1 Long Whatton</b>	446941	323769	55.92	25.70	23.21	15.05	18.15	23.37	30.51	26.61	34.61	23.34	28.54	26.59	<b>27.63</b>
<b>20</b>	<b>M1 Long Whatton West</b>	447022	323763	32.93	26.26	9.82	22.87	10.13	26.94	28.72	13.40	32.62	23.34	41.03	30.46	<b>24.63</b>
<b>21</b>	<b>Copt Oak</b>	448122	313068	44.19	25.14	27.67	19.86	12.24	25.66	23.01	20.69	43.31	31.32	38.79	28.82	<b>28.39</b>
<b>22</b>	<b>Charley</b>	448513	313572	22.44	18.43	8.48	17.45	12.24	17.68	34.07	21.59	31.77	25.80	25.86	23.82	<b>21.64</b>
<b>23</b>	<b>Broom</b>	443659	313997	36.78	36.30	22.76	36.71	21.52	24.52	47.27		37.01	35.62	42.81	30.33	<b>34.60</b>
<b>24</b>	<b>Sinope</b>	440169	315266	0.62		12.02	16.36	13.03	19.95	23.33		36.26	31.48	30.33	22.07	<b>20.55</b>

### Appendix 3: The Distribution of NO<sub>2</sub> tubes and real Time NO<sub>2</sub> monitors across NWLDC.





**Appendix 4: Results of the NO<sub>2</sub> tube co-location study with the real time monitor at Kegworth (2002), based on 9 months data.**

Location	Grid Easting	Grid Northing	Average 2002 (µg/m <sup>3</sup> )	Bias adjusted (µg/m <sup>3</sup> )	2005 prediction (µg/m <sup>3</sup> ) based on 2002 bias adjusted value
Coalville Belvoir	442351	314293	23.62	26.37	24.28
Coalville Jackson	442309	314205	25.28	28.23	25.98
Coalville Oxford St.	443279	314121	25.16	28.09	25.56
Coalville Abbotts Oak	444841	314639	21.31	23.79	21.65
Bardon Rd C/V	444189	313169	29.35	32.77	30.17
All Saints Coalville	444689	314627	25.54	28.52	26.25
Measham, High Boundary	433451	312207	25.12	28.05	25.82
	433358	318972	18.16	20.28	18.67
Ashby Marlborough	435386	317692	19.94	22.27	20.26
Ashby Market St.	435835	316778	23.84	26.62	24.50
Ashby A42	436340	315837	24.09	26.90	24.76
C/Don High St	444493	327304	28.64	31.98	29.44
C/Don E.M.A	444477	326735	17.99	20.09	18.49
C/Don Stat. Rd.	444784	328125	25.25	28.19	25.95
CD Dise	444355	326311	20.93	23.37	
Kegworth A6	448818	326625	33.45	37.35	34.38
Whatton Rd Keg	448070	326249	21.85	24.40	22.46
Keg Molehill Fm	447445	326476	39.16	<b>43.73</b>	<b>40.25</b>
M1 Long Whatton	446941	323769	27.63	30.85	28.40
M1 Long Wh'n West	447022	323763	24.63	27.50	25.32
Copt Oak	448122	313068	28.39	31.70	29.18
Charley	448513	313572	21.64	24.16	22.24
Broom	443659	313997	34.60	38.63	35.56
Sinope	440169	315266	20.55	22.95	21.12

The bias adjusted measured concentrations for 2002 have been projected forward to 2005 using the factors detailed in the Technical Guidance as shown below:

- 2002 to 2005 correction factor =>  $0.892/0.969 = 0.92$

## Appendix 5: Modelled Receptor Locations

Receptor Location	Annual Mean ug/m3	Peak Hour ug/m3
Ashby A42	29.3	126.6
Ashby Malborough	21.0	124.0
Ashby Market St	27.9	125.4
Boundary	22.2	123.9
C/Don High St	25.8	124.3
CV Abbotts Oak	22.7	123.5
CV All Saints	22.7	123.7
CV Bardon Rd	29.2	124.4
CV Belvoir	26.1	124.8
CV Jackson	24.0	124.3
CV Oxford St	22.7	123.7
Measham	25.2	123.4
Broom	28.2	125.4
C/Don EMA	24.8	124.4
C/Don Station Rd	31.2	124.1
Charley	33.7	122.3
Copt Oak	<b>54.5</b>	<b>217.3</b>
D/Don Diseworth	27.4	125.3
Keg Molehill farm	<b>50.5</b>	<b>204.9</b>
<b>Kegworth A6</b>	<b>33.6</b>	<b>111.3</b>
M1 Long Whatton	<b>45.2</b>	144.0
M1 Long Whatton West	38.4	123.0
Sinope	27.5	125.1
Whatton Rd Kegworth	29.5	123.1

**Table A5 – 1: Modelled Annual Mean and Peak Hour NO<sub>2</sub> µg/m<sup>3</sup> – receptor locations 2002**

### Correction factors for 2005 model determined from the Kegworth receptor location:

Measured 2002 = 37.25µg/m<sup>3</sup>

Modelled 2002 = 33.6µg/m<sup>3</sup>

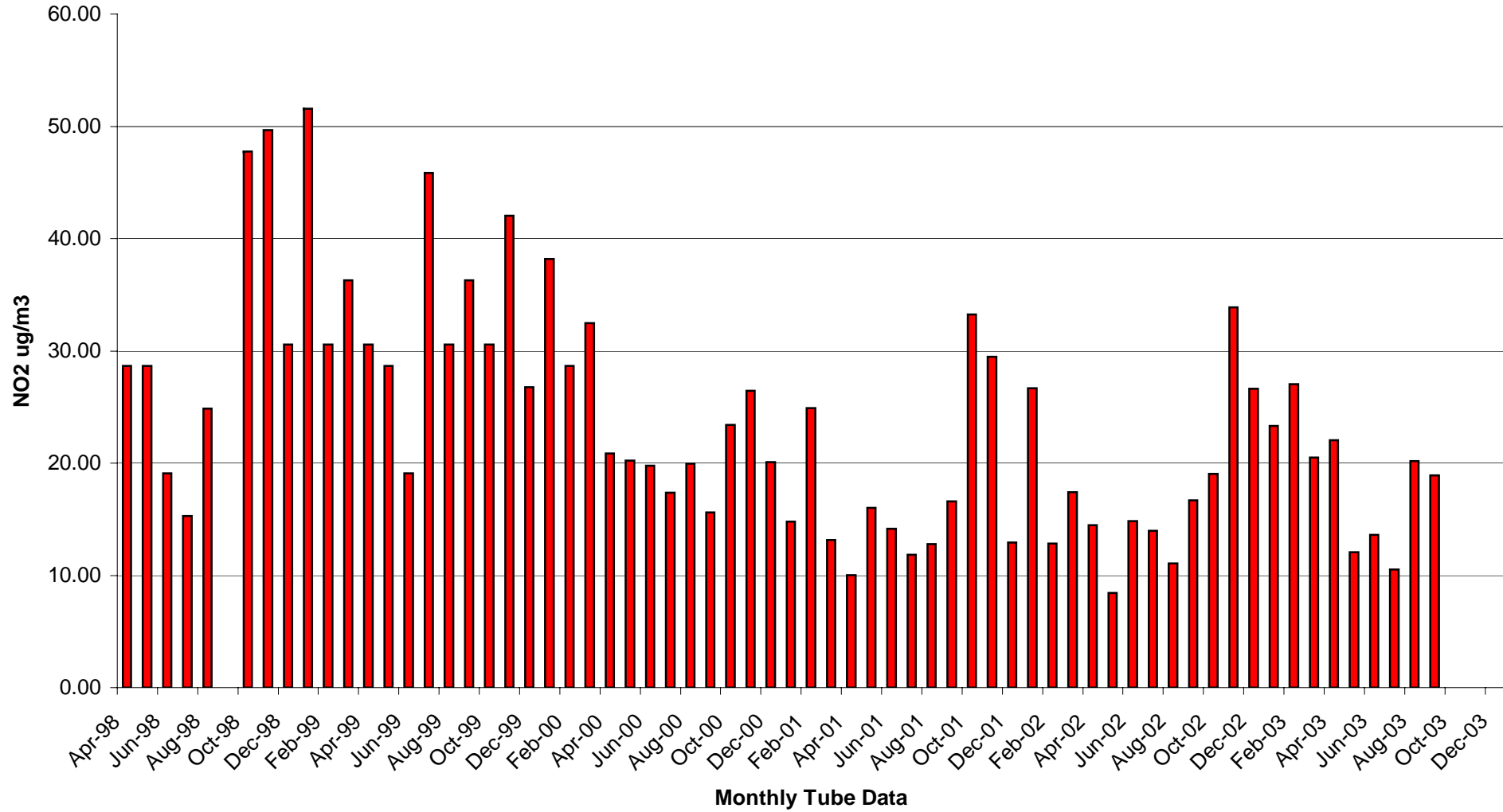
Correction factor =  $\frac{37.25}{33.6}$  = 1.11

Site	Annual Mean ug/m3	Factor Applied	Peak Hour ug/m3
Ashby A42	29.32	32.55	130.33
Ashby Malborough	22.76	25.26	127.56
Ashby Market St	27.61	30.65	128.67
Boundary	24.23	26.90	127.17
C/Don High St	27.33	30.34	127.57
CV Abbotts Oak	24.75	27.47	125.37
CV All Saints	24.59	27.29	125.67
CV Bardon Rd	31.05	34.47	126.54
CV Belvoir	27.71	30.76	127.06
CV Jackson	25.66	28.48	126.73
CV Oxford St	24.73	27.45	125.82
Measham	27.43	30.45	124.62
Broom	29.40	32.63	127.17
C/Don EMA	25.59	28.40	127.74
C/Don Station Rd	31.08	34.50	126.86
Charley	33.58	37.27	133.34
Copt Oak	<b>41.18</b>	<b>45.71</b>	143.71
D/Don Diseworth	25.00	27.75	126.89
Keg Molehill farm	<b>53.06</b>	<b>58.90</b>	191.34
<b>Kegworth A6</b>	<b>35.07</b>	<b>38.93</b>	<b>134.10</b>
M1 Long Whatton	<b>52.45</b>	<b>58.22</b>	165.69
M1 Long Whatton West	<b>44.13</b>	<b>48.98</b>	142.15
Sinope	29.88	33.17	129.71
Whatton Rd Kegworth	32.20	35.74	128.55

**Table A5 – 2: Modelled Annual Mean and Peak Hour NO<sub>2</sub> µg/m<sup>3</sup> – with correction factor applied to predict concentrations of NO<sub>2</sub> at receptor locations in 2005.**

Appendix 6: Historical NO2 Tube Data for Tubes in the Vicinity of East Midlands Airport (EMA)

Tube Number 13 - Castle Donington E.M.A



### NO2 Tube 15 - Castle Donnington, Diseworth

