2021 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995
Local Air Quality Management

June 2021

ASHFORD
BOROUGH COUNCIL

www.ashford.gov.uk

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Executive Summary: Air Quality in Our Area

Air Quality in Ashford

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children, the elderly, and those with existing heart and lung conditions. There is also often a strong correlation with equalities issues because areas with poor air quality are also often less affluent areas[1,2].

The mortality burden of air pollution within the UK is equivalent to 28,000 to 36,000 deaths at typical ages[3], with a total estimated healthcare cost to the NHS and social care of £157 million in 2017[4].

Ashford is the largest borough in Kent, with a fast-growing population. In 2003, Ashford was identified as one of the Growth Areas in the government's Sustainable Communities Plan with a £2.5 billion investment programme underway to provide 31,000 new homes and 28,000 new jobs by 2031. Although the urban area of Ashford is expanding, much of the borough is rural in character, including protected areas such as the North Downs and the High Weald.

The main source of air pollution in the borough is road traffic emissions from major roads, notably the M20, A20, A28 and A292. Other pollution sources, including commercial, industrial and domestic sources, also make a contribution to background pollutant

[1] Public Health England. Air Quality: A Briefing for Directors of Public Health, 2017

[2] Defra. Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

[3] Defra. Air quality appraisal: damage cost guidance, July 2020

[4] Public Health England. Estimation of costs to the NHS and social care due to the health impacts of air pollution: summary report, May 2018

concentrations. Pollutant concentrations within the borough are all below the national air quality objectives and the latest monitoring data show levels are decreasing slightly.

Actions to Improve Air Quality

Air quality in the borough is considered to be good, with concentrations below the national air quality objectives at relevant locations. Ashford Borough Council protects air quality within its borough using Core Strategy Policy CS1 to encourage sustainable development and high quality designs and Policy ENV12 which concerns major development proposals and their potential impact on air quality. The Local Transport Plan for Kent sets out policies to improve transport, and encourage sustainable transport within the borough. Ashford Borough Council has been working closely with Kent County Council to improve air quality; details of the actions taken recently are described below.

Local Plan 2030

The Ashford Local Plan was adopted in February 2019.

Policy ENV12 on 'Air Quality' states that *"All major development proposals should promote a shift to the use of sustainable low emission transport to minimise the impact of vehicle emissions on air quality.*

Development should be located where it is accessible to support the use of public transport, walking and cycling.

Development proposals that might lead to a significant deterioration in air quality or national air quality objectives being exceeded, either by itself, or in combination with other committed development, will require the submission of an Air Quality Assessment to be carried out in accordance with the relevant guidance…"

Electric Vehicle Charging

Kent County Council are leading a project with seven of the Kent local authorities to implement more charging points around Kent. 153 car parks have been put forward as potential locations and installations are expected to begin towards the end of 2021. Although there are only a relatively small number of electric vehicle owners at present, the current network of charging points in Ashford resulted in 1,796 charging sessions from 1 January 2020 to 31 December 2020. The council currently has 14 council managed charging points. Table 1 shows the charging sessions, and total energy consumption from the electric charging points in 2019 and 2020. Although the use of Elwick Place increased significantly in 2020 (23.8% increase), all of the other sites decreased, likely to be reflecting the restrictions due to COVID -19 lockdowns imposed throughout 2020.

Table 1 – Electric Vehicle Charging Sessions

Location	Sum of Charging Sessions			Sum of Total kWh		
	2019	2020	%Change	2019	2020	%Change
Civic/ Stour Centre, Ashford x2	417	334	-20	2634	4693	56
Julie Rose Stadium Car Park, Ashford x2	408	101	-75	3167	1436	-55
Leisure Centre, Tenterden x2	204	146	-29	2365	890	-63
Station Road (West) Car Park, Tenterden x2	222	125	-44	3545	1147	-68
Vicarage Lane Car Park, Ashford x2	318	116	-74	3720	1126	-70
Elwick Place, Ashford x4	221	974	88	1879	12152	85
Grand Total	**1790**	**1796**	**0.3**	**17310**	**21444**	**23.8**

To take into account the cumulative impacts of development on air quality, and to encourage electric vehicle ownership, Ashford Borough Council requires future new builds to incorporate electric vehicle charging points. Each new dwelling with a designated parking space (driveway, carport, or garage), is required to provide at least one electric vehicle charging point. The charging point may be a dedicated electric vehicle charging socket, or a suitably rated three-pin socket capable of safely providing a slow charge to an electric vehicle via a domestic charging cable.

Green Travel

The council continues to contribute towards the KM Charity Walk to School scheme. The KM Charity Team runs green travel initiatives for schools including parent-led walking buses, and other initiatives including Green Footsteps. A number of schools have achieved the Green Travel Mark Awards (at different levels), encouraging children to walk, cycle or travel to school in some active way. The scheme has attempted to improve road awareness, encourage physical activity and reduce the use of vehicles, which should improve air quality.

The council launched a scheme to encourage electric and hybrid vehicle uptake amongst taxi and private hire fleets in the borough. Furthermore, the council intends to explore options to provide fuel efficient driver training for taxi and private hire drivers to reduce vehicle emissions.

Variable Message Signs

Ashford Borough Council encourage and support Kent County Council in displaying roadside messages such as “Could you car share? Search Kent Lift Share”, “Don’t take your speed to the limit”, “Save fuel, cut pollution, switch off when stopped”; which are intended to help to encourage behaviour change to lower emissions.

Air Quality Strategy

Further to the actions identified above Ashford Borough Council has also adopted an Air Quality Strategy to reduce emissions and maintain and improve air quality[5]. Actions are focussed around behaviour change away from unsustainable modes of transport, reducing emissions per vehicle and implementing high standards for development. This includes ensuring Ashford Borough Council provide leadership, whilst working with partners and the public. Details of the actions included in the Strategy are provided in appendix G

A28 Chart Road Improvement Scheme

The A28 is the main route serving the south and west of Ashford. The route runs north-south on the western side of the town and connects to the A20/A292 to the north, and ultimately, the strategic highway network via the M20.

The scope of the improvement scheme includes the dualling of the existing A28 Chart Road carriageway, with two lanes being provided in both directions between Matalan (Brookfield Road) and Templer Way roundabouts. A new bridge over the railway line is proposed to take the southbound carriageway with the existing bridge carrying the northbound carriageway.

Further, the plan is to enlarge both the Brookfield Road and Templar Way junctions to accommodate increased capacity stemming from the carriageway upgrade. Under the scheme, the Loudon Way signalised junction would be retained and improved with more efficient signals, new pedestrian and cycle crossing facilities and dedicated right and left turning lanes from Chart Road. Currently the works have been delayed for financial reasons and, at present it is hoped that the project will recommence in 2022 or 2023.

[5] https://news.ashford.gov.uk/business-news/new-air-quality-strategy-for-ashford-approved/

M20 Junction 10a

The need for additional motorway junction capacity to the southeast of Ashford has been recognised for the past two decades. The Ashford Local Plan to 2030 relies on the delivery of Junction 10a to support the delivery of key proposed site allocations for housing and employment development.

The works are now complete and the junction open for traffic. The application was accompanied by an environmental impact assessment that included a chapter on air quality, which demonstrated that impacts on air quality would not be significant[6].

Network Rail LTPP – Kent Route Study

The Long Term Planning Process (LTPP) strategy is designed to facilitate strategic planning of the rail network, taking into consideration passenger and freight forecasts. The Kent Route Study (KRS) was published in May 2018 and sets out the strategic vision for this part of the rail network over the next 30 years[7].

Ashford International Station

When the Channel Tunnel Rail Link was constructed, the preferred route alignment passed immediately to the north of Ashford International Passenger Station (IPS) and spurs were constructed to allow Eurostar trains to stop and pick up passengers. These spurs, which are owned and managed by High Speed 1 and Network Rail, were signalled using a system that was incompatible with the new Siemens Class 374 trains being operated by Eurostar, which means that they could not access Ashford International Passenger Station (IPS).

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[6] For details see https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010006/TR010006-000178-M20_J10a_6.1_ES_Chapter_5.pdf

[7] For details see https://cdn.networkrail.co.uk/wp-content/uploads/2018/06/South-East-Kent-route-study-print- version.pdf

Funding of £9.8 million was secured through the South East Local Enterprise Partnership via the Local Growth Fund as part of the £10.5 million project to re-signal the Station and improve the platforms at Ashford IPS. This project was delivered by the end of March 2018, however a further technical issue arose for Class 374 trains accessing Ashford via the spurs. Eurostar, HS1, Network Rail, Kent County Council and Ashford Borough Council have worked to resolve this issue so that the Class 374 trains can be used for services stopping in Ashford since early 2020. The Class 374 trains have a number of benefits including more seats on each train, a higher roof to reduce sonic boom through tunnels, better aerodynamics, units that reduce energy demand, and an electric braking system resulting in 10% energy savings, all of which provide greater energy efficiency.

Operation Brock – Brexit Contraflow

A contraflow was in use between March 2019 and February 2020 on the M20 in anticipation of problems caused by cross-channel disruption after Brexit. The contraflow has now been removed.

As of July 2018, in conjunction with Highways England, additional NO_2 diffusion tubes were installed at five locations along the A20/M20. These have been included in the monitoring data for 2018 to 2020 .

Major Town Centre Redevelopment Proposals

The council continues to pursue the revitalisation of Ashford Town Centre. This includes the acquisition of the Mecca Bingo, Homeplus Furniture, and Matalan sites alongside negotiations to secure the redevelopment of former underused and derelict land adjacent to the main transport corridor in central Ashford. There are a number of other sites close to the town centre where development is either approved, resolved to be granted subject to completion of legal agreements, completed or applications are imminent.

Major projects include the following sites:

- Ashford Designer Outlet Expansion - opened in Autumn of 2019, comprising of new units within the existing shell of the Designer Outlet and a northwards expansion of units towards Newtown Road as well as the creation of a new surface level car park south of the Aylesford Stream. The development has the potential to attract a considerable number of additional visitors to Ashford and includes the funding of potential improvements to the pedestrian/cycle routes between the Designer Outlet and public transport links provided at Ashford International and domestic railway station;
- Klondyke Works - permission has been granted for 93 apartments and construction has now commenced;
- Victoria Road & George Street Site - a former brownfield site occupying a prominent location opposite the Ashford IPS identified for a mixed-use redevelopment. Works have completed on the ALDI food-store and Curious Brewery and both are now open for trading. A 216-apartment scheme with ground floor commercial fronting Victoria Road completed in 2020 and a 140-bed hotel is nearing completion with an opening expected mid-2021;
- Victoria Crescent - a former brownfield site in two parts. Permission granted for 59 apartments over the two sites. Both sites are now complete;
- Former Powergen Site - the development of 660 dwellings over 5 plots with ancillary A1/A3 uses has commenced and 14 additional apartments (in the form of an additional storey to x2 of the apartment blocks) have since been permitted. The first block available for occupation comprises 74 homes including apartments and riverside townhouses and work on the remaining plots (phases) is continuing with homes in Plot 4 being marketed and construction at a more advanced stage compared with the westernmost Plot 5;
- Elwick Place - cinema, restaurants, public car park and hotel has been completed with the hotel and cinema open for trading and some ground floor commercial units are open for trading or soon to open with the remainder being vacant. The remainder of the

site east of Elwick Place has been granted outline planning permission for residential and care home use;

- Former Godinton Way Industrial Estate - a “brownfield" site for residential development. A redevelopment scheme comprising for 83 dwellings is complete;
- Godinton House - permission granted and construction is currently underway for conversion and extension of the building into 28 apartments above ground floor commercial;
- Mecca Bingo site – site purchased by Ashford Borough Council and identified for mixed-use development. Detailed scheme and planning application awaited;
- Multi-storey car park, Station Road – existing surface level car park, owned and operated by Ashford Borough Council, identified for erection of multi-storey car park. Outline planning permission granted;
- Homeplus site – site purchased by Ashford Borough Council and identified for housing development. Detailed planning application submitted and was resolved in 2021 to be granted subject to resolution of various matters and s.106 legal agreement;
- Commercial Quarter – the former ‘Coachworks’ part of site has the potential to deliver an Enterprise/Innovation Centre as part of one of the office buildings, providing start up space and small serviced office space within Ashford. Planning permission has been granted. The business ‘start up’ units and food and drink outlets are complete and occupied;
- Swanton House, Elwick Road – scheme for demolition of existing building and erection of two new blocks giving 34 apartments in total and residents’ parking currently awaiting determination;

There is potential for these developments either individually, or cumulatively, to have an impact on air quality. It is possible that applications will come forward for further intensive redevelopment on Victoria Road in the area north of Victoria Crescent. Ashford Borough Council is using the planning system to ensure that where necessary, planning

applications have robust air quality assessments submitted, and mitigation is requested if required.

Other Major Development Proposals:

- Conningbrook Lakes - the council has approved major development at Conningbrook Lakes including a country park, residential development and leisure activities (e.g. water sports). The first phase of residential development on the western side of the site, north of the overflow car parking area serving the Julie Rose Stadium, comprising 300 homes, is under construction by the Chartway Group with a substantial number of occupations having occurred;
- Chilmington Green - major development providing up to 5,750 residential units and supporting infrastructure. The first infrastructure phases of this development started in early 2017. The first detailed application for housing was granted planning permission in April 2018 and work has now started on site with circa 140 homes now being occupied in different locations in the development area;
- Waterbrook Park - a hybrid application (including outline and detailed elements) for a significant expansion of the existing lorry park to 600 spaces (and its relocation on the site) along with new business and retail floorspace together with up to 400 dwellings, has been approved and is under construction. The new lorry park and associated facilities is complete (and was used for a time period as a contingency in relation to the Stour park Inland Border Facility (below) as are small and medium size enterprise commercial uses on Arrowhead Road). The Council has approved a large storage and distribution single use for the entirety of Zone A on Arrowhead Road but this has not yet commenced. On Waterbrook Avenue, a drive through restaurant has been approved and has not commenced;
- Stour Park, Sevington - permission was granted by the council in late Summer 2017 for substantial employment floor space suited to storage and distribution/logistics uses together with general and business floor space and supporting retail provision. The first

application for ‘site layout’ has been approved and was commenced in 2019. The site has been purchased by the Department for Transport and, pursuant to Special Development Order and subsequent Article 4 applications has been developed as an Inland Border Facility. This was operational from 01/01/2021 and has elements still under construction;

- Newtown Works – Detailed application for a mixed use development comprising film studios with post-productions offices and workshop, media village, 120 bed hotel, 62 serviced apartments, multi-storey car park, commercial and educational floorspace and 302 apartments permitted by the Council in late summer 2020. Scheme yet to commence. There is a possibility that elements will need reconsideration due to changing market requirements.

The planning system is being used to ensure that major developments have a robust air quality assessment submitted, and relevant, proportionate mitigation is implemented where impacts are likely to arise.

Conclusions and Priorities

This Annual Status Report confirms that air quality within Ashford continues to meet the relevant air quality objectives, and that air quality is generally good. The main source of pollution within the borough is road traffic, and the Local Transport Plan for Kent is crucial, setting out policies to improve transport, and encourage sustainable transport within the borough. A number of actions to maintain and improve current air quality are included in the ASR. The planning system is also key to ensuring that air quality does not deteriorate, especially given the large amount of development planned in this area. The Ashford Local Plan was adopted in February 2019, and Policy ENV12 aims to protect and improve air quality. Priorities for this year will include ensuring that a modal shift to active modes of travel is encouraged, that an increase in the proportion of electric vehicles in the fleet is promoted, and that applications for large scale developments, properly assessed in relation to air quality.

Reductions in travel during 2020, as a result of the COVID-19 pandemic, have led to wide-spread reductions in air pollutant concentrations nationwide. Air quality monitoring continued in Ashford throughout 2020 throughout the pandemic, with the exception of one site which had to be moved due to accessibility issues.

Local Engagement and How to get Involved

Members of the public can help improve air quality in the borough by travelling using sustainable transport options, such as walking, running, cycling and using public transport. Ashford Borough Council, in conjunction with Kent and Medway Air Quality Partnership encourages the promotion of air quality, and educational materials can be provided.

Further information on local air quality can be obtained via the UBreathe app for iPhone and Android, which provides air pollution health advice where you need it.

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1 Local Air Quality Management

This report provides an overview of air quality in Ashford during 2020. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely, the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Ashford to improve air quality and any progress that has been made.

Due to restrictions put in place in relation to the COVID-19 pandemic, 2020 was not a representative year in relation to air quality, largely due to the reduction in overall travel. This is reflected throughout this report.

The statutory air quality objectives applicable to LAQM in England are presented in Table E.1.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 12 months setting out measures it intends to put in place in pursuit of compliance with the objectives.

Ashford Borough Council does not have any AQMAs. For reference, a map of Ashford Borough Council's monitoring locations, as well as those undertaken by Highways England within Ashford, is provided in Appendix D.

2.2 $PM_{2.5}$ – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG16 (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of $PM_{2.5}$ (particulate matter with an aerodynamic diameter of 2.5 µm or less). There is clear evidence that $PM_{2.5}$ has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Ashford Borough Council is taking the following measures to address $PM_{2.5}$: Ashford Borough Council is part of the Kent Health and Wellbeing Board, which brings together County and District Councillors, senior officers from the NHS Area Team, Clinical Commissioning Groups, Social Care and Public Health and members of the Local Healthwatch. The Board produced the Kent Joint Health and Wellbeing Strategy (Kent County Council, 2014), which sets out how the multidisciplinary teams can align their plans to improve public health and tackle key health issues over the coming years.

Ashford Borough Council is working with Public Health colleagues to prioritise action on air quality to help reduce the health burden from air pollution. The Public Health Outcomes Framework is a Department of Health data tool for England, intended to focus public health action on increasing life expectancy and reducing differences in life expectancy between communities. The PHOF includes an indicator, based on the effect of particulate matter ($PM_{2.5}$) on mortality. For Ashford, this indicator (3.01) for 2019 is 5.1% of deaths attributable to $PM_{2.5}$, which is slightly lower than the regional average (5.2%) and the same as the average for England (5.1%). The approach used, in partnership with Public Health colleagues, includes the encouragement of active travel, which will also have wider public health benefits captured in other indicators such as increased physical activity (indicator C17a) and reducing excess weight at various ages (indicators C09a and b and C16).

The Local Transport Plan for Kent (Kent County Council, 2017) sets out a 15-year transport delivery plan for the county. Ashford has been identified as an area for significant growth in housing and employment and contains one of the UK's four Growth Areas. $PM_{2.5}$ is one of the main pollutants associated with road traffic emissions; reducing transport emissions within the borough is therefore of key importance. The Local Transport Plan proposes a number of strategies to improve transport within Ashford, including improvements to local bus and rail services and district and borough cycling strategies.

Ashford Borough Council works closely with local bus operators and is part of the Quality Bus Partnership (QBP) comprising of council officers, bus companies, local councillors and other key partners. Through this partnership there have been positive moves towards improving air quality across the borough.

As part of the commitment to improving air quality, updates are provided to the QBP through the quarterly meetings.

Planning is also important for reducing future concentrations of $PM_{2.5}$ and Ashford Borough Council is focussed through its planning policy on preventing concentrations being inadvertently increased. Policy ENV12 within the Local Plan states that "*All major development proposals should promote a shift to the use of sustainable low emission transport to minimise the impact of vehicle emissions on air quality.*

Development should be located where it is accessible to support the use of public transport, walking and cycling.

Development proposals that might lead to a significant deterioration in air quality or national air quality objectives being exceeded, either by itself, or in combination with other committed development, will require the submission of an Air Quality Assessment to be carried out in accordance with the relevant guidance" and developments should respect the environmental limits and protect air quality standards.

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

This section sets out the monitoring undertaken within 2020 by Ashford Borough Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2016 and 2020 to allow monitoring trends to be identified and discussed. It should be noted that due to restrictions put in place for the COVID-19 pandemic, 2020 was not a representative year in relation to air quality, largely due to the reduction in overall travel.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

There was no automatic monitoring undertaken within the borough.

3.1.2 Non-Automatic Monitoring Sites

Ashford Borough Council undertook non-automatic (i.e. passive) monitoring of NO_2 at 29 sites during 2020. Since July 2018 Ashford Borough Council, in conjunctionwith Highways England, has undertaken monitoring at five further sites along the A20/M20, which are included in the above. Table A.1 in Appendix A presents the details of the non-automatic sites.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments and any other adjustments applied (e.g. annualisation and/or distance correction), are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, annualisation (where the annual mean data capture is below 75% and greater than 33%), and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO_2)

Error! Reference source not found. in Appendix A compares the adjusted monitored NO_2 annual mean concentrations for the past five years with the air quality objective of 40µg/m^3. Note that the concentration data presented represents the concentration at the location of the monitoring site, following the application of bias adjustment and annualisation, as required (i.e. the values are exclusive of any consideration to fall-off with distance adjustment).

The full 2020 dataset of monthly mean values is provided in Appendix B. Note that the concentration data presented in Table B.1 includes distance corrected values, where relevant.

In November 2020 site AS62 was moved to a roadside location due to accessibility issues as a result of the COVID-19 pandemic. The new site at Simone Weil Way (AS65) is included in Table A.1, but does not have enough data to be included in Table B.1. Data from this site will be included in the 2022 ASR.

Concentrations were all well below the annual mean objective of 40 µg/m^3. As the concentrations at all sites were below the annual mean objective, exceedances of the 1-hour mean objective are highly unlikely.

Measured annual mean concentrations for the past five years are presented in Table A.2. There is a downwards trend in concentrations, as shown in Figure A.1 in Appendix A, however, a clear decrease in concentrations between 2019 and 2020 can be seen, as a result of travel restrictions due to the COVID-19 pandemic.

Appendix A: Monitoring Results

Table A.1 – Details of Non-Automatic Monitoring Sites

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
AS15/AS16/AS17[c]	Lees Road	Other/Motorway	601303	142563	NO2	NO	0	33	NO	3
AS18/AS19/AS20	Heathfield Nursing Home	Kerbside	603393	142073	NO2	NO	0	17.3	NO	3
AS31	42, Newtown Green	Roadside	601828	141461	NO2	NO	0	3.8	NO	2
AS33	East Lodge, Chart Road	Urban	599826	143084	NO2	NO	0	12.7	NO	1.8
AS35	102 Brookfield Road	Urban	599513	142110	NO2	NO	0	14.3	NO	1.8
AS37	30 Kingsnorth Road	Urban	600488	141277	NO2	NO	0	7	NO	1.8
AS40	4 Blackwall Road North	Urban	603229	142795	NO2	NO	0	14	NO	1.8
AS44	Dovecote House, The Street	Urban Background	603800	141792	NO2	NO	0	22.2	NO	1.8
AS45	1 Highfield Court, Hythe Rd	Urban	604207	141400	NO2	NO	0	18	NO	1.8
AS46	8 Winslade Way	Other/Motorway	603311	142192	NO2	NO	0	21	NO	2.1
AS47	Kenistone, Kingsford Street	Other/Motorway	604583	140961	NO2	NO	0	21.3	NO	2.1

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
AS48	Ransley House, Kingsford Street	Other/Motorway	604733	140878	NO2	NO	0	10.9	NO	2.1
AS49	Hythe Road	Roadside	604005	141616	NO2	NO	4.3	2	NO	2
AS50	49 Hythe Road	Urban	601707	142748	NO2	NO	0	5.7	NO	2
AS51	Wellesley Road	Roadside	601247	142850	NO2	NO	0.6	3.9	NO	2
AS52	49 Somerset Road	Urban	601211	142990	NO2	NO	0	5.4	NO	2
AS53	Northgate House, 1-9 North Street	Urban	601055	142972	NO2	NO	0	2.4	NO	2
AS54	North Street	Roadside	601068	143048	NO2	NO	2.7	2	NO	2
AS55	5 Maidstone Road	Urban	600367	143225	NO2	NO	0	12.7	NO	2
AS56	68 New Street	Urban	600667	143016	NO2	NO	0	5	NO	2
AS57	24 Bank Street	Urban	600883	142694	NO2	NO	0	4.5	NO	2
AS58	Trafalgar House, Elwick Road	Urban	600865	142588	NO2	NO	0	18.7	NO	2
AS59	Romney Marsh Road (opposite railway station)	Roadside	601096	142114	NO2	NO	3	3.2	NO	2
AS60	Victoria Road (opposite Curious Brewery)	Roadside	600946	142205	NO2	NO	0.6	1.8	NO	2
AS61	117 Station Road	Urban	601150	142342	NO2	NO	0	10.8	NO	2
AS62	Warren Lodge Nursing Home (closed Nov 2020)	Urban Background	600191	143560	NO2	NO	0	16.6	NO	2
AS63	Brookfield Road (by Matalan)	Roadside	599263	142471	NO2	NO	5.8	5.9	NO	2
AS64	282 Beaver Road	Urban	599183	141842	NO2	NO	0	58	NO	2

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
AS65	Simone Weil Way (opened Nov 2020)	Roadside	600188	143619	NO2	NO	15.9	2.4	NO	2
HE1	Westwell Lane, Ashford TN26 1JA	Motorway	599298	145188	NO2	NO	0	0.3	NO	1.8
HE2	Maidstone Rd, Charing TN27 0JS	Roadside	594818	149759	NO2	NO	N/A	0.3	NO	1.8
HE3	Ashford Road, Charing TN27 0JA	Roadside	595216	149249	NO2	NO	2.3	0.03	NO	1.8
HE4	Maidstone Road, Westwell TN26 1AP	Roadside	597003	146561	NO2	NO	4.4	0.04	NO	1.8
HE5	Maidstone Road, Ashford TN25 4NR	Roadside	599183	144730	NO2	NO	3.5	0.04	NO	1.8

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

Table A.2 – Annual Mean NO_2 Monitoring Results: Non-Automatic Monitoring (µg/m^3)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2020 (%) (2)	2016	2017	2018	2019	2020
AS15/AS16/AS17(3)	601303	142563	Other/Motorway	100	100.0	32.8	36.4	30.5	27.7	22.2
AS18/AS19/AS20(3)	603393	142073	Kerbside	100	100.0	27.4	27.9	26.3	23.8	18.1
AS31	601828	141461	Roadside	100	100.0	22.3	24.3	18.4	19.6	16.1
AS33	599826	143084	Urban	100	100.0	21.8	21.7	19.6	18.4	16.0
AS35	599513	142110	Urban	100	100.0	20.8	22.2	19.4	18.1	15.8
AS37	600488	141277	Urban	100	100.0	25.7	26.5	25.1	25.1	19.2
AS40	603229	142795	Urban	100	100.0	18.9	19.1	16.3	15.5	12.9
AS44	603800	141792	Urban Background	100	100.0	21.6	24.1	19.7	18.9	14.3
AS45	604207	141400	Urban	100	100.0	-	25.6	20.3	19.4	13.7
AS46	603311	142192	Other/Motorway	100	100.0	-	32.0	25.6	23.8	19.5
AS47	604583	140961	Other/Motorway	100	100.0	-	-	14.4	14.0	12.0
AS48	604733	140878	Other/Motorway	100	100.0	-	-	13.8	13.2	10.8
AS49	604005	141616	Roadside	100	100.0	-	-	-	37.1	26.9
AS50	601707	142748	Urban	100	100.0	-	-	-	23.4	19.8
AS51	601247	142850	Roadside	100	100.0	-	-	-	-	31.0
AS52	601211	142990	Urban	100	100.0	-	-	-	34.7	22.8
AS53	601055	142972	Urban	100	92.3	-	-	-	33.3	23.7
AS54	601068	143048	Roadside	100	92.3	-	-	-	30.1	21.0
AS55	600367	143225	Urban	100	100.0	-	-	-	23.7	16.4
AS56	600667	143016	Urban	100	100.0	-	-	-	22.4	17.0
AS57	600883	142694	Urban	100	100.0	-	-	-	28.8	21.5
AS58	600865	142588	Urban	100	61.5	-	-	-	26.8	22.1
AS59	601096	142114	Roadside	100	100.0	-	-	-	25.1	25.3
AS60	600946	142205	Roadside	100	100.0	-	-	-	29.4	23.7
AS61	601150	142342	Urban	100	100.0	-	-	-	31.1	22.7
AS62	600191	143560	Urban Background	30	25.0	-	-	-	19.8	16.0
AS63	599263	142471	Roadside	100	100.0	-	-	-	29.1	22.5

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2020 (%) (2)	2016	2017	2018	2019	2020
AS64	599183	141842	Urban	100	100.0	-	-	-	21.2	17.2
HE1(3)	599298	145188	Motorway	100	44.2	-	-	17.0	18.0	13.1
HE2(3)	594818	149759	Roadside	100	44.2	-	-	18.7	19.4	-
HE3(3)	595216	149249	Roadside	100	44.2	-	-	24.9	22.8	18.6
HE4(3)	597003	146561	Roadside	100	44.2	-	-	19.2	19.2	14.8
HE5(3)	599183	144730	Roadside	100	44.2	-	-	29.7	26.7	23.6

☒ **Annualisation has been conducted where data capture is <75% and >33% in line with LAQM.TG16.**

☒ **Diffusion tube data have been bias adjusted.**

☒ **Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction.**

Notes:

The annual mean concentrations are presented as µg/m^3.

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

NO_2 annual means exceeding 60µg/m^3, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

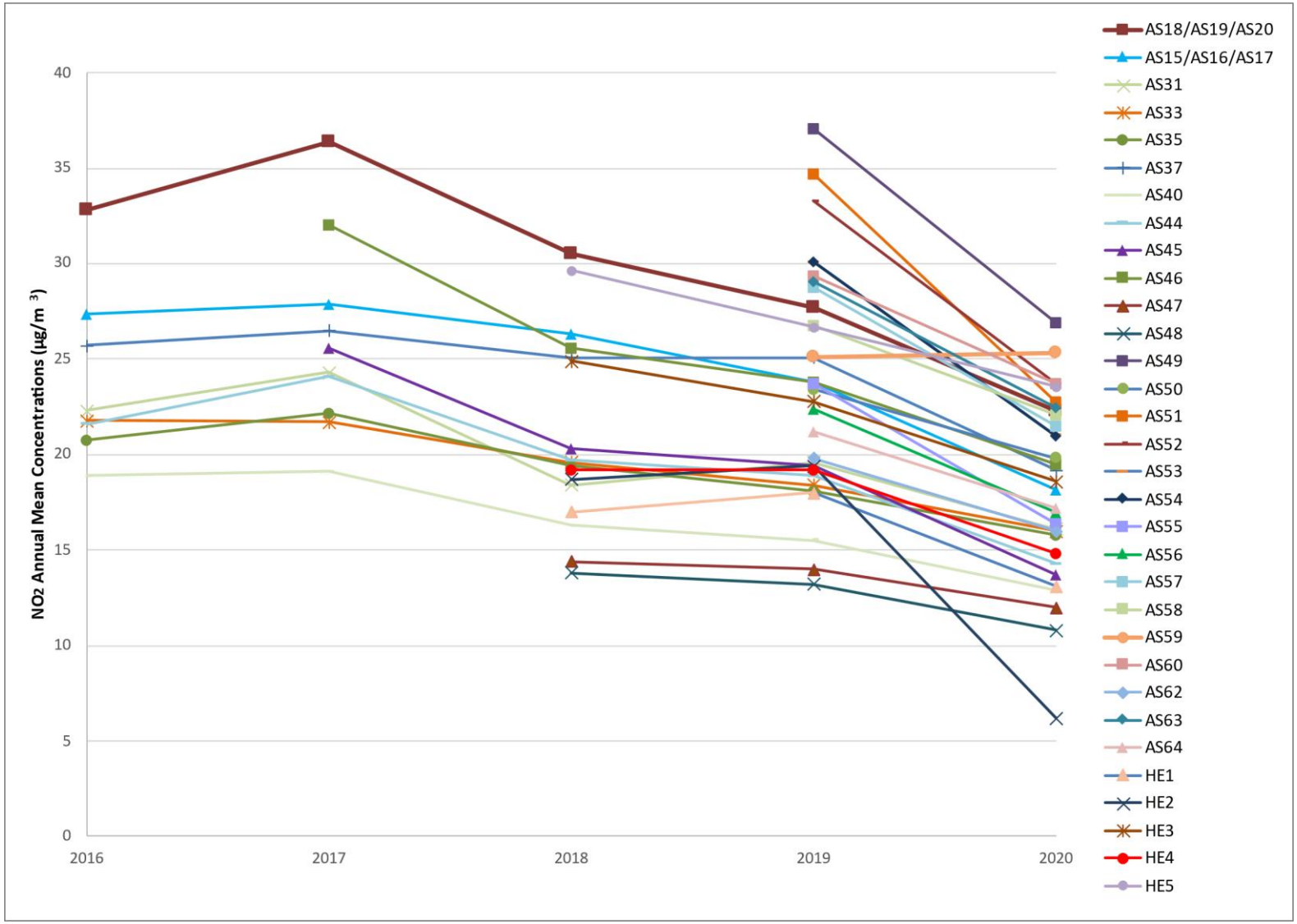
Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) Average of triplicate diffusion tubes.

Figure A.1 – Trends in Annual Mean NO_2 Concentrations



Appendix B: Full Monthly Diffusion Tube Results for 2020

Table B.1 – NO_2 2020 Diffusion Tube Results ($\mu g/m^3$)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Easting)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.77)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
AS15/AS16/AS17(3)	601303	142563	39.7	37.1	22.3	15.4	18.9	27.1	28.5	30.2	29.7	30.8	36.3	29.5	28.8	22.2	-	
AS18/AS19/AS20(3)	603393	142073	31.2	26.2	12.0	20.6	20.1	18.3	20.0	24.7	29.6	23.1	29.7	25.8	23.4	18.1	-	
AS31	601828	141461	32.7	28.2	18.8	15.8	13.6	14.2	18.2	17.6	22.4	21.8	29.1	19.0	21.0	16.1	-	
AS33	599826	143084	29.2	24.1	18.4	16.1	13.7	17.1	15.1	20.7	21.2	22.7	28.7	22.7	20.8	16.0	-	
AS35	599513	142110	30.0	19.4	20.0	15.5	13.0	15.3	15.6	17.5	22.5	22.1	30.1	24.5	20.5	15.8	-	
AS37	600488	141277	31.9	23.7	23.7	20.9	20.6	22.7	18.6	26.3	27.2	22.5	35.4	26.1	25.0	19.2	-	
AS40	603229	142795	26.6	20.8	14.3	11.4	10.8	11.5	12.9	13.9	18.0	18.7	22.8	18.7	16.7	12.9	-	
AS44	603800	141792	29.5	23.9	16.0	14.2	11.8	13.8	14.2	16.7	18.1	18.8	24.8	21.0	18.6	14.3	-	
AS45	604207	141400	24.1	21.2	15.4	13.0	11.9	14.5	14.6	15.5	19.8	17.1	24.2	22.9	17.9	13.7	-	
AS46	603311	142192	39.0	29.8	17.5	17.6	17.2	18.6	22.2	25.7	28.1	27.9	34.7	25.8	25.3	19.5	-	
AS47	604583	140961	19.7	14.3	12.3	16.9	14.0	14.2	11.2	13.3	17.8	16.3	21.5	15.6	15.6	12.0	-	
AS48	604733	140878	17.2	13.7	11.4	14.4	11.7	11.9	10.8	14.3	14.9	13.1	20.8	14.2	14.0	10.8	-	
AS49	604005	141616	46.3	39.8	28.5	19.5	25.7	30.5	34.1	36.3	35.8	36.2	45.0	41.4	34.9	26.9	-	
AS50	601707	142748	32.5	23.2	25.9	29.0	23.3	22.1	18.6	25.9	29.7	24.5	28.2	25.8	25.7	19.8	-	
AS51	601247	142850	55.8	43.9	37.5	24.4	32.3	33.9	28.1	45.1	42.8	44.5	50.2	45.3	40.3	31.0	-	Moved to other side of the road due to tubes being stolen
AS52	601211	142990	43.1	34.8	28.6	13.9	22.7	25.3	14.4	31.3	34.6	34.4	41.8	30.3	29.6	22.8	-	
AS53	601055	142972	43.1	38.7	26.4	20.6	19.9	24.4	-	32.6	33.3	33.6	39.8	26.0	30.8	23.7	-	
AS54	601068	143048	41.5	30.4	-	21.3	16.1	23.7	19.6	26.1	27.9	28.1	37.0	28.0	27.2	21.0	-	
AS55	600367	143225	30.2	28.8	19.0	18.2	14.6	15.8	15.9	20.2	23.0	20.7	29.2	20.4	21.3	16.4	-	
AS56	600667	143016	29.8	23.6	19.6	20.6	16.9	19.1	14.8	21.5	23.2	23.2	29.4	23.1	22.1	17.0	-	
AS57	600883	142694	36.4	29.6	24.6	21.4	18.7	22.3	24.2	30.0	33.1	32.4	37.8	24.9	28.0	21.5	-	
AS58	600865	142588	-	25.4	21.0	25.4	20.8	-	-	27.4	-	29.0	-	31.2	25.7	22.1	-	
AS59	601096	142114	34.5	24.2	23.2	24.0	19.1	19.0	26.6	39.6	42.6	44.8	51.6	45.3	32.9	25.3	-	
AS60	600946	142205	43.8	32.7	27.4	22.0	22.1	27.8	22.0	31.8	32.0	33.3	45.4	29.8	30.8	23.7	-	
AS61	601150	142342	42.0	34.5	25.7	21.9	21.7	24.4	21.6	28.0	32.0	32.7	37.7	31.3	29.5	22.7	-	
AS62	600191	143560	26.6	19.0	-	-	-	-	-	-	-	19.1	-	-	-	-	-	Site closed 04/11 due to accessibility issues
AS63	599263	142471	43.5	39.4	25.1	19.1	17.4	27.1	23.5	29.2	30.9	34.6	35.2	26.3	29.3	22.5	-	
AS64	599183	141842	28.4	24.2	20.4	19.6	16.8	15.9	15.8	19.8	25.0	18.5	37.0	26.4	22.3	17.2	-	
AS65	600188	143619	-	-	-	-	-	-	-	-	-	-	38.8	33.2	-	-	-	New roadside location opposite Warren Lodge Care Home
HE1(3)	599298	145188	-	-	-	-	-	-	-	17.0	19.3	13.6	24.7	17.2	18.4	13.1	-	
HE2(3)	594818	149759	-	-	-	-	-	-	-	14.2	-	17.7	-	-	-	-	-	Insufficient data capture
HE3(3)	595216	149249	-	-	-	-	-	-	-	20.5	27.3	25.1	26.8	31.1	26.2	18.6	-	
HE4(3)	597003	146561	-	-	-	-	-	-	-	16.7	21.2	16.8	27.8	21.5	20.8	14.8	-	
HE5(3)	599183	144730	-	-	-	-	-	-	-	27.3	33.1	29.6	39.6	36.2	33.2	23.6	-	

☒ **All erroneous data have been removed from the NO_2 diffusion tube dataset presented in Table B.1**.

☒ **Annualisation has been conducted where data capture is <75% and >33% in line with LAQM.TG16.**

☐ **Local bias adjustment factor used.**

☒ **National bias adjustment factor used.**

☐ **Where applicable, data has been distance corrected for relevant exposure in the final column.**

☒ **Ashford confirm that all 2020 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

NO_2 annual means exceeding 60µg/m^3, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

New or Changed Sources Identified Within Ashford Borough Council During 2020

Ashford Borough Council has not identified any new sources relating to air quality within the reporting year of 2020.

QA/QC of Diffusion Tube Monitoring

Nitrogen dioxide analysis procedures are compliant with the Diffusion Tubes for Ambient NO_2 Monitoring: Practical Guidance for users and laboratories (February 2008). The diffusion tubes are supplied and analysed by Socotec UK (formerly knownas ESG Didcot) utilising the 50% Triethanolamine (TEA) in acetone preparation method. Socotec UK is a UKAS accredited laboratory which participates in the AEA inter-comparison, AIR PT and the WASP scheme. In 2020, Socotec UK was 100% satisfactory in two PT/WASP trials (January-February and September-October),there were no results for the May-June and July-August trials.

Diffusion Tube Annualisation

Annualisation was required for six non-automatic monitoring sites, the sites requiring annualisation, along with details of the calculation method undertaken, are provided in Table C.2. Annualisation is required for any site with data capture less than 75% but greater than 33%.

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2021 ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG16 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO_2

continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

Ashford Borough Council have applied a national bias adjustment factor of 0.77 to the 2020 monitoring data. A summary of bias adjustment factors used by Ashford Borough Council over the past five years is presented in Table C.1.

Ashford Borough Council does not undertake any automatic monitoring and does not calculate a local bias-adjustment factor. Therefore, the bias factor has been taken from the diffusion tube spreadsheet of national comparison studies.

Table C.1 – Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2020	National	03/21	0.77
2019	National	09/20	0.75
2018	National	06/19	0.76
2017	National	09/18	0.77
2016	National	06/17	0.77

NO_2 Fall-off with Distance from the Road

Wherever possible, local authorities should ensure that monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure should be estimated using the Diffusion Tube Data Processing Tool/NO_2 fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO_2 concentrations corrected for distance are presented in Table B.1.

No diffusion tube NO_2 monitoring locations within Ashford Borough Council required distance correction during 2020.

Table C.2 – Annualisation Summary (concentrations presented in µg/m^3)

Site ID	Annualisation Factor Canterbury	Annualisation Factor Rochester Stoke	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean
AS58	1.1007	1.1325	1.1166	25.7	28.7
HE1	0.9359	0.9143	0.9251	18.4	17.0
HE2	0.9359	0.9143	0.9251	8.8	8.1
HE3	0.9359	0.9143	0.9251	26.2	24.2
HE4	0.9359	0.9143	0.9251	20.8	19.2
HE5	0.9359	0.9143	0.9251	33.2	30.7

Appendix D: Maps of Monitoring Locations and AQMAs

Figure D.1 – Map of Non-Automatic Monitoring Site

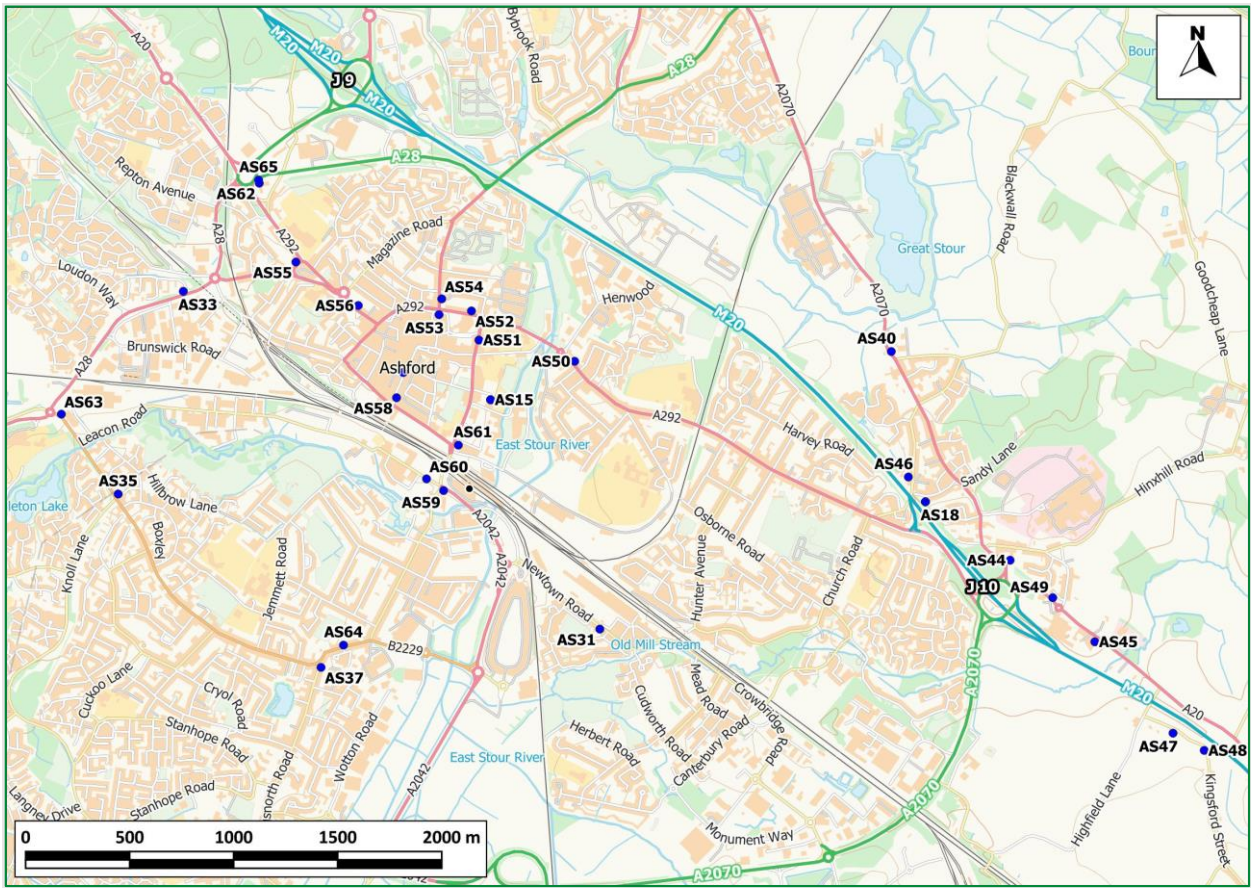


Figure D.2 – Diffusion Tubes Centre of Ashford

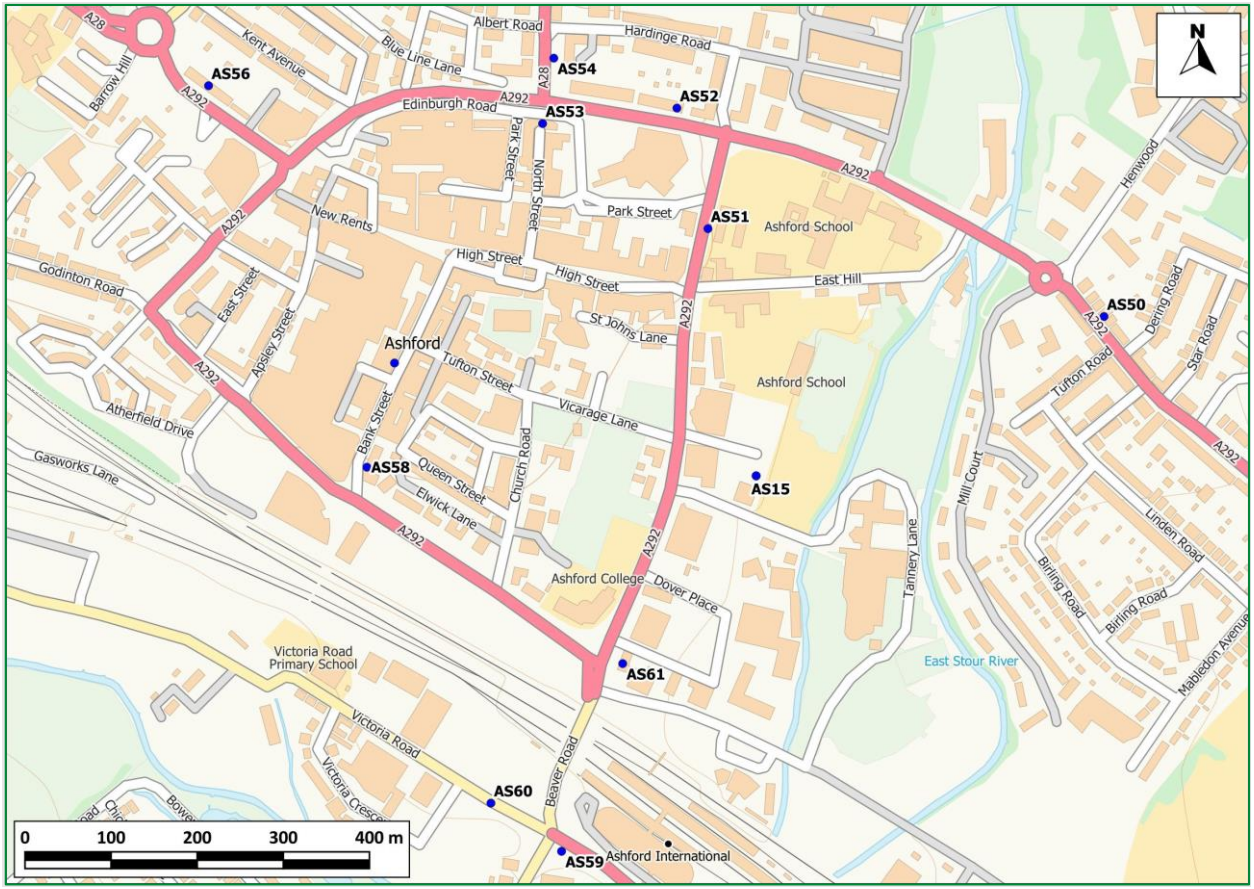


Figure D.3 – Diffusion Tubes East of Ashford

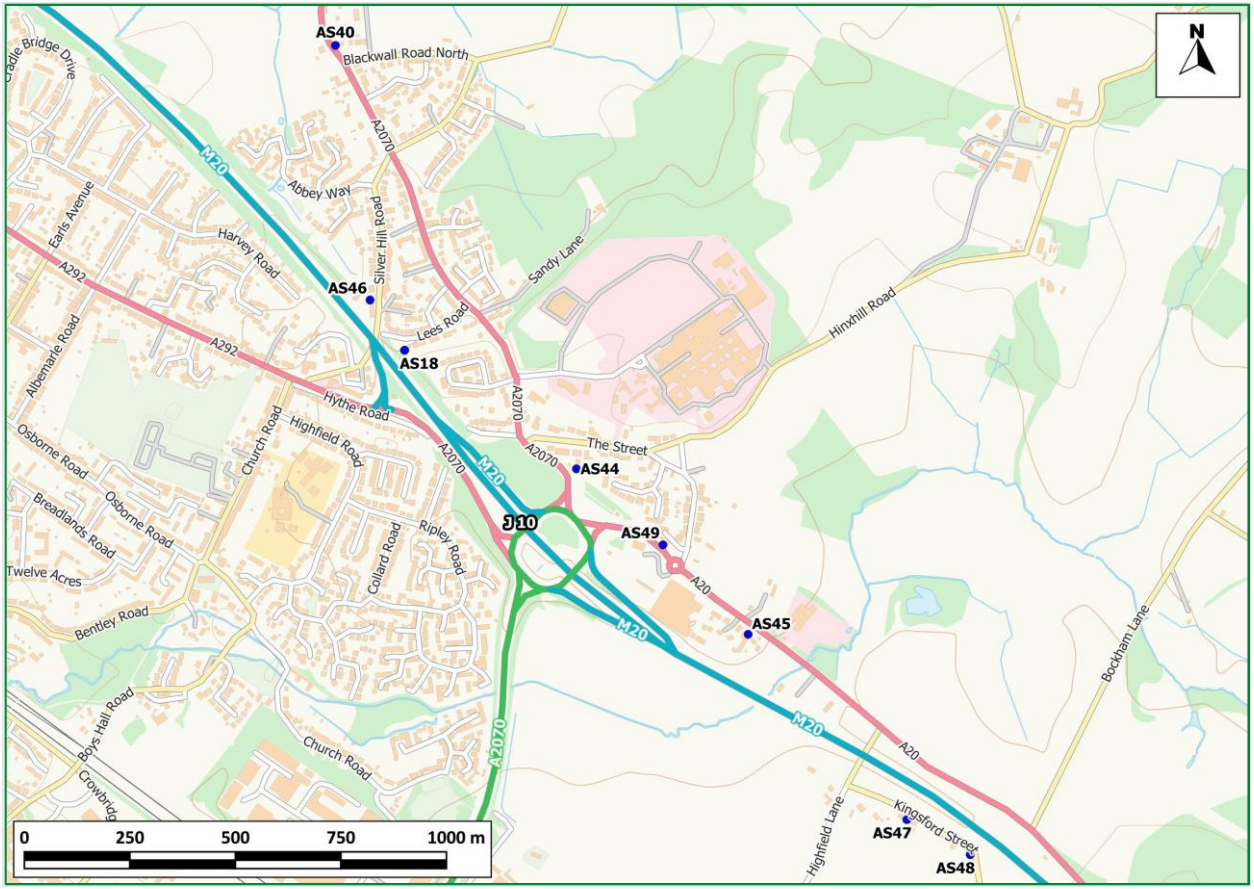


Figure D.4 – Diffusion Tubes South of Ashford

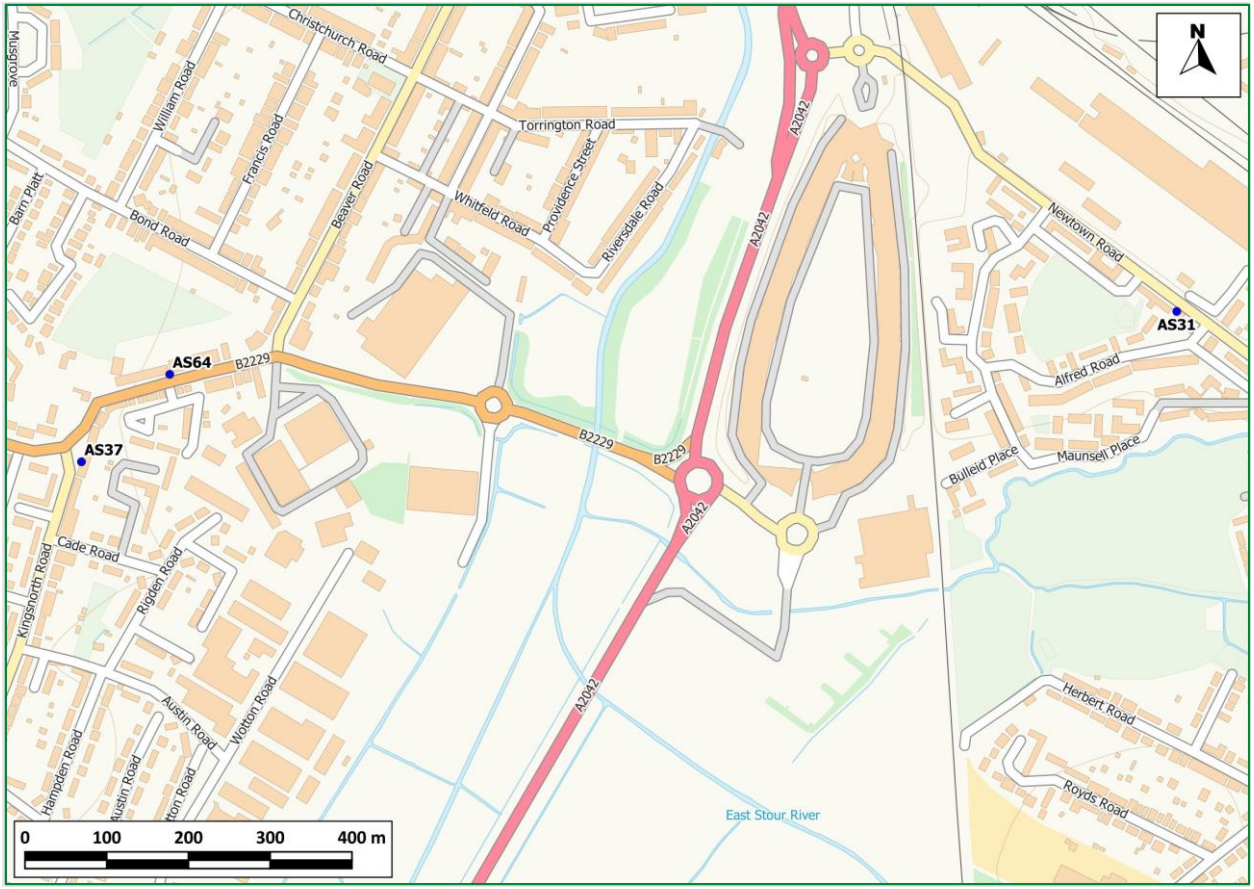


Figure D.5 – Diffusion Tubes Southwest of Ashford

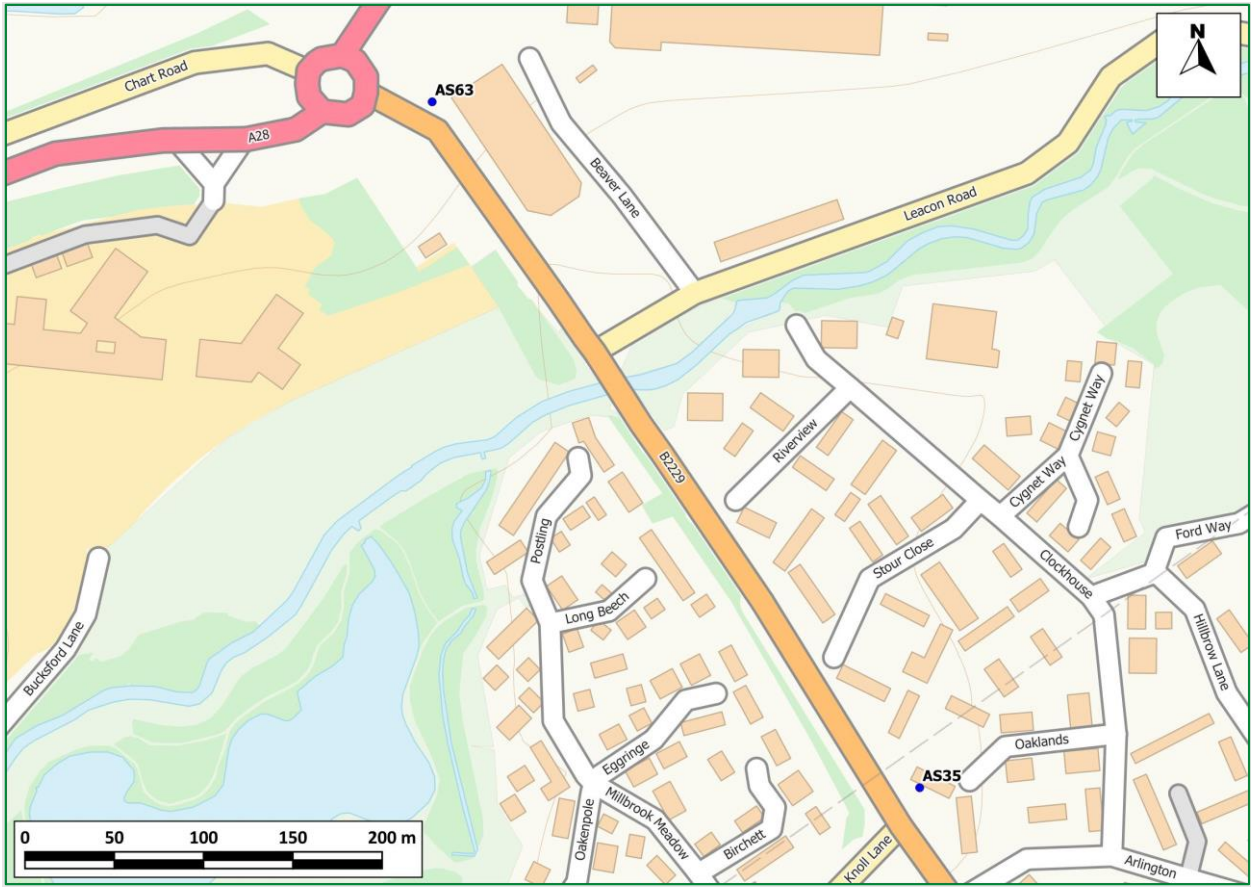


Figure D.6 – Diffusion Tubes West of Ashford

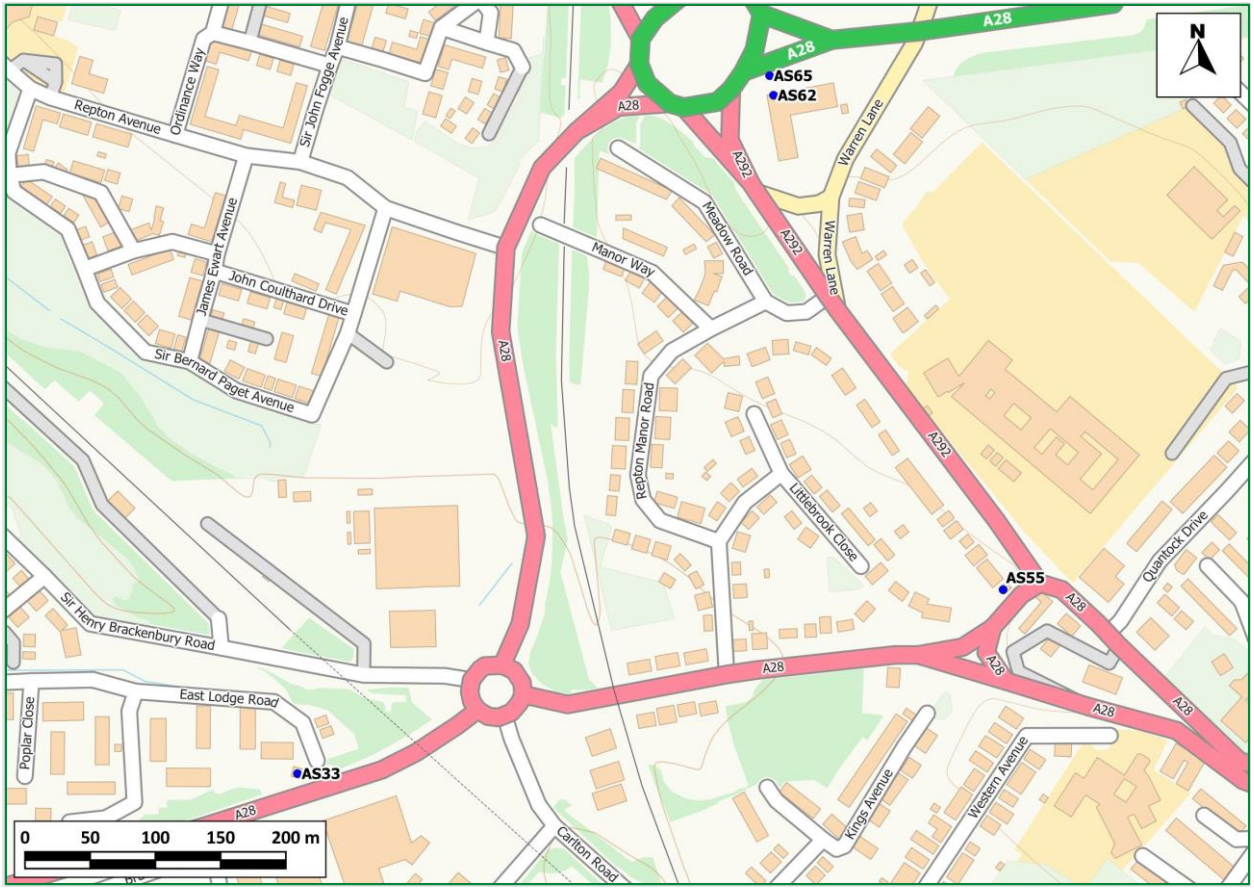
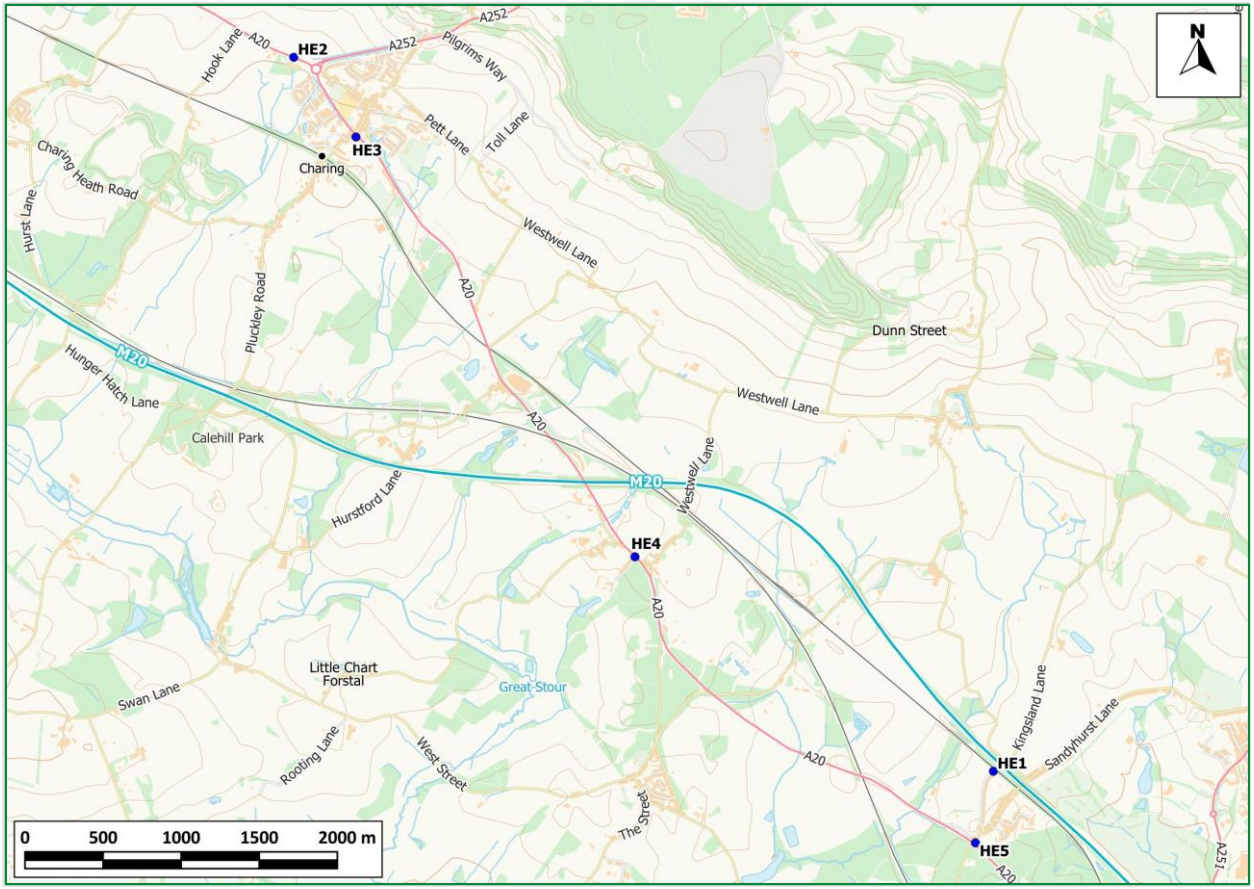


Figure D.7 – Diffusion Tubes set up by Highways England



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[8]

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO_2)	200µg/m^3 not to be exceeded more than 18 times a year	1-hour mean
	40µg/m^3	Annual mean
Particulate Matter (PM_{10})	50µg/m^3, not to be exceeded more than 35 times a year	24-hour mean
	40µg/m^3	Annual mean

[8] The units are in microgrammes of pollutant per cubic metre of air (µg/m^3).

Appendix F: Impact of COVID-19 upon LAQM

COVID-19 has had a significant impact on society. Inevitably, COVID-19 has also had an impact on the environment, with implications to air quality at local, regional and national scales.

COVID-19 has presented various challenges for Local Authorities with respect to undertaking their statutory LAQM duties in the 2021 reporting year. Recognising this, Defra provided various advice updates throughout 2020 to English authorities, particularly concerning the potential disruption to air quality monitoring programmes, implementation of Air Quality Action Plans (AQAPs) and LAQM statutory reporting requirements. Defra has also issued supplementary guidance for LAQM reporting in 2021 to assist local authorities in preparing their 2021 ASR. Where applicable, this advice has been followed.

Despite the challenges that the pandemic has given rise to, the events of 2020 have also provided Local Authorities with an opportunity to quantify the air quality impacts associated with wide-scale and extreme intervention, most notably in relation to emissions of air pollutants arising from road traffic. The vast majority (>95%) of AQMAs declared within the UK are related to road traffic emissions, where attainment of the annual mean objective for nitrogen dioxide (NO_2) is considered unlikely. On 23rd March 2020, the UK Government released official guidance advising all members of public to stay at home, with work-related travel only permitted when absolutely necessary. During this initial national lockdown (and to a lesser extent other national and regional lockdowns that followed), marked reductions in vehicle traffic were observed; Department for Transport (DfT) data[9] suggests reductions in vehicle traffic of up to 70% were experienced across the UK by mid-April, relative to pre COVID-19 levels.

This reduction in travel in turn gave rise to a change of air pollutant emissions associated with road traffic, i.e. nitrous oxides (NO_x), and exhaust and non-exhaust particulates (PM). The Air Quality Expert Group (AQEG)[10] has estimated that during the initial lockdown period in 2020, within urbanised areas of the UK reductions in NO_2 annual mean concentrations were between 20 and 30% relative to pre-pandemic levels, which

[9] Prime Minister's Office, COVID-19 briefing on the 31st of May 2020

[10] Air Quality Expert Group, Estimation of changes in air pollution emissions, concentrations and exposure during the COVID-19 outbreak in the UK, June 2020

represents an absolute reduction of between 10 to 20 µg/m^3 if expressed relative to annual mean averages. During this period, changes in $PM_{2.5}$ concentrations were less marked than those of NO_2. $PM_{2.5}$ concentrations are affected by both local sources and the transport of pollution from wider regions, often from well beyond the UK. Through analysis of AURN monitoring data for 2018-2020, AQEG have detailed that $PM_{2.5}$ concentrations during the initial lockdown period are of the order 2 to 5µg/m^3 lower relative to those that would be expected under business-as-usual conditions.

As restrictions are gradually lifted, the challenge is to understand how these air quality improvements can benefit the long-term health of the population.

Impacts of COVID-19 on Air Quality within Ashford

Reductions of NO_2 concentrations of between 3 and 50% were experienced at several diffusion tube monitoring sites between April and June 2020 (2019 data for April to June was not available for multiple sites). This equated to a 12 to 34% reduction in annual mean concentrations at all sites relative to 2019.

Opportunities Presented by COVID-19 upon LAQM within Ashford

A temporary cycle lane was implemented on Somerset Road. However, due to negative feedback the measure was removed. No further LAQM related opportunities have arisen as a consequence of COVID-19 within Ashford.

Challenges and Constraints Imposed by COVID-19 upon LAQM within Ashford

During 2020, access to the Warren Lodge Care Home diffusion tube monitoring site (AS61) was restricted due to the location needing to be accessed through the care home. Therefore, it was not possible to maintain diffusion tube changes for the period of March to October in line with the national monitoring calendar. This has affected data capture for 2020, resulting in this monitoring site having insufficient data capture. The site was subsequently moved to a roadside location outside the care home in November 2020 to form a new site (AS65). **Medium Impact**

The impacts as presented above are aligned with the criteria as defined in Table F 1, with professional judgement considered as part of their application.

Table F 1 – Impact Matrix

Category	Impact Rating: None	Impact Rating: Small	Impact Rating: Medium	Impact Rating: High
Automatic Monitoring – Data Capture (%)	More than 75% data capture	50 to 75% data capture	25 to 50% data capture	Less than 25% data capture
Automatic Monitoring – QA/QC Regime	Adherence to requirements as defined in LAQM.TG16	Routine calibrations taken place frequently but not to normal regime. Audits undertaken alongside service and maintenance programmes	Routine calibrations taken place infrequently and service and maintenance regimes adhered to. No audit achieved	Routine calibrations not undertaken within extended period (e.g. 3 to 4 months). Interruption to service and maintenance regime and no audit achieved
Passive Monitoring – Data Capture (%)	More than 75% data capture	50 to 75% data capture	25 to 50% data capture	Less than 25% data capture
Passive Monitoring – Bias Adjustment Factor	Bias adjustment undertaken as normal	<25% impact on normal number of available bias adjustment colocation studies (2020 vs 2019)	25-50% impact on normal number of available bias adjustment studies (2020 vs 2019)	>50% impact on normal number of available bias adjustment studies (2020 vs 2019) and/or applied bias adjustment factor studies not considered representative of local regime
Passive Monitoring – Adherence to Changeover Dates	Defra diffusion tube exposure calendar adhered to	Tubes left out for two exposure periods	Tubes left out for three exposure periods	Tubes left out for more than three exposure periods
Passive Monitoring – Storage of Tubes	Tubes stored in accordance with laboratory guidance and analysed promptly.	Tubes stored for longer than normal but adhering to laboratory guidance	Tubes unable to be stored according to be laboratory guidance but analysed prior to expiry date	Tubes stored for so long that they were unable to be analysed prior to expiry date. Data unable to be used
AQAP – Measure Implementation	Unaffected	Short delay (<6 months) in development of a new AQAP, but is on-going	Long delay (>6 months) in development of a new AQAP, but is on-going	No progression in development of a new AQAP
AQAP – New AQAP Development	Unaffected	Short delay (<6 months) in development of a new AQAP, but is on-going	Long delay (>6 months) in development of a new AQAP, but is on-going	No progression in development of a new AQAP

Appendix G: Air Quality Strategy

Ensuring we lead the way		
Objective	**Key Actions**	**Key Performance Issues**
Create an in house resource to deliver the Air Quality Strategy	Appoint an officer, with key tasks to include establishing a cross council delivery group, developing a lobbying and funding strategy and developing behaviour change campaigns. (recommendation 25, 26)	• Officer in post • Delivery group set up • Additional funding levered in
Increase the number of staff using public transport, cycling walking or car pools in their journeys to, from, and within work	Conduct annual staff survey, includes questions around journeys to, from, and within work to establish current methods and trends. (recommendation 23)	• New schemes launched to target barriers identified by the survey e.g car pooling • Increase in those using public transport cycling or walking
	Review the impact of free car parking permits for staff in terms of the implications for air quality, parity of terms and conditions with staff who use other modes of transport and our incomes levels	Review completed after six months of free car parking scheme
	Explore the installation of additional shower facilities within the Civic Centre to enable staff to cycle to and from work (recommendation 24)	Increased use of public transport and cycling as primary means of travel to and from baseline to be established through staff survey
	Explore the establishing of a pool bike scheme to enable travel whilst in work (recommendation 21)	Reduced levels of claim against vehicle mileage scheme
	Promote mileage rate for cycling scheme (recommendation 24)	Increased take up of cycle to work subsidy
Reduce the pollutants from our vehicle fleet	Explore limits on high polluting vehicles within our leasing and mileage claim schemes (recommendation 19)	Following feasibility, reduced levels of CO_2 within staff vehicle fleet as recorded in annual greenhouse gas emission report
	Explore procurement of fuel efficient driver training for	• Following feasibility, reduced levels

	essential car users (recommendation 22)	of CO_2 within staff vehicle fleet as recorded in annual greenhouse gas emission report • Following feasibility reduced fuel consumption within council fleet vehicles
Ensure the highest standards of development in our borough	A best practice standard is set for future developments and this standard to be applied as is appropriate. The standard includes: • Electric vehicle charging points for residential and non-residential development, including off street car parking for major developments • Minimum standard gas fired boilers • Major developments carried out in line with guidance from the Institute of Air Quality Management (recommendation 3)	The standard is applied to all new developments as and where appropriate
	A proportion of Community Infrastructure Levy C1L should be set aside for air pollution mitigation measures (recommendation 2)	This will be taken forward dependent on the future of the C1L post national government changes
	Set appropriate planning conditions requiring the delivery or electric vehicle charging points within residential and non-residential developments. (recommendation 5)	• Electric vehicle charging points provided within new developments at a minimum of 1 per residential property with a dedicated parking space. • Electric vehicle charging points provided within new non-residential development at a minimum of 10% of parking provision. • Increased number of charging points within the borough.
	Set appropriate planning conditions for enabling cycling to work within new commercial development. (recommendation 15)	Cycle storage, shower and changing facilities provided within non-residential development.
	Maintain high standards of green space, including effective planting strategies to support pollution mitigation and street ventilation. (recommendation 4)	Improved spaces around the areas with the highest air pollution levels.
Ensure we understand our air	Ongoing monitoring of our air quality making best use	Annual air quality status reports

quality	of available resources and information	compiled and submitted to the Department for the Environment, Food and Rural Affairs (DEFRA).
Working with our partners		
Objective	**Key Actions**	**Key Performance Issues**
Increasing the use of sustainable transport	Lobbying bus companies and KCC to provide low emission buses within Ashford and maintain good, high quality, frequent and well used services. (recommendation 11)	• Bus vehicles at Euro IV standard or higher • Reduced levels of private car use within Ashford and consequential reduction in pollutant concentrations.
	Lobby rail companies to ensure services continue to be frequent and regular	There is a positive impact in decision making
	Lobby KCC regarding the outcomes of The Big Conversation	Community preferred rural public transport options maintained in Ashford, particularly serving rural communities
Minimising the impacts of poor air quality	Work with KCC to deliver roadside planting that seeks to mitigate air pollution (recommendation 4)	Roadside planting delivered and impacting positively on pollutant concentrations along key transport routes
	Lobby KCC to consider air quality impacts in the design of road layouts and traffic calming measures	Reduced pollutant concentrations along key transport routes
	Lobby KCC to use urban traffic management control to optimise traffic flow within Ashford. (recommendation 7)	Reduced pollutant concentrations along key transport routes
	Work with KCC to explore options for providing on street electric vehicle charging points (recommendation 6)	Feasibility is assessed and a project developed accordingly.
	Collaborate with KC over the use of variable message signing (VMS) to promote air quality information (recommendation 28)	• Reduced pollutant concentrations along key transport routes. • Reduced incidents of vehicle idling in high risk areas.
	Work with Kent Police to tackle vehicle idling in key locations such as outside schools (recommendation	Reduced incidents of vehicle idling in high risk areas.

	18)	
Driving a collaborative approach to air quality	Continue to work with our KCC partners, including in the development and delivery of the Kent energy and low emissions strategy.	Positive impact on the developing strategy and the direction of travel.
	Influence any legislation emerging nationally; lobby the national government to ensure we are able to take action where we need to.	Positive outcomes in the national environment, for example in terms of funding allocated to district authorities.
	Work with the Ashford Health and Wellbeing Partnership to ensure all partners are playing their part in tackling air quality, for example the NHS.	The Ashford Health and Wellbeing Partnership develops the action plan across the partnership and drives delivery accordingly.
	Work with big employers in Ashford to reduce the number of employee journeys made to and from work by single occupant vehicles.	A scheme is developed and key big employers sign up to it.
Enabling behaviour change		
Objective	**Key Actions**	**Key Performance Issues**
Making sustainable transport the easy and preferred choice for our community	Delivering the council's Cycling and Walking Strategy, including an audit of what cycling facilities are available in the borough and action to be taken where gaps are found.	Delivery of the strategic aims contained in the strategy.
	Continue to support and enhance walk to school schemes within the borough (recommendation 17)	Increased uptake of walk to school schemes.
	Rolvenden Rocket pilot continues, with lessons learned and expansion to other parishes/ hosts.	• Number of schemes launched, in operation and level of usage. • Promotion of community transport grant schemes
	Promotion of Kent Karrier and other sustainable transport schemes, where appropriate.	Increased membership recorded in Ashford borough.
	Ensuring our network of electric vehicle charging points expands (recommendation 5).	Number of electric charging points across the borough.
	Explore options to reduce or remove parking charges for electric vehicles within our own car parks to encourage increased uptake of these vehicles (recommendation 14).	Options paper developed for consideration.

Making sustainable transport easy and preferred choice for business	Launch a scheme to encourage electric and hybrid vehicles in the taxi and private hire fleets in the borough (recommendation 13).	Uptake of scheme among trade.
	Explore options to deliver fuel efficient driver training for taxi and private hire drivers (recommendation 10).	Interest in scheme established and uptake of scheme.
	Explore options for new HGV parking facilities to provide electric HGV charging and refrigeration (recommendation 10).	Options paper developed for consideration.
Advising and informing the public	A long term overarching behavioural change campaign to be designed and delivered – key messages will need to be identified, as well as target audiences. This campaign will need to include an educational aspect, to ensure people understand the issues around air quality. The campaign will show individuals how they can help protect them, their families, neighbours and communities. The campaign should link to existing national, high profile activities, such as Clean Air Day.	• Number of people who recognise air quality and pollution as an important issue, as measured by the residents survey. • Increased use of sustainable transport options. • Measured reduction in pollutant concentrations.
	Linked to the campaign, the council's webpages to be updated to ensure full information on air quality is provided to members of the public, including actions they can take themselves (recommendation 27).	• Number of hits on the new webpages. • Number of people who recognise air quality and pollution as an important issue, as measured by the residents survey. • Increased use of sustainable transport options. • Measured reduction in pollutant concentrations.
	Work with the Ashford Health and Wellbeing Partnership information for residents living in the worst affected areas in relation to steps they can take to minimise impacts on their health (recommendation 29).	• Number of people taking regular physical exercise. • Number of people categorized as obese. • Number of smokers in the adult population. • Reduction in hospital admissions where poor air quality may be a contributory factor. • Improvement in health profile of target areas.

Glossary of Terms

Abbreviation	Description
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
ASR	Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control

References

- Local Air Quality Management Technical Guidance LAQM.TG16. April 2021. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Local Air Quality Management Policy Guidance LAQM.PG16. May 2016. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.