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Elmbridge
Borough Council

2025 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995
Local Air Quality Management, as amended by the
Environment Act 2021

Date: June 2025



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Report Reference Number	Stantec 332612365/100
Date	25 June 2025

Local Responsibilities and Commitment

This ASR was prepared by the Planning and Environmental Health Team of Elmbridge Borough Council with the support and agreement of the following officers, departments and working groups:

- Elmbridge Borough Council – Planning and Environmental Health, Assets Management and Property Services and Climate Change and Sustainability.
- Members of the Surrey Air Alliance (SAA) made up from the eleven Surrey Districts and Boroughs, Surrey County Council (SCC) Public Health, and Highways Teams).

This ASR has been approved by:

- Suzanne Parkes, Head of Planning and Environmental Health at Elmbridge Borough Council.
- Councillor Caroline James, Portfolio Holder for Planning and Councillor Ashley Tilling Portfolio Holder for Climate Change, Environmental Services and Sustainability ratified the ASR. The ASR was formally approved at Individual Cabinet Member Decision Making on 25th June 2025 by Councillor Ashley Tilling.
- Ruth Hutchinson, Director of Public Health SCC. On behalf of the SCC Director of Public Health, the Public Health team work closely with the Surrey Air SAA including District and Borough Council partners responsible for submitting ASRs on air quality

within their area to develop initiatives and implement actions to improve air quality across the county of Surrey through collaboration and consultation.

If you have any comments on this ASR, please send them to Paul Leadbeater at:

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Executive Summary: Air Quality in Our Area

The following Annual Status Report (ASR) was prepared and written by Stantec UK Limited (Stantec), on behalf of Elmbridge Borough Council ('the Council') in accordance with Local Air Quality Management (LAQM) Technical Guidance (TG) 2022¹, published by Department for Environment, Food and Rural Affairs (Defra) on behalf of the devolved administrations. The 2025 ASR provides the latest information regarding air quality in Elmbridge for the reporting year of 2024. It also provides updates on actions to improve air quality that have occurred since the previous 2024 ASR² was published.

Air Quality in Elmbridge

This report is designed to provide a summary for those living and working within the Borough of Elmbridge about the state of air quality in the area. It also provides progress on the actions that the Council and others, including the public, are taking, or could take, to improve air quality. Air quality and a healthy environment are important to the Council and measures to improve air quality are outlined in the Council's Vision (corporate plan)³.

Breathing in polluted air affects our health and costs the NHS and our society billions of pounds each year. Air pollution is recognised as a contributing factor in the onset of heart disease and cancer and can cause a range of health impacts, including effects on lung function, exacerbation of asthma, increases in hospital admissions and mortality.

Air pollution particularly affects the most vulnerable in society, children, the elderly, and those with existing heart and lung conditions. Low-income communities are also disproportionately impacted by poor air quality, exacerbating health and social inequalities.

¹ Department for Environment, Food and Rural Affairs (Defra). 'Local Air Quality Management Technical Guidance (TG22)'. August 2022.

² Elmbridge Borough Council '2024 Air Quality Annual Status Report'. 2024. Available at: https://www.elmbridge.gov.uk/sites/default/files/2024-07/2024%20Annual%20Status%20Report_0.pdf

³ Elmbridge Borough Council. 'Elmbridge 2030 Vision'. 2023. Available at <https://www.elmbridge.gov.uk/vision>

Table ES 1 provides a brief explanation of the key pollutants relevant to Local Air Quality Management and the kind of activities they might arise from.

Table ES 1 - Description of Key Pollutants

Pollutant	Description
Nitrogen Dioxide (NO ₂)	NO ₂ is a gas which is generally emitted from high-temperature combustion processes such as road transport or energy generation.
Sulphur Dioxide (SO ₂)	SO ₂ is a corrosive gas which is predominantly produced from the combustion of coal or crude oil.
Particulate Matter (PM ₁₀ and PM _{2.5})	<p>Particulate matter is everything in the air that is not a gas.</p> <p>Particles can come from natural sources such as pollen, as well as human made sources such as smoke from fires, emissions from industry and dust from tyres and brakes.</p> <p>PM₁₀ refers to particles under 10 micrometres. Fine particulate matter or PM_{2.5} are particles under 2.5 micrometres.</p>

The main air pollutants of concern within Elmbridge are nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}). Whilst sulphur dioxide (SO₂) is referred to in Table ES 1, previous rounds of Review and Assessment and historic monitoring of SO₂ (at Bell Farm School, Hersham) have concluded that concentrations of SO₂ are compliant with Air Quality Strategy Objectives in Elmbridge. Emissions of SO₂ have continued to decline across the UK (i.e. a 99% reduction in SO₂ emissions from the energy sector between 1990 and 2023⁴) which has largely been driven by the decline in the use of coal in the energy sector and limits on sulphur content in liquid fuels. Therefore, SO₂ is not considered to be a pollutant of concern within Elmbridge (the Borough).

Nitrogen Dioxide

Monitoring undertaken by the Council shows that there were no breaches of the annual mean objective for NO₂ in 2024 at any of the monitoring locations within the Borough. The vast majority of measured NO₂ concentrations in 2024 at monitoring sites within the Borough were lower than measured NO₂ concentrations in 2023.

⁴ Defra. 'National Statistics: Emissions of Pollutants in the UK – Sulphur Dioxide'. February 2025. Available at: <https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-sulphur-dioxide-so2>

Surrey-wide modelling of air pollutant concentrations, undertaken by Cambridge Environmental Research Consultants (CERC)⁵, provides source apportionment predictions for nitrogen oxides (NO_x: nitric oxide (NO) plus NO₂) in Elmbridge. The largest contributor to NO_x emissions in Elmbridge is road transport sources (48%), with diesel cars (20%) being the largest contributor within the road transport source group.

There are currently six Air Quality Management Areas (AQMAs) designated within Elmbridge all due to exceedances of the annual mean NO₂ objective. The main priority of the Council's Air Quality Action Plan (AQAP) for 2021 to 2026⁶ is to work towards eradicating any exceedances of the annual mean NO₂ objective and improving air quality within the Council's AQMAs.

Particulate Matter – PM_{2.5}

Two PM_{2.5} targets were published via The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023⁷ and are set out below:

- an annual mean concentration target for PM_{2.5} levels in England to be 10 µg/m³ or below by 2040; and
- a population exposure reduction target for a reduction in PM_{2.5} population exposure of 35% compared to 2018 to be achieved by 2040.

The Government has published an Environmental Improvement Plan 2023⁸ which sets out the following interim PM_{2.5} targets to be met by the end of January 2028:

- the highest annual mean concentration in the most recent full calendar year must not exceed 12 µg/m³ of PM_{2.5}; and
- compared to 2018, the reduction in population exposure to PM_{2.5} in the most recent full calendar year must be 22% or greater.

⁵ CERC. 'Detailed Air Quality Modelling and Source Apportionment for Elmbridge Borough Council'. Final Report. November 2019.

⁶ Elmbridge Borough Council. 'Elmbridge Borough Council Air Quality Action Plan'. 2021

⁷ UK Statutory Instrument 2023 No.96. The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023.

⁸ Defra. 'Environmental Improvement Plan'. January 2023.

Defra is developing guidance to ensure that the above PM_{2.5} targets are appropriately considered in planning applications and planning decisions. Interim guidance⁹ has been published, requiring applicants to evidence that key sources of air pollution have been identified within their schemes and appropriate action taken to minimise exposure to and emissions of PM_{2.5} as far as reasonably practicable.

The Environmental Improvement Plan⁸ also details how these targets will be met including reducing emissions at home, driving effective local action through local authorities, maintaining, and improving the regulatory framework for industrial emissions, supporting farmers to reduce their impact on ammonia¹⁰ emissions and reducing emissions from cars and other forms of transport.

There is currently no legal duty for local authorities to take action on PM_{2.5} and the above targets do not form part of the LAQM Framework. However, local authorities are expected to contribute towards reducing PM_{2.5} by targeting sources of PM_{2.5} emissions within their control.

Furthermore, the Council has ambitiously committed to achieving the former World Health Organisation (WHO) Guideline Value for PM_{2.5}¹¹ of an annual mean concentration of 10 µg/m³ by 2030 within their 2021 AQAP. This can only be achieved through partnership working with the Surrey Authorities to drive down levels of PM_{2.5} across the County.

Surrey-wide modelling of pollutant concentrations, undertaken by CERC¹², provides source apportionment predictions for particulate matter (PM₁₀ and PM_{2.5}) in Elmbridge. The largest contributor to PM_{2.5} emissions is 'other sources'¹³ at 20%, followed by 'road

⁹ Defra. 'PM_{2.5} Targets: Interim Planning Guidance. October 2024. Available at: <https://uk-air.defra.gov.uk/pm25targets/planning>

¹⁰ When ammonia mixes with other gases in the atmosphere, it can result in the formation of secondary particulate matter.

¹¹ In September 2021, the World Health Organisation (WHO) introduced even more stringent Guideline Values for particulates (5 µg/m³).

¹² CERC. 'Detailed Air Quality Modelling and Source Apportionment for Elmbridge Borough Council'. Final Report. November 2019.

¹³ These sources include: (1) combustion in commercial, institution and agricultural sectors, (2) combustion in industry, (3) combustion in energy production and transfer, (4) production processes, (5) extraction and distribution of fossil fuels, (6) solvent use, (7) other transport and machinery, (8) waste treatment and disposal, (8) agricultural, forests and land use change, (10) other sources and sinks.

source' contribution at 17%. Furthermore, the report shows predicted exceedances of the 24-hour mean PM₁₀ objective along the A3 and M25 (in 2017), however, the exceedances occur within the road and are therefore not representative of relevant exposure. The report also shows that in 2017, a large proportion of Elmbridge exceeded the 10 µg/m³ target value set out in the AQAP⁶. The Surrey-wide modelling of air pollutants including PM₁₀ and PM_{2.5} is set to be updated in 2026 and will provide more up-to-date information regarding PM₁₀ and PM_{2.5} source apportionment across Elmbridge.

Actions to Improve Air Quality

Whilst air quality has improved significantly in recent decades, there are some areas where local action is needed to protect people and the environment from the effects of air pollution.

The Environmental Improvement Plan⁷ sets out actions that will drive continued improvements in air quality and to meet the new national interim and long-term targets for fine particulate matter (PM_{2.5}), a pollutant of significant concern regarding human health. The Air Quality Strategy¹⁴ provides more information on local authorities' responsibilities to work towards these new targets and reduce fine particulate matter in their areas.

The Road to Zero¹⁵ details the Government's approach to reduce exhaust emissions from road transport through several mechanisms, in balance with the needs of the local community. This is extremely important given that cars are the most popular mode of personal transport, and the majority of AQMAs are designated due to elevated concentrations heavily influenced by transport emissions.

Monitoring

The Council works to understand local air quality through a monitoring network within its administrative boundary to include three real-time monitoring stations (two measuring NO₂ and one measuring PM₁₀ and PM_{2.5}) and a network of passive diffusion tubes monitoring NO₂ concentrations. Live data for all three real-time monitoring stations can be viewed at: <https://www.ukairquality.net/>.

¹⁴ Defra. 'Air Quality Strategy – Framework for Local Authority Delivery'. August 2023

¹⁵ DfT. 'The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy'. July 2018

Local Planning Policy

Measures to improve air quality have been included in the Council's Development Management Plan¹⁶ and air quality is an important consideration for all planning applications, particularly within and adjacent to the Boroughs six AQMAs. On 26th February 2025, EBC resolved to withdraw the Regulation 22 Submission version of the Elmbridge Local Plan 2037¹⁷ which was referenced in the 2024 ASR. Addressing air quality as part of new developments was embedded in the now withdrawn Emerging Local Plan. In recognition of the importance of addressing air quality within the Borough, a specific 'air quality' policy was proposed (draft Policy ENV8).

The Council's Local Development Scheme sets out a timetable to produce the New Local Plan between 2025 and 2028, with adoption anticipated at the end of 2028. However, given the implications and timeline of Local Government Reorganisation, the New Local Plan may not reach adoption. It is likely the process will be taken over by the new unitary authority. In the current Local Plan, air pollution is addressed within a wider policy which encompasses other types of environmental pollution.

The Council produced the Elmbridge Design Code¹⁸ which was adopted in April 2024. The Design Code requires developers to acknowledge the constraints and opportunities that help shape the design process. This will include environmental considerations such as air quality. It also includes requirements for new developments relating to enhancing connectivity and sustainable transport infrastructure through development design, as well as green infrastructure and electric vehicle charging infrastructure provision.

Council Plans and Strategies

In July 2019, the Council declared a 'Climate Emergency' and have pledged to take action locally to contribute to national carbon neutral targets through the development of policies and practices, together with the aim of making the Council a carbon neutral organisation.

¹⁶ Elmbridge Borough Council. 'Development Management Plan'. 2015. Available at: <https://www.elmbridge.gov.uk/sites/default/files/2023-05/Development%20Management%20Plan.pdf>

¹⁷ Elmbridge Borough Council. 'Regulation 19 Draft Elmbridge Local Plan 2037'. 2022. Available at: <https://www.elmbridge.gov.uk/local-plan-examination>

¹⁸ Elmbridge Borough Council. 'Elmbridge Design Code'. September 2023. Available at: www.elmbridge.gov.uk/sites/default/files/2024-04/Elmbridge%20Design%20Code%202024.pdf

The Council has adopted its Carbon Management and Reduction Plan¹⁹ in 2020 to assist in the delivery of this commitment.

The Council has published the Vision³, for a sustainable, thriving Elmbridge driven by the power of its community. Sustainability is at the heart of the Vision and the Borough's AQAP Plan 2021- 2026¹² is integral to the commitment for sustainability and enhancing our natural environment. There are number of carbon reduction measures proposed as part of these plans and strategies which will also benefit air quality, including the installation of electric vehicle charging points in key Council car parks and encouraging the use of sustainable transport modes.

The Council's AQAP⁶ was approved by Defra and Council members and adopted in December 2021. Progress on measures to improve air quality within the AQAP have been reported in this ASR.

Surrey County Council's Joint Strategic Needs Assessment²⁰ (JSNA) is an assessment of the current and future health and social care needs of the population of Surrey and informs the Surrey Health and Wellbeing Strategy. The JSNA will include a chapter on 'Air Quality' within the 'Wider Determinants of Health' section. This 'Air Quality' chapter is being developed by SCC Public Health who are working closely with the Highways and Greener Future teams, all Surrey District and Borough Councils, and Surrey Heartlands Integrated Care Board. The 'Air Quality' chapter is due to be published in summer 2025.

Public Information

In October 2024, the Council moved to a new provider for their pollution warning service, Cambridge Environmental Consultants' (CERC) airTEXT service. In the lead up to the change, users of the previous service, airAlert, were notified to move to the new service. In addition, a comprehensive communications package was rolled out between October and February 2024 promoting the new service. This included new campaign branding and an animation video focusing on particulate matter and the airTEXT service.

¹⁹ Elmbridge Borough Council. 'Carbon Management and Reduction Plan'. July 2023. Available at: <https://www.elmbridge.gov.uk/sites/default/files/2024-12/Carbon%20Management%20and%20Reduction%20Plan%202030%20V2.pdf>

²⁰ Surrey County Council. 'Joint Strategic Needs Assessment'. April 2025. Available at: <https://www.surreyi.gov.uk/jsna/>

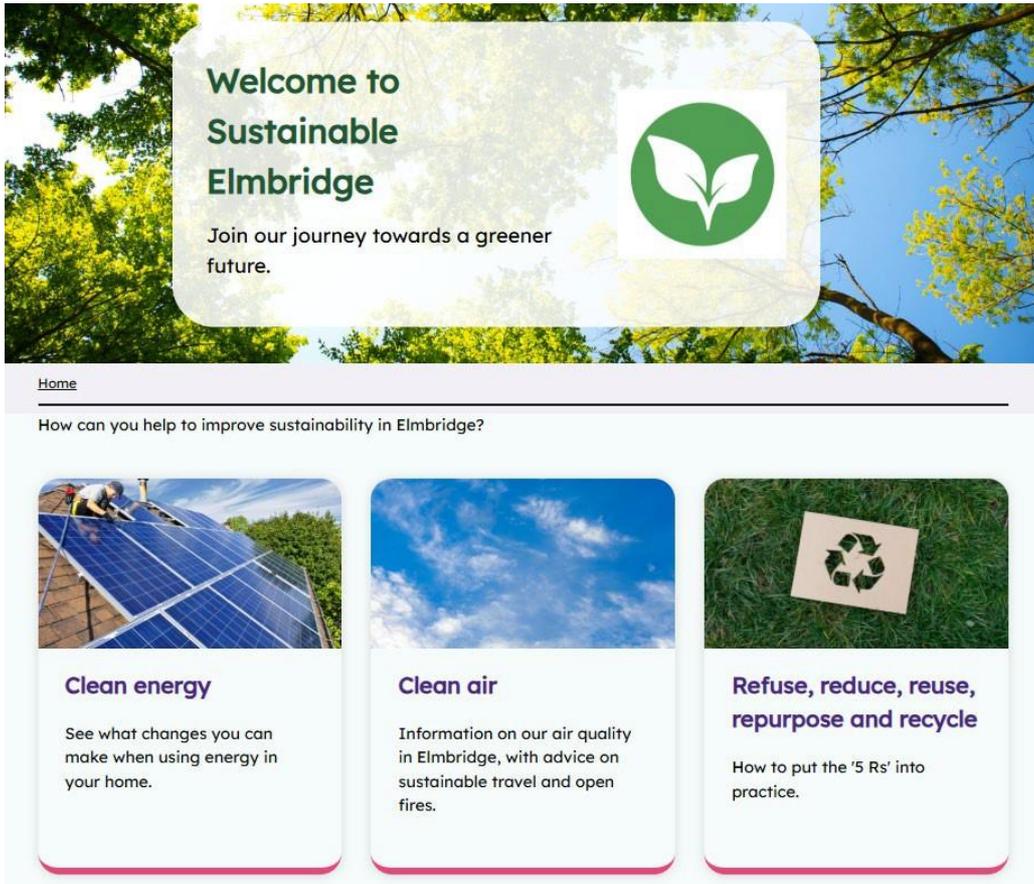


Officers attended a local respiratory event as well as visiting all of the Borough's independent pharmacies promoting the new airTEXT service. Pharmacists agreed to include a promotional postcard with residents' prescriptions for those taking specific heart and lung medicines (which may indicate they could benefit from the service). As of May 2025, 90 residents have subscribed to airTEXT, 67 by SMS, 10 by voicemail and 13 by email.

The Council also utilises its website to display public information regarding air quality including details on its air quality monitoring, current and historical ASRs and the AQAP⁶. The 'Improving your local air quality' page²¹ informs residents of the main pollutants in the Borough, has a short video, and explains how residents can help to improve both outdoor

²¹ Elmbridge Borough Council Website. 'Improving your local air quality'. Available at: www.elmbridge.gov.uk/environment/air-quality/improving-your-local-air-quality

and indoor air quality, as well as highlighting what the major sources of both outdoor and indoor air pollution.



The ‘Sustainable Elmbridge Hub’ on the Council’s website includes a ‘Clean air’ webpage²² that provides more detail about the ways residents can reduce the air pollution that they produce, focusing on electric transport, active travel, utilisation of public transport, car sharing and open fires and woodburning stoves. The webpage also includes a link to the Councils AQAP⁶.

Surrey Air Alliance

The Surrey Air Quality Study Group, formed in May 2016, has developed into the Surrey Air Alliance (SAA) consisting of officer representatives from all eleven District and Borough Councils, and SCC’s Highways and Public Health services.

The Council continues to be an active member of the Surrey Air Alliance (SAA) and assists in the delivery of the SAA workplan.

²² Elmbridge Borough Council Website. ‘Clean air’. Available at: <https://www.elmbridge.gov.uk/sustainable-elbridge-0/clean-air>



A key workplan task, which the Council has led, is the Surrey-wide air quality modelling project. The air quality modelling project, undertaken by CERC, was completed in 2019 and establishes a clear baseline for key pollutants (NO₂, PM₁₀ and PM_{2.5}) across Surrey. The Council will work with the SAA to deliver an update to the Surrey-wide modelling which will be published in 2026/27. The interactive contour maps of modelled pollutant concentrations have continued to be hosted on the SCC website throughout 2024:

<https://surreycc.maps.arcgis.com/apps/webappviewer/index.html?id=43910ffb100248ed972115b7a9b49d20>.

A key workplan project that the Council is involved in is directed at raising awareness of air quality within schools close to AQMAs. The SAA have worked with The Safer Travel Team and received grant funding from SCC's 'Rethinking Transport' budget to support schools in encouraging parents and children to travel to school more sustainably.

As of March 2025, within Elmbridge, there are currently 10 schools with a School Travel Plan on Modeshift STARS, an accreditation scheme which aims to recognise schools that have shown excellence in sustainable and active travel. Modeshift STARS grades now go from Green (Approved), Bronze (Good), Silver (Very Good), Gold (Excellent) and Platinum (Outstanding). Within Elmbridge 7 schools are rated Bronze and 3 are rated Green.



Some schools have also accepted the challenge to become Green Flag schools through the internationally recognised Eco-Schools Framework. As of April 2025, 98 schools in Surrey have Green Flag status, the most in England 12 of these are within Elmbridge.



A new initiative within schools was launched in 2023 called 'Let's Go Zero' with a commitment to achieve Net Zero by 2030. As of April 2025, there are a total of 110 Let's Go Zero schools in Surrey of which 12 are within Elmbridge.



In 2021/22, Surrey schools had 201,993 children enrolled which means that, based on statistics, 18,363 children in Surrey classrooms could have asthma.

During 2022, the SAA worked with the Surrey Heartlands Children and Young People's Asthma Team on a project to develop an Asthma care bundle. As part of this work the SAA drew up a prioritised list of schools based on modelled pollution concentrations at all schools within the County, so that the Asthma team could identify the initial tranche of schools to roll the project out to, and the group has been briefed on the pollution warning services available in Surrey including Surrey airAlert. Three schools within Elmbridge were on the priority list.

The SAA also fed information into the Asthma Toolkit. See the following link for more information about the Asthma Toolkit: <https://www.healthysurrey.org.uk/children-and-families/asthma-toolkit/parent-and-carer>.

'Ask about Asthma Week' was held from 3rd to 9th October 2022. Forty primary schools across Surrey Heartlands were targeted and sent stickers and a weblink to the Asthma Toolkit. Elmbridge released an article promoting the week with links to the Toolkit and airAlert.

The group also attended a number of meetings to help support the production of an Air Quality Pack for healthcare professionals, with the aim of ensuring air quality information is easily accessible and available, what messaging about poor air quality means for patients, and what actions they can take to reduce their exposure to air pollution and improve air quality.

On the 19th of May 2023, the SAA gave a briefing on air quality to the Surrey Asthma Network, including a discussion on ozone levels across the County and how this can also impact on health.

The group also helped the Surrey Heartlands Children and Young People's Asthma Team at their Children and Young People's Asthma Learning Event on the 20th of June 2023, with a stand demonstrating the Surrey airAlert service, and other pollution services available across the UK. The event was well attended by a number of health care professionals (doctors, nurses, and pharmacists) working in asthma and respiratory medicine, and provided a key forum at which to demonstrate pollution warning services in Surrey. As of June 2023, 21 schools within Elmbridge have signed up for asthma training which includes education on asthma triggers such as air pollution.

In 2024, the SAA has supported the implementation of the a paediatric toolkit for parents and schools, [Asthma friendly school | Healthy Surrey](#). As part of this work, the SAA promoted the Schools' Air Quality Monitoring for Health and Education' (SAHME) project. The following link provides further information regarding the project: [SAMHE](#).

SAMHE schools receive a free indoor air quality monitor linked to an interactive Web App, enabling teachers and pupils to view and investigate on air quality data in their classrooms.

In 2025 the SAA continue to support the Asthma friendly school's project. By reaching the Asthma Friendly School Standard, schools are recognised for their commitment to asthma care and management. This recognition is displayed on the Healthy Surrey website, and

schools will receive a certificate and an official logo to show the year they achieved the standard. The newly introduced airTEXT service supports this initiative.

In March 2021, Defra awarded £256,686 from the Air Quality Grant to fund a project to encourage a greater uptake of Electric Vehicles as Taxi's across seven eligible Boroughs, and Districts in Surrey which included Elmbridge. Taxis were selected as the target vehicles given the high mileage and multiple trips the vehicles make within Surrey's AQMAs and the nature of the journeys which take the vehicles into areas frequented by the members of our communities who are most sensitive to air pollution such as to hospitals, care facilities and schools. The project has since been reconfigured to accommodate longer vehicle trials based on feedback from the taxi trade and potential vehicle suppliers and submission of the reconfigured project was made to Defra for approval. Further funding has been secured to take the electric vehicle taxi project forward. The implementation of this project has however been further delayed due to necessary procurement work needing to be undertaken prior to the full tender process commencing and remains in the SAA workplan for 2025/26.

Domestic wood burning as a lifestyle choice has been identified as a significant contributor to local air pollution. In 2020, it was estimated that 25% of the UK's manmade PM_{2.5} emissions came from domestic combustion, of which 70% were from wood burning²³. In September 2023, a second consortium (including SCC, District and Borough Councils) application was submitted; led by Hertfordshire County Council (HCC), for Defra air quality grant funding to support Global Action Plan's (GAP) Clean Air Night campaign in January 2025. The submission followed the unsuccessful application in 2022, to support GAP's Clean Air Night campaign in January 2024. In February 2024, Defra notified HCC that, while the application scored higher than the previous application, the bid was unsuccessful on this occasion. The SAA was a founder supporter for GAP's Clean Air Night campaign in January 2024 - [Clean Air Night | GAP \(actionforcleanair.org.uk\)](https://www.actionforcleanair.org.uk). The Council continues to support both Global Actions initiatives: Clean Air Day in June and Clean Air Night during January. Clean Air Night 2025 focused on local sources of particulate matter and practical steps to reduce them as well as the promotion of the new airTEXT service.

²³ Defra. 'Emissions of air pollutants in the UK – Particulate matter (PM10 and PM2.5)-. March 2025. Available at: <https://www.gov.uk/government/statistics/emissions-of-air-pollutants/emissions-of-air-pollutants-in-the-uk-particulate-matter-pm10-and-pm25>

Encouraging Uptake of Sustainable Travel Modes

Elmbridge was one of the first boroughs in Surrey to have its Local Cycling and Walking Infrastructure Plan (LCWIP) developed by SCC. Dated March 2022, the Elmbridge LCWIP Report was prepared through a process of joint working between SCC and Borough Councils and the SCC appointed consultants, Atkins. The report includes the following:

- identification of where good walking and cycling facilities would be most beneficial;
- identification of what improvements are required at these locations; and
- plan how these improvements can be delivered, and which to prioritise first.

The stage 1 feasibility studies for the LCWIP have been completed and the project has now moved onto Stage 2 (the design process stage for the Phase 1 schemes in the Borough).

Encouraging Uptake of Electric Vehicles

The Council's Environmental Enforcement Officers continue to use an electric pool car for work travel. The Council's Parking Enforcement Contractor also has the use of electric vehicle and mopeds. Also, in late Summer 2023, three electric pool car vehicles were made available for staff to book and use for meetings and site visits. In 2024, these continued to be popular and very well used via a centralised booking system.

The Council continues to work towards becoming carbon neutral and supporting a sustainable Elmbridge with the Green Fleet Strategy 2030, which sets out the plan to decarbonise the Council's fleet vehicles. The Green Fleet Strategy and phased vehicle replacement programme has seen nine vehicles replaced to date; with a further five vehicles scheduled to be replaced by electric vehicles in 2025/26. This will see an increase from 33% of the fleet increase to 52% by the end of 2025/26. of the fleet then being electric vehicles.

The Council is also increasing the provision of electric vehicle charging points within the Borough.

As of April 2024, the Council has fast 10-22kW electric vehicle charging points at the following locations:

- Hollyhedge Road car park, Cobham.
- Churchfield Road car park, Weybridge.
- Civic Centre car park, Esher.
- Drewitts Court car park, Walton-on-Thames.
- Claygate Centre for the Community (Elm Road, Claygate, KT10 0EH).

- Cobham Centre for the Community (Oakdene Road, Cobham, KT11 2LY).
- Community Transport, (River Mole Business Park, Mill Road, Esher, KT10 8BJ).
- Hersham Centre for the Community (7 Queens Road, Hersham, KT12 5LU).
- Molesey Centre for the Community (Bishops Fox Way, West Molesey, KT8 2AS).
- Walton Centre for the Community (Manor Road, Walton-on-Thames, KT12 2PB).

The Council is also exploring the options for the further provision of off-street electric vehicle charging points, as well as liaising with SCC on their delivery of an on-street electric vehicle charging point network.

In July 2020, the Council adopted a new taxi and private hire licensing policy that came into force on 1st September 2020 for a five-year period. The policy recognised the need to ensure the health and wellbeing of residents and as such aimed to improve local air quality by encouraging the use of low and ultra-low emission taxi and private hire vehicles such as electric, hybrid or liquified petroleum gas.

The Council also took steps within the policy to phase out the use of diesel vehicles and from 1st September 2020, no new licences for diesel vehicles have been issued. After 31st of December 2025, the Council will no longer renew licences for diesel vehicles that do not meet Euro standard 6 as a minimum. Likewise, the Council will not issue or renew any licences for petrol vehicles that do not meet Euro 6 standards as a minimum.

In 2020, 76% of the taxi and private hire fleet in Elmbridge was fuelled by diesel. As of May 2025, that figure has reduced to 39%. However, the Council has also seen a reduction in the number of licensed vehicles generally.

The Council's Taxi & Private Hire Policy 2020-25 is under review (summer 2025) and consideration is being given to the next phase in the reduction of higher polluting vehicles.

Conclusions and Priorities

Air quality monitoring has shown a general decrease in NO₂ concentrations across the Borough during the 2020 to 2024 monitoring period presented in this ASR. It should be noted that measured NO₂ concentrations in 2020 and 2021 were much lower than previous years due to the impact of COVID-19 on road traffic levels. Monitoring in the Borough shows that there were no breaches of the annual mean objective for NO₂ in 2024 at any of the monitoring sites. However, further action is required to ensure that NO₂ concentrations continue to decrease across the Borough. The Council is also committed to

targeting PM_{2.5} pollution through a range of interventions with the aim of achieving annual mean concentrations of less than 10 µg/m³ by 2030 across the Borough.

Measured concentrations have remained below the annual mean NO₂ objective in the last four years at monitoring sites within AQMAs declared by Elmbridge. Furthermore, NO₂ annual mean concentrations have been more than 10% below the NO₂ objective for three consecutive years post-Covid²⁴ in all of the Borough's AQMAs, except for the Esher AQMA (where an annual mean NO₂ concentration within 10% of the objective was recorded in 2022). Therefore, the following AQMAs will be considered for revocation in 2025: Hampton Court, Hinchley Wood, Weybridge, Walton Road (Molesey) and Walton-on-Thames High Street AQMAs.

NO₂ concentrations within the Esher AQMA will continue to be monitored closely and this AQMA will be considered for revocation once three consecutive years of data evidencing annual mean NO₂ concentrations more than 10% below the objective are available (potentially in 2026 if trends continue).

Measured annual mean NO₂ concentrations within the former Cobham High Street AQMA (Cobham 1 and Cobham 7) have been more than 10% below the annual mean NO₂ objective for several years. The revocation of the Cobham High Street AQMA was approved by Defra in 2020.

The areas prioritised for action in 2025 are:

- **Priority 1 – reducing NO₂ levels within the Borough's AQMAs to below to objective in the shortest time practicable.**
- **Priority 2 – targeting PM_{2.5} through a range of interventions with the aim of reaching the WHO's recommended level of 10µg/m³ by 2030 within the Borough.**
- **Priority 3 – modal shift to more sustainable transport.**
- **Priority 4 – ensuring air quality is a priority within the Council's policies and those of SCC and assist in delivering the projects and actions.**

²⁴ Measured concentrations in 2020 and 2021 are not considered to representative of typical conditions. This is due to Covid-19 restrictions in place during these years which led to lower measured concentrations.

- **Priority 5 – partnership working as part of the SAA to improve Surrey’s air quality.**

How to get Involved

Our approach to local engagement includes the following messages and tools:

- As most of the air pollution is associated with traffic, consider alternatives to using your car; public transport, walking or cycling will help reduce emissions.
- Whilst driving minimise the amount of time you idle your engine to reduce emissions.
- When purchasing a new car, consider vehicles with lower exhaust emissions, such as hybrid or electric vehicles. Information on electric car grants is available at: <https://www.gov.uk/government/collections/government-grants-for-low-emission-vehicles>
- Sustainable Elmbridge hub – tips and tools to tackle climate change and improve air quality. See <https://www.elmbridge.gov.uk/sustainable-elmbridge-0>.
- If you are carrying out building works, consider future-proofing your home by installing an electric vehicle charge point. A fast (7kW) charger is recommended and there are grants available which can bring the cost down to under £300. More information can be found at: <https://www.gov.uk/government/collections/government-grants-for-low-emission-vehicles>.
- Where possible consider installing zero emission heating technologies. If installing or replacing an existing wood burning stove, consider purchasing one that has been approved for use in smoke control areas by Defra or an Eco-design ready stove to help reduce emissions. More information can be found at: <https://www.elmbridge.gov.uk/pollution/local-air-quality/>.
- Air pollution can cause short term (acute) and long term (chronic) health problems. The most sensitive groups are adults and young children with respiratory conditions and adults with heart conditions. If you feel that you are in one of the higher risk groups or have particular concerns regarding air quality, you can sign up to our airTEXT information service. For more information visit the airTEXT website at: <https://www.elmbridge.gov.uk/environment/air-quality/airtext>.

Sign up for airText

It's a free service, giving you advanced warning of when local air pollution is expected to be higher than usual.

Up to 3 days advanced warning

Particularly useful for those with heart and lung conditions

Tracks local nitrogen dioxide, ozone and fine particulate levels

airtext.info/signup

airTEXT

 **Elmbridge**
Borough Council

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1 Local Air Quality Management

This report provides an overview of air quality in Elmbridge during 2024. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995), as amended by the Environment Act (2021), 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 AQAP setting out the measures it intends to put in place in order to achieve and maintain the objectives and the dates by which each measure will be carried out. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Elmbridge Borough Council to improve air quality and any progress that has been made.

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 AQAP⁶ within eighteen months. The AQAP should specify how air quality targets will be achieved and maintained and provide dates by which measures will be carried out.

A summary of AQMAs declared by the Council can be found in Table 2.1. The table presents a description of the six AQMAs that are currently designated within Elmbridge. Appendix D provides maps of AQMAs and also the air quality monitoring locations in relation to the AQMAs. The air quality objective pertinent to the current AQMA designations is the NO₂ annual mean objective.

Table 2.1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Walton-on-Thames High Street	01/11/2013	NO ₂ Annual Mean	An area encompassing part of the High Street, Walton-on-Thames, between its junction with Hepworth Way/Church Street and Ashley Road/Hersham Road	YES	42.3	21.0	8 years	Air Quality Action Plan for Elmbridge Borough 2021 - 2026	https://www.elmbridge.gov.uk/pollution/local-air-quality/
Weybridge High Street	17/11/2008	NO ₂ Annual Mean	An area encompassing Balfour Road, Church Street, High Street and Monument Hill, Weybridge.	YES	62	25.3	4 years	Air Quality Action Plan for Elmbridge Borough 2021 - 2026	https://www.elmbridge.gov.uk/pollution/local-air-quality/
Hampton Court	17/11/2008	NO ₂ Annual Mean	An area encompassing parts of Hampton Court Way and Riverbank.	NO	50.7	19.1	4 years	Air Quality Action Plan for Elmbridge Borough 2021 - 2026	https://www.elmbridge.gov.uk/pollution/local-air-quality/

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Hinchley Wood	17/11/2008	NO ₂ Annual Mean	An area encompassing part of the A309 Kingston Bypass between Littleworth Road and Manor Road North.	YES	57.7	19.3	8 years	Air Quality Action Plan for Elmbridge Borough 2021 - 2026	https://www.elmbridge.gov.uk/pollution/local-air-quality/
Esher High Street	17/06/2005	NO ₂ Annual Mean	An area extending along the High Street, Church Street and including parts of Esher Green and Lammas Lane.	YES	62.1	22.7	4 years	Air Quality Action Plan for Elmbridge Borough 2021 - 2026	https://www.elmbridge.gov.uk/pollution/local-air-quality/
Walton Road, Molesey	18/06/2005	NO ₂ Annual Mean	An area extending 50m either side of the centre line of Walton Road, Molesey between its junction with Tonbridge Road and Esher Road/Bridge Road.	NO	55.8	21.1	4 years	Air Quality Action Plan for Elmbridge Borough 2021 - 2026	https://www.elmbridge.gov.uk/pollution/local-air-quality/

Elmbridge Borough Council confirm the information on UK-Air regarding their AQMA(s) is up to date.

Elmbridge Borough Council confirm that all current AQAPs have been submitted to Defra.

2.2 Progress and Impact of Measures to address Air Quality in Elmbridge

Defra's appraisal of last year's ASR concluded that the report was well structured, detailed, and provided the information specified in the Guidance. Furthermore, the following comments were provided by Defra to help inform future reports:

- The Council have referred to both the new Defra 2023 Environmental Improvement Plan and WHO guidelines throughout their results analysis and priorities for the coming years. This is welcomed and indicative of good practice.
- The Council have now successfully installed a new automatic monitoring location located on Esher High Street, measuring both PM₁₀ and PM_{2.5} to enable them to establish an understanding of baseline concentrations within the Borough. This is welcomed.
- The Council have continued to provide clear evidence of several key actions to improve air quality during the current reporting year. One key example is the new "Let's go Zero" Initiative launched in 2023 to help local schools achieve net zero by 2030 through EBC's partnership with Surrey Air Alliance. This is commended.
- The Council have provided excellent mapping of all monitoring locations within the Borough and included AQMA boundaries, which is commended.
- The Council have provided clear evidence of local engagement, which is welcomed.
- There is a minor issue for Table 2.1 in the report. For the column "Name and Date of AQAP Publication of AQAP Publication," the entries for the Weybridge High Street, Hampton Court, Hinchley Wood, Esher High Street and Walton Road Molesey AQMAs are incorrect. EBC's current AQAP only covers the period from 2021-2026. This is assumed to be a typo, but the Council are highly encouraged to amend this in future ASRs.

The 2025 ASR has addressed these comments by conducting the following:

- Minor formatting issues have been corrected.
- Where elements of the previous ASR have been commended or are indicative of good practice, they have also been included in this ASR.

The Council has taken forward a number of direct measures during the current reporting year of 2024 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. Thirty-two measures are included within Table 2.2, with the type of measure and the progress the Council have made during the reporting year of 2024 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

More detail on these measures can be found in their respective Action Plans. Key completed measures are:

- The LCWIP has progressed to stage 2 which is the design phase within Elmbridge.
- The Council agreed on financial contributions towards the implementation of Cobham Walking Route and the Hampton Court Cycle Route/ Path.
- Installation of more electrical vehicle charging points across the Borough.
- Moving to, and the funding of a new pollution warning service, CERC's airTEXT and promoting it to residents of the Borough.
- Continued support for the successful engagement and behaviour change programme in Surrey Schools.
- Responding to the 'Climate Emergency,' included as a priority in the Council Plan 2022/2023, and implementation of the Council Carbon Management and Reduction Plan.
- Funding has been secured for the SAA electric taxi project.
- Installation and commissioning a new particulate monitor in Esher. Reporting the results in the 2025 ASR.
- Promotion of air quality and the potential impacts of air pollution on human health, Clean Air Day, Clean Air Night, new animation video and branding supporting extensive communications via social media, the Council's website and officer attended events.
- Upgraded both NO₂ air quality monitoring to 4G communications.

The Council expects the following measures to be completed over the course of the next reporting year:

- Increase the number of electric vehicles charging points in the Borough.

- Supporting Transport for Southeast including the publication of the Strategic Investment Plan.
- Progress on the AQAP deliverables has been slower than expected due to resources, support from other services due to competing work demands.
- Working with SAA on inputting into the air quality chapter within the Joint Strategic Needs Assessment (JSNA)
- Air Quality appropriately considered within the Local Transport Plan 4 (LTP4).
- Delivery of the Defra air quality electric taxi grant project.
- Continued progress and delivery on SAA projects, support for schools' projects, Clean Air Day, and Clean Air Night campaigns.
- Input into improvements to CERC's airTEXT website and targeting more of those residents who would benefit from the service.
- Work with the SAA on planning a smooth transition of air quality projects during progress on the implementation Governments Local Government devolution Bill.
- Progressing the LCWIP from the design stage to implementation.

The Council's priorities for the coming year remain:

- **Priority 1** – reducing NO₂ levels within the Borough's AQMAs to below the objective in the shortest time practicable.
- **Priority 2** – targeting PM_{2.5} through a range of interventions with the aim of reaching the WHO's recommended level of 10µg/m³ by 2030 within the Borough.
- **Priority 3** – modal shift to more sustainable transport.
- **Priority 4** – ensuring air quality is a priority within the Council's policies and those of SCC and assist in delivering the projects and actions.
- **Priority 5** – partnership working as part of the SAA to improve Surrey's air quality.

The Council worked to implement these measures in partnership with the following stakeholders during 2024:

- SAA (includes all Surrey Districts and Borough councils),
- SCC Public Health and Highways teams,
- SCC Trading Standards team,

- SCC Safer Travel Team and,
- National Health Service teams within Surrey.

The principal challenge and barrier to implementation that the Council anticipates facing is:

- As part of the Governments Road Investment Strategy 2015 to 2020, improvements are being made to the M25 Junction 10/A3 Wisley Interchange. Improvements include restoring heathland and upgrading the junction because it is the busiest section on the M25 with over 300,000 vehicles passing through each day. Throughout the improvements, which started in summer 2022 traffic, has been rerouted through Elmbridge resulting in traffic delays and congestion. Since December 2022, the project has been progressed, and work is expected to finish spring 2026. For more information, please refer to Appendix C.
- At time of writing, various reorganisation proposals have been submitted to government for consideration regards creation of either two or three unitary authorities across the existing eleven district and borough councils within the Surrey County Council region. The Council have been advised to expect a decision from government in autumn 2025. The decision will likely see different boundaries across the SCC area and may change future ASR submissions. Combined work already exists within Surrey Authorities for example collaborations through the SAA which will assist the move to the new Unitary Authorities.
- Available resources.

The measures stated above and in Table 2.2 have helped achieve compliance in all six AQMAs.

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
EBC-3 (Top 3 Air Quality Action 1)	Reduce air pollution from Taxis and Private Hire vehicles that are licenced by Elmbridge Borough Council.	Promoting Low Emission Transport	Taxi Licensing conditions	2020	Ongoing	EBC	N/A	NO	Funded	-	Implementation	Reduced vehicle emissions	The percentage/type diesel taxi and private hire vehicles remaining.	<p>The EBC Taxi and Private Hire Licensing Policy was adopted in September 2020. This policy is due for renewal in summer 2025.</p> <p>In 2020, 76% of the taxi and private hire fleet in Elmbridge was fuelled by diesel. As of May 2025, that figure has reduced to 39%. However, the Council has also seen a reduction in the number of licensed vehicles generally.</p>	<p>After 31st December 2025, we will no longer renew licences for diesel vehicles that do not meet Euro standard 6 as a minimum. Likewise, we will not issue or renew any licences for petrol vehicles that do not meet Euro 6 standards as a minimum.</p> <p>The current Taxi and Private Hire Licensing Policy is available at: https://www.elmbridge.gov.uk/licensing/taxi-and-private-hire-licensing/passenger-policies-and-information#:~:text=The%20law%20requires%20that%20passengers,be%20operated%20throughout%20the%20journey.</p> <p>Also see SCC-3, SAA Defra grant from Taxi project.</p>
EBC-19 (Top 3 Air Quality Action 2)	Raising public awareness of air pollution by promoting the AirTEXT service particularly to vulnerable residents.	Public Information	Via other mechanisms	Introduced in 2025 after the adoption of the AQAP.	Ongoing	EBC	EBC	NO	Funded	< £10k	Implementation	N/A	No. of residents reached by promotional / engagement activities and the number of residents subscribed in Elmbridge.	<p>90 AirTEXT subscriptions as of May 2025.</p>	<p>During the switch from airAlert to AirTEXT in October 2024, we lost most of our subscribers despite efforts to move them across to the new service.</p> <p>We have promoted, AirTEXT through the Council's website, visits to the boroughs independent pharmacies and attendance at respiratory events targeting those who could benefit from the service.</p>
SCC-5 (Top 3 Air Quality Action 3)	Implementation of the Local Cycling and Walking Infrastructure Plan (LCWIP) within Elmbridge by 2030.	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	2020	2030	SCC and EBC	Central Government, developers, highways, and infrastructure funding	NO	Partially Funded	£50k - £100k	Implementation	Reduced vehicle emissions	Completion and adoption of the LCWIP.	<p>The LCWIP, for Elmbridge has been developed and will move to implementation. Prioritisation of the routes complete, with feasibility work commencing in 2023/24. EBC agreed a financial contribution towards the implementation of the Cobham Walking Route and the</p>	<p>The LCWIP is a ten-year programme and would include the following:</p> <ul style="list-style-type: none"> • Identification of where good walking and cycling facilities would be most beneficial. • Identification of what improvements are required at these locations. • Plan how these improvements can be

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
														Hampton Court Cycle Route/Path. As of May 2025, the project has moved to Stage 2 which is the Phase 1 design phase.	delivered, and which prioritise first. The County LCWIP programme can be viewed at: https://www.surreycc.gov.uk/roads-and-transport/sustainable/cycling-and-walking/plans#plans .
EBC-1	Use of, and exploration of possibilities for increasing use of, Council electric vehicles for journeys within the Borough and supporting electric vehicle use by Council contractors	Promoting Low Emission Transport	Public Vehicle Procurement -Prioritising uptake of low emission vehicles	2020	2025	EBC	EBC	NO	Partially Funded	£10k - 50k	Implementation	Reduced vehicle emissions	Environmental Enforcement officer's new electric vehicle. Expanded to all visit-based council officers.	Environmental Enforcement officers and service offices use an electric pool car for visits within the Borough. Building on this year, the Green Fleet Strategy vehicle replacement programme has seen the following electric vehicles come into our fleet: three electric pool cars for staff usage meeting and site visit usage, including replacement of the Mayor's vehicle, two community transport buses and two support vans with electric vehicles.	<p>The Carbon Management and Reduction Plan (CMRP) includes actions that will assist in the implementation of this measure including:</p> <ul style="list-style-type: none"> Review of the Council's internal purchases, working towards the ambition of an ultra-low carbon fleet. Replace and review existing electric vehicle fleet and increase number of electric pool cars. <p>The full CMRP can be viewed at: https://www.elmbridge.gov.uk/your-council/council-plans-policies-and-strategies/climate-change-plans/our-carbon-footprint#:~:text=Our%20Carbon%20Management%20and%20Reduction,2020%2C%20and%20has%20been%20revised.</p>

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
EBC-2	Increasing the number of electric vehicles charging points in Council car parks	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharging	2020	Ongoing	EBC	EBC	NO	Partially Funded	£10k - 50k	Implementation	Reduced vehicle emissions	The number of charging points installed.	<p>The Council has electric vehicle charging points at the following locations:</p> <ul style="list-style-type: none"> Hollyhedge Road car park Churchfield Road car park Civic Centre car park Drewitts Court car park Claygate Centre for the Community Cobham Centre for the Community Community Transport, Hersham Centre for the Community Molesey Centre for the Community Walton Centre for the Community 	<p>A requirement for all developments to implement electric vehicle charging points in accordance with the standards set out in the Parking Supplementary Planning Document (SPD) will be included in the emerging Local Plan.</p> <p>The Council adopted the Parking SPD in July 2020. The document includes standards that new developments are expected to meet in relation to electric vehicle charging infrastructure.</p> <p>The Parking SPD is available at: Elmbridge Borough Council - Supplementary planning documents: https://www.elmbridge.gov.uk/planning/planning-policy-and-guidance/supplementary-planning-documents</p>
EBC-4	Reducing Council staff and fleet transport emissions as part of the Council's Carbon Reduction Strategy	Promoting Travel Alternatives	Workplace Travel Planning	2020	2030	EBC	EBC	NO	Partially Funded	£10k - 50k	Implementation	Reduced vehicle emissions	Latest carbon reduction plan updates.	<p>Initial assessment of emissions completed.</p> <p>Additionally, a salary sacrifice scheme has been introduced for staff who would like to purchase their own electric vehicle. Uptake by staff of the Octopus Energy scheme has been positive.</p>	<p>The CRMP includes actions that will assist in the implementation of this measure including:</p> <ul style="list-style-type: none"> Review of the Council's internal purchases, working towards the ambition of an ultra-low carbon fleet. Replace and review existing electric vehicle fleet and increase number of electric pool cars. <p>The full CMRP can be viewed at: https://www.elmbridge.gov.uk/your-council/council-plans-policies-and-strategies/climate-change-plans/our-carbon-footprint#:~:text=Our%20Carbon%20Management%20and%20Reduction,2020%2C%20and%20has%20been%20revised</p>

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
EBC-5	Investigate options for a pilot cargo bike scheme for local businesses	Promoting Travel Alternatives	Promotion of cycling	2021	2023	EBC	-	-	Not Funded	-	Aborted	Reduced vehicle emissions	Businesses applying for the Green Business Boost grant scheme	While the specific pilot will not be going forward, the Council has introduced a Green Business Boost grant scheme where local businesses can apply for funding to help with their decarbonisation measures, which would include them purchasing an e-cargo bike.	High streets are where the Borough's AQMAs are located. Exploring alternate delivery options for high street businesses could help reduce emissions within AQMAs. SCC plan to implement measure through the Local Transport Plan 4 (LTP4).
EBC-6	Work towards fulfilling the Council's pledge to be carbon neutral by 2030	Promoting Travel Alternatives	Other	2020	2030	EBC	EBC	NO	Partially Funded	£10k - 50k	Implementation	-	-	CMRP 2030 actions are monitored and reported against as part of the council's quarterly performance report.	<p>The CMRP contains actions aimed at fulfilling the Council's Carbon neutral pledge. Such actions that will also be beneficial to air quality include:</p> <ul style="list-style-type: none"> • Seeking strategic direction on enabling remote working for Council staff. • Replacement of gas-fired boilers with electric or other state-of-the-art technologies at the Civic Centre. • Planning for future replacement of gas-fired boilers at community centres. <p>The full CMRP can be viewed at: https://www.elmbridge.gov.uk/your-council/council-plans-policies-and-strategies/climate-change-plans/our-carbon-footprint#:~:text=Our%20Carbon%20Management%20and%20Reduction,2020%2C%20and%20has%20been%20revised</p>

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
EBC-7	Embed air quality in the Local Plan	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2021	Ongoing	EBC	EBC	NO	Funded	< £10k	Implementation	Reduced vehicle and building emissions		<p>The Elmbridge Design Code was adopted in April 2024.</p> <p>The Council withdrew the Draft Elmbridge Local Plan 2037 in February 2025 and is in the early stages of producing a new Local Plan.</p> <p>The Council's Local Development Scheme sets out a timetable to produce the New Local Plan between 2025 and 2028, with adoption anticipated at the end of 2028.</p> <p>However, given the implications and timeline of Local Government Reorganisation, the New Local Plan may not reach adoption, and the process will be taken over by the new unitary authority.</p>	<p>New local Plan will seek to encourage more sustainable development through the implementation of policies regarding matters such as energy efficiency, renewable and low carbon energy; minimising waste and promoting a circular economy; promoting high standards of sustainable design; encouraging sustainable transport modes and, the delivery of electric vehicle charging, etc.</p>
EBC-8	Indoor air quality to be considered as part of the planning process for new development in the AQMAs	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2020	Ongoing	EBC	N/A	NO	-	-	Planning	N/A	Number of planning applications in AQMA with indoor air quality considered	<p>Ongoing.</p> <p>The Councils website now highlights indoor air quality and what residents can do to improve it.</p> <p>At a local NHS respiratory event, officers spoke about indoor air quality.</p>	<p>Housing within existing high streets is on the increase. The six AQMAs are all high street locations. While indoor air quality is not the primary focus of an AQAP it is included as an action on the grounds of public health.</p> <p>Consideration will be given to inclusion within an SPD on air quality.</p>

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
EBC-9	Investigate including Air Quality Positive principles in a Design and Renewables SPD	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2021	2025	EBC	EBC	NO	Partially Funded	< £10k	Implementation	Reduced vehicle and building emissions	Number of planning applications considered to be air quality positive	Work on the Climate Change & Renewables SPD is ongoing.	<p>The New London Plan -, published in 2021, requires large-scale developments to consider how air quality can be improved across the area through an Air Quality Positive approach.</p> <p>The Air Quality Positive approach requires new development proposals to consider ways in which the development could maximise benefits to local air quality, as well as what measures and design features that will be put in place to reduce exposure to air pollution.</p> <p>The Council adopted the Design Code SPD in April 2024 which includes Air Quality Positive principles for new developments, such as green infrastructure, measures to encourage sustainable transport modes and renewable energy.</p>
EBC-10	Encouraging residents to refrain from garden bonfires	Public Information	Via the Internet	2021	Ongoing	EBC	EBC	NO	Funded	< £10k	Implementation	Reduced stationary source emissions	Reduction in the number of "bonfire" complaints received	Ongoing.	Use of the Council's website and social media to promote changes in behaviour to move away from burning waste and connecting this as a local source of damaging particulates.
EBC-11	Promoting approved wood-burning stoves and burning of approved products and encouraging recycling of waste	Promoting Low Emission Plant	Shift to installations using low emission fuels for stationary and mobile sources	2020	Ongoing	EBC	EBC	NO	Funded	< £10k	Implementation	-	-	<p>The Council have supported the Global Action Plan (GAP)'s Clean Air Day 2024 and Clean Air Night 2025.</p> <p>A comprehensive communication campaign from October 2024 to January 2025 around local sources of particulates and their health impacts.</p>	<p>In, 2022 EBC in partnership with SCC participated in a bid led by Hertfordshire County Council (HCC) and GAP for Defra air quality grant for a public information campaign around particulates from solid fuel burning – Clean Air Night. The bid was unsuccessful. In September 2023, a second application led by HCC was submitted, for Defra air quality grant funding to support GAP's Clean Air Night in January 2025. The second bid was also unsuccessful on this occasion, but the plan is to support the 2025 campaign.</p>

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EBC-12	Ensure appropriate and effective monitoring is undertaken across Elmbridge to meet statutory review and assessment duties	Other	Other	2021	Ongoing	EBC	EBC	NO	Funded	< £10k	Implementation	-	Production of Air Quality Annual Status Report	ASRs are produced yearly.	The Council seeks to implement and maintain an efficient monitoring network. That includes monitoring for NO ₂ using diffusion tubes and three automatic monitoring stations, two of which monitor NO ₂ concentrations and one measuring PM ₁₀ and PM _{2.5} . Full monitoring continued throughout 2024. All three stations report live data via UK Air Quality.
EBC-13	Installation of a particulate matter monitor in Elmbridge	Other	Other	2020	2024	EBC	Community Infrastructure Levy (CIL)	NO	Not Funded	£10k - 50k	Complete	-	Installation of a particulate matter monitoring site.	Automatic roadside particulate monitoring site was installed in April 2024. First set of annual data has been reported in this ASR.	After the delays of previous years due to site approvals and securing an electricity supply, costs increased after the additional CIL funding was secured. The particulate matter monitor became operational in April 2024.
EBC-14	CERC Surrey-wide air quality modelling update	Other	Other	2022	Ongoing	EBC in partnership with SAA	SAA	NO	Not Funded	£10k – 50k	Planning	-	Air quality modelling undertaken	On going.	CERC update to borough-wide modelling to be progressed in 2025 and it's anticipated the modelling report published in 2026/2027. This will feed into further work such as review of monitoring locations. The planned Local Government reorganisation may alter the delivery time.
EBC-15	Review of diffusion tube locations across the Borough following CERC modelling update	Other	Other	2019	Ongoing	EBC	EBC	NO	Not Funded	< £10k	Planning	N/A	Report on diffusion tube location review produced	Review of diffusion tube locations in accordance with CERC modelling undertake in 2019 and new locations added as a result.	Once updated borough-wide modelling has been undertaken a further review of diffusion tube locations will be undertaken.
EBC-16	Monitor impact of London Low Emission Zones (LEZ) in Elmbridge AQMA	Other	Other	2020	Ongoing	EBC in partnership with SAA	EBC	NO	Funded	< £10k	Implementation	N/A	Results of traffic surveys and reported in air quality annual status reports	SAA to monitor the situation as the Ultra Low Emission Zone (ULEZ) is implemented in Greater London. Elmbridge borders two London Boroughs. Since the ULEZ was introduced, no significant negative impacts on air quality in Elmbridge have been noted.	Potential for negative impacts in Esher and Hampton Court with traffic rerouting around LEZ. Identification of any issues will allow further actions to be targeted in these areas. In August 2023, the ULEZ was expanded to cover every London Borough.

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EBC-17	Continuation of the Schools Air Quality Programme	Public Information	Via other mechanisms	2021	Ongoing	EBC in partnership with SAA	Defra, SAA	YES	Partially Funded	< £10k	Implementation	Reduced vehicle and building emissions	No. of children/schools reached by promotional / engagement activities	Ongoing.	The SAA jointly work with the Safer Travel Team at SCC to deliver a variety of projects, including, Eco schools and Let's Go Zero by 2030 initiative. 2025 updates provided in the Executive Summary of the ASR.
EBC-18	Use of the EBC website to promote public awareness of the Elmbridge AQMAs and air quality in general	Public Information	Via the Internet	2021	Ongoing	EBC	EBC	NO	Funded	< £10k	Implementation	2024 ASR published on the Councils website July 2024	Latest ASR available on website	Ongoing – In 2024 new animation video and branding was commissioned to facilitate improved communication of air quality messaging to residents and businesses.	The Council's website publishes the current ASR plus historical ASRs and the AQAP. It also provides a link to the CERC modelling map, plus links to the three real-time monitors. Advice and information on improving outdoor and indoor air quality. https://www.elmbridge.gov.uk/environment/air-quality
EBC-20	Clean Air Day Activities	Public Information	Via other mechanisms	2020	Ongoing	EBC	EBC	NO	Partially Funded	< £10k	Implementation	-	-	-	Support the annual Clean Air Day and Clean Air Night
EBC-21	Raise awareness of indoor air pollution through the EBC website and social media	Public Information	Via the Internet	2021	Ongoing	EBC	EBC	NO	Partially Funded	< £10k	Implementation	N/A	Information available on website	Ongoing.	Consideration is also given to planning applications for residential development with AQMAs and the likely impacts on indoor air quality
EBC-22	Remain an active member of the Surrey Air Alliance and contributors to Work Plan	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2016	Ongoing	EBC	EBC	NO	Funded	< £10k	Implementation	Reduced vehicle and building emissions	Adoption of Work Plan	The constitution adopted and workplan produced. Regular meetings have been held.	The SAA facilitates Surrey Authorities, and SCC working together to improve air quality in Surrey. Examples of large projects include CERC Surrey-wide modelling project, Defra grant for school's project and the recent Defra grant for Electric Taxi fleet trial (see measure SCC-3 plus the 2022 and 2023 Defra grant application for Clean Air Night).

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EBC-23	Work with the Surrey Authorities to achieve the former WHO Guideline Values for PM ₁₀ and PM _{2.5} in the Elmbridge Borough by 2030 and any further UK Government targets introduced	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2020	2030	EBC in partnership with Surrey Authorities	N/A	NO	-	-	Implementation	Reduction in PM _{2.5} concentrations	Achievement of WHO Guideline Values across Elmbridge	The was AQAP completed and published on the Councils website.	Various measures within the AQAP will assist in quantifying PM ₁₀ / PM _{2.5} concentrations within the Borough and seek to reduce these concentrations within a local authority sphere of control.
SCC-1	Supporting Transport for Southeast	Policy Guidance and Development Control	Other policy	2021	2023	GLA, SCC and EBC	Developers & highway infrastructure funding	NO	Partially Funded	> £10 million	Planning	Reduced vehicle emissions	-	The Transport Strategy was adopted in Summer 2020	Elmbridge is located within two of the five study areas (the inner orbital and southwest radial). The outcome of these studies will form the basis of the Transport for Southeast Strategic Investment Plan for new transport schemes, initiatives, and policies. In March 2023, the Transport Strategic Investment Plan received approval which includes almost 300 multi-modal transport interventions which will be delivered across the south east over the next 27 years. Further information on Transport for South East can be found at: https://transportforthesoutheast.org.uk/our-work/strategic-investment-plan/ Home - Transport for the South East and Transport body gets green light to proceed with ambitious investment plan - Transport for the South East.

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SCC-2	Implementation of the Low Emission Transport Strategy for Surrey	Policy Guidance and Development Control	Low Emissions Strategy	2018	Ongoing	SCC and EBC	Developers & highway infrastructure funding	NO	Partially Funded	> £10 million	Implementation	Reduced vehicle emissions	Suite of indicators associated with quantum and distribution of air pollution, travel behaviour and delivery of infrastructure for low emission transport options.	The Strategy has been adopted and is being implemented.	The Low Emissions Transport Strategy will be superseded by implementation of the LTP4. Covered within the LTP4 are the following relevant policy areas which, as the Low Emissions Strategy did, will contribute to lower emissions and therefore improved air quality. LTP4 was adopted in July 2022, the plan can be viewed on the following website; https://www.surreycc.gov.uk/roads-and-transport/policies-plans-consultations/transport-plan
SCC-3	Support an electric vehicle strategy for Surrey	Policy Guidance and Development Control	Other policy	2018	Ongoing	SCC and EBC	Developers & highway infrastructure funding	NO	Partially Funded	£100k - £500k	Implementation	-	-	Electric Vehicle Strategy produced and adopted by Elmbridge Borough Council. Defra confirmed the electric taxi fleet trial revisions and match funding. As of 2024 Guildford Borough Council acting as lead authority on the project. Discussion is ongoing with vehicle provider.	In March 2023 SCC announced an investment of 60 million pounds with Connect Kerb with the aim of delivering 10,000 public electric vehicle charging points by 2030 across the County. SCC electric vehicle strategy has been enshrined into SCC LTP4. The SAA has also submitted a grant application to Defra for an electric taxi fleet trial including telemetric devices in vehicles. In March 2021, the project was awarded £256,868 from the Defra Air Quality Grant Fund. There have been a number of delays with the project, as of 2024 on track for delivery in 2025/6.

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SCC-4	Implementation of the Climate Change Strategy for Surrey	Policy Guidance and Development Control	Low Emissions Strategy	2020	Ongoing	SCC and EBC	Central Government, developers, highways, and infrastructure funding	YES	Partially Funded	£1 million - £10 million	Implementation	Reduced vehicle and building emissions	Implementation of Strategy	The Strategy has been adopted and is being implemented.	The Strategy has been considered by eleven Districts and Boroughs. The Strategy includes measures that will be beneficial for air quality. Air quality-related actions are provided in the section 'Transport and Air Quality' of the Strategy which can be viewed at: https://www.surreycc.gov.uk/community/climate-change/what-are-we-doing/carbon-free/climate-change-strategy .
SCC-6	Alteration of existing signalised pedestrian crossings on the High Street, Weybridge to reduce congestion	Traffic Management	Other	2020	Ongoing	SCC and EBC	Developers & highway infrastructure funding	NO	Partially Funded	£10k - 50k	Planning	-	-	The study is ongoing to determine feasibility.	Still at feasibility stage. Work brief was issued to SCC's Professional Services Highway Partner in August 2021 - awaiting work programme. As of June 2023 – options have been developed, and detail designs have been produced for the project team to consider and comment on. No further information on implementation.
SCC-7	Improvements to the Hampton Court Roundabout/junction to reduce congestion	Traffic Management	Other	2020	Ongoing	SCC and EBC	Developers & highway infrastructure funding	NO	Partially Funded	£10k - 50k	Planning	-	-	The applicants are looking to implement the permission (subject to all conditions being discharged) at the end of June 2025.	The Planning application refusal was appealed and subsequently overturned. The Secretary of State for Culture Media and Sport has been asked to give consent to the development under the South Western Railway Act 1913. The Secretary of State held an 8-week public consultation closing on 5 June 2024. Approval was given. Despite progress to June 2025 the applicant will still need to go out to tender for the contractors for construction so the development unlikely to start until 2026.

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SCC-8	Installation of additional pedestrian facilities on Esher High Street	Promoting Travel Alternatives	Promotion of walking	2020	Ongoing	SCC and EBC	Developers & highway infrastructure funding	NO	Partially Funded	£10k - 50k	Implementation	-	-	Feasibility study in progress as part of the Esher Town Centre Vision. As of May 2025, the project is in the design phase.	Feasibility study remains in progress. Following a recent LCWIP workshop, feedback received noted this location is a core walking area and needs a broader consideration of the local aspirations and the competing place vs. movement functions of the road. Significant improvements to achieve the 'place' objective and improve pedestrian facilities would likely require a reduction in capacity. In May 2025, the LCWIP moves to design stage.
SCC-9	Working with SCC to ensure that Air Quality is appropriately considered within the LTP4.	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2020	2022	SCC and EBC	N/A	NO	-	-	Planning	-	-	-	See action SCC 2. LTP4 was adopted in July 2022, the plan can be reviewed on the following link: https://www.surreycc.gov.uk/roads-and-transport/policies-plans-consultations/transport-plan .

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

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy²⁵, local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter (PM_{2.5}). There is clear evidence that PM_{2.5} (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

The Public Health Outcomes Framework data tool compiled by Public Health England quantifies the mortality burden of PM_{2.5} within England, as well as on county and local authority scales. The tool is available online at:

<https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/0/gid/1000049/pat/6/par/E12000008/ati/102/are/E10000030>.

The latest available data for 2023 shows that the percentage of mortality attributable to PM_{2.5} pollution (indicator D01) across England is 5.2%. The percentage within Surrey is 5.3% and within Elmbridge is 5.6%. Elmbridge has a higher percentage of mortality attributable to PM_{2.5} pollution when compared to England and Surrey as a whole.

The modelling exercise undertaken by CERC also quantifies the mortality burden of PM_{2.5}, in terms of fraction of deaths attributable to PM_{2.5} pollution, associated total life years lost and economic cost within Elmbridge, and the wider-Surrey area. The estimated total number of deaths attributable to PM_{2.5} pollution in Surrey in 2017 was between 173 – 468, which equated to an estimated economic cost between £87,235,665 – £235,790,256. In Elmbridge, the estimated total number of deaths attributable to PM_{2.5} pollution in 2017 was between 19 - 51, which equated to an estimated economic cost between £9,828,813 – £29,869,995⁷.

The CERC modelling contour maps of predicted pollutant concentrations across Surrey and Elmbridge are available in an interactive format at the following website:

<https://surreycc.maps.arcgis.com/apps/webappviewer/index.html?id=43910ffb100248ed972115b7a9b49d20>.

²⁵ Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

Elmbridge Borough Council is taking the following measures to address PM_{2.5}:

- An automatic monitoring station that measures PM_{2.5} has been installed in Esher to assist in understanding the baseline concentration in the area.
- PM_{2.5} dispersion modelling, funded by the Council, was carried out in 2019 and will be updated during 2026/27
- Discouraging wood-burning and promoting the use of only approved wood-burning stoves and fuels. The Council was part of the consortium that took part in Clean Air Night from January 2024 to January 2025 and promoted it on the Council website
- A comprehensive communications package was rolled out from October 2024 to February 2025 promoting the new service. This included new campaign branding and an animation video focusing on particulates and the airTEXT service.



- Officers attended a local respiratory event and visited all of the Borough's independent pharmacies raising awareness of the health impacts of particulates and promoting the new airTEXT service.
- Promoting travel alternatives through the development and implementation of the LCWIP, installation of additional pedestrian facilities, and reducing the Council staff and fleet transport emissions through the Carbon Reduction Strategy.
- Implementing the taxi and private hire licensing policy that came into force 1st September 2020.

- Implementing Surrey's Climate Change Strategy (April 2020)²⁶ which includes measures targeted at reducing vehicle emissions.
- Implementing Surrey County Council's Low Emissions Transport Strategy (2018)²⁷ proposals now through LTP4.

²⁶ Surrey County Council. 'Surrey's Climate Change Strategy'. 2020.

²⁷ Surrey County Council. 'Surrey Low Emission Transport Strategy'. 2018.

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

This section sets out the monitoring undertaken within 2024 by Elmbridge and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2020 and 2024 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

The Council undertook automatic (continuous) monitoring at three sites during 2024. Table A.1 in Appendix A shows the details of the automatic monitoring sites. Live data is available on UK Air Quality website (<https://www.ukairquality.net/>).

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on how the monitors are calibrated and how the data has been adjusted are included in Appendix C.

3.1.2 Non-Automatic Monitoring Sites

Elmbridge undertook non- automatic (i.e. passive) monitoring of NO₂ at 41 sites during 2024.

Table A.2 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 25%), and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO₂)

Table A.3 and Table A.4 in Appendix A compare the ratified and adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40µg/m³. 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).

For diffusion tubes, the full 2024 dataset of monthly mean values is provided in Appendix B. Note that the concentration data presented in Table B.1 includes distance corrected values, only where relevant.

Table A.5 in Appendix A compares the ratified continuous monitored NO₂ hourly mean concentrations for the past five years with the air quality objective of 200µg/m³, not to be exceeded more than 18 times per year.

Data from automatic monitoring sites have been processed using the Automatic Data Processing Tool (v1.0). The diffusion tube data have been processed using the Defra Diffusion Tube Processing Tool (v5.0).

Automatic Monitoring

In 2024, the Council undertook automatic monitoring of NO₂ concentrations at Hampton Court Parade, within the Hampton Court AQMA, Weybridge High Street 2, within the Weybridge High Street AQMA. Annual mean NO₂ concentrations at both automatic

monitoring sites were well below the objective, with an annual mean NO₂ concentration of 19.9 µg/m³ measured at Hampton Court Parade and 22.6 µg/m³ measured at Weybridge High Street 2. The measured annual mean concentration at the Hampton Court Parade site has decreased by 4.1 µg/m³ in 2024 in comparison to 2023 and the measured annual mean concentration at the Weybridge High Street 2 site has decreased by 2.4 µg/m³ in 2024 in comparison to 2023. Data capture during 2024 was good (>85%) at both automatic monitoring sites.

There were no measured exceedances of the hourly mean NO₂ air quality objective of 200 µg/m³ at the Hampton Court Parade or Weybridge High Street 2 monitoring sites in 2024.

Monitoring will continue at all automatic monitoring sites during 2025 and no changes to the monitoring network are currently proposed.

Non-Automatic Monitoring

In 2024, all non-automatic monitoring sites within Elmbridge Borough recorded concentrations below the annual mean NO₂ air quality objective. Furthermore, during 2024, there were no measured annual mean NO₂ concentrations greater than 60 µg/m³, and therefore it is considered unlikely that the hourly mean NO₂ air quality objective was exceeded at monitoring locations within the Borough.

No distance correction has been carried out as no measured concentrations exceeded the objective or were within 10% of the objective (i.e. >36 µg/m³).

The highest measured annual mean NO₂ concentration in 2024 occurred at Weybridge 7 (26.8 µg/m³), located at 44 Church Street, Weybridge, in the Weybridge High Street AQMA. This was followed by Cobham 11 (26.7 µg/m³) and Esher 7 (24.1 µg/m³). During 2024, NO₂ concentrations have decreased at all monitoring sites in comparison to 2023 apart from at Cobham 10 which increased by 0.3 µg/m³ to 20.1 µg/m³ from 2023 to 2024. Data trends for all current sites for the past five years are provided in Appendix A, Figures A.1 – A.7. Overall, between 2020 and 2024, measured concentrations have slightly fluctuated over the years, however a general decrease in concentrations is evident across all of the sites since 2020.

Annual mean NO₂ concentrations have remained below the air quality objective at monitoring sites since 2020 in all AQMAs declared by Elmbridge. Furthermore, measured NO₂ annual mean concentrations have been more than 10% below the annual mean NO₂ air quality objective for three consecutive years (post-covid) in all of Elmbridge's AQMAs, except for within the Esher AQMA where the measured NO₂ annual mean concentration

was within 10% of the objective in 2022. Therefore, the following AQMAs will be considered for revocation in 2025: Hampton Court, Hinchley Wood, Weybridge, Walton Road (Molesey) and Walton-on-Thames High Street AQMAs.

NO₂ concentrations within the Esher AQMA will continue to be monitored closely and this AQMA will be considered for revocation once three consecutive years of data evidencing annual mean NO₂ concentrations more than 10% below the objective are available (potentially in 2026 if trends continue).

Monitoring will continue at all diffusion tube monitoring sites during 2025 and no changes to the monitoring network are currently proposed.

3.2.2 Particulate Matter (PM₁₀)

Table A.6 in 0 compares the ratified and adjusted monitored PM₁₀ annual mean concentrations for the past five years with the air quality objective of 40µg/m³.

Table A.7 in Appendix A compares the ratified continuous monitored PM₁₀ daily mean concentrations for the past five years with the air quality objective of 50 µg/m³, not to be exceeded more than 35 times per year.

During 2024, the Council undertook automatic monitoring of PM₁₀ concentrations at Esher High Street, within Esher High Street AQMA. As the monitor began operation in April 2024, the valid data capture during 2024 was less than 75% (74.1%), therefore the data has been annualised.

The measured annual mean PM₁₀ concentration in 2025 was well below the objective, with an annual mean PM₁₀ concentration of 12.8 µg/m³.

The daily mean PM₁₀ concentrations did not exceed the daily mean objective (50 ug/m³ not to be exceeded more than 35 times in a year), with only one daily mean concentration greater than 50 µg/m³ being recorded in 2024. The 90.4th percentile of daily mean PM₁₀ concentrations was also well below 50 µg/m³ at 23 µg/m³.

PM₁₀ monitoring will continue at the Esher High Street automatic monitoring site during 2025.

3.2.3 Particulate Matter (PM_{2.5})

Table A.8 in Appendix A presents the ratified and adjusted monitored PM_{2.5} annual mean concentrations for the past five years.

During 2024, the Council undertook automatic monitoring of PM_{2.5} concentrations at Esher High Street, within Esher High Street AQMA. Due to the monitor being installed in April of 2024, the valid data capture during 2024 was less than 75% (74.1%) and therefore the data has been annualised.

The annual mean PM_{2.5} concentration at Esher High Street in 2024, 7.5 µg/m³, was below the Air Quality Standards Regulations (2010) objective of 20 µg/m³, the Environmental Tagrets (Fine Particulate Matter) (England) Regulations (2023) target of 10 µg/m³ by 2040 and Elmbridge AQAP target of 10 µg/m³ by 2030.

PM_{2.5} monitoring will continue at the Esher High Street automatic monitoring site during 2025.

3.2.4 Sulphur Dioxide (SO₂)

Previous rounds of Review and Assessment and historic monitoring have confirmed that SO₂ concentrations in Elmbridge are compliant with the air quality objectives. Therefore, monitoring of SO₂ is not required and is not currently carried out by Elmbridge Borough Council.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Which AQMA? ⁽¹⁾	Monitoring Technique	Distance to Relevant Exposure (m) ⁽²⁾	Distance to kerb of nearest road (m) ⁽¹⁾	Inlet Height (m)
Hampton Court Parade	Hampton Court Parade	Roadside	515338	168292	NO ₂	Yes	Hampton Court	Chemiluminescence	10.0	1.9	1.6
Weybridge High Street 2	Weybridge High Street 2	Kerbside	507459	164909	NO ₂	Yes	Weybridge High Street	Chemiluminescence	6.5	0.7	1.8
Esher High Street	Esher High Street	Roadside	513969	164765	PM ₁₀ , PM _{2.5}	Yes	Esher	Gravimetric	5.0	2.4	2.1

Table A.2 – 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)
ESHER 1	Lamppost outside The Hair Gallery, Church St	Roadside	513840	164693	NO ₂	Yes - Esher	0.4	1.5	No	2.6
ESHER 7	35-37 High St	Roadside	513982	164750	NO ₂	Yes - Esher	2.3	0.6	No	2.3
ESHER 8	Outside 9 Church St	Roadside	513832	164684	NO ₂	Yes - Esher	0.1	3.2	No	2.4
ESHER 9	Lamppost next to Churchyard, Church St	Kerbside	513821	164712	NO ₂	Yes - Esher	12.5	0.6	No	2.6
ESHER 11	The Bear, Copsem Lane side	Roadside	513895	164599	NO ₂	Yes - Esher	1.6	5.1	No	2.6
ESHER 13	Panahar Tandoori, 124-126 High St	Kerbside	513736	164489	NO ₂	Yes - Esher	2.7	0.9	No	2.4
ESHER 14	Lamppost in Car Park, Sunrise Living off A3 Roundabout Esher	Roadside	514034	162282	NO ₂	No	6.2	1.0	No	1.6
ESHER 15	Lamppost o/s Helix House, Esher Green/High St, Esher KT10 8AB	Roadside	513901	164779	NO ₂	Yes - Esher	1.1	3.8	No	1.9
HINCHLEY WOOD 1	Kingston Bypass (opp Fire Station)	Roadside	515248	165535	NO ₂	Yes - Hinchley Wood	20.8	4.5	No	2.4
HINCHLEY WOOD 3	Lamppost corner Kingston Bypass/Manor Rd Nth, Esher KT10 0AT	Roadside	515728	165191	NO ₂	No	17.3	2.6	No	1.9

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)
HAMPTON COURT 1	Lamppost nr bus stop, entrance to Summer Road, Hampton Court Way	Kerbside	515379	167946	NO ₂	Yes - Hampton Court	20.9	0.9	No	2.2
HAMPTON COURT 2, HAMPTON COURT 3, HAMPTON COURT 4	Air Quality Station, Hampton Court Parade	Roadside	515338	168292	NO ₂	Yes - Hampton Court	10.0	1.9	Yes	1.7
HAMPTON COURT 5	Traffic sign, 1 Creek Road	Roadside	515329	168390	NO ₂	Yes - Hampton Court	13.7	0.4	No	2.4
MOLESEY 1	113 Walton Rd.	Kerbside	514450	168134	NO ₂	Yes - Walton Road, Molesey	3.5	1.1	No	2.5
MOLESEY 8	44-46 Walton Rd	Roadside	514716	167960	NO ₂	Yes - Walton Road, Molesey	0.1	2.6	No	2.4
MOLESEY 9	Tesco, Walton Rd	Roadside	514507	168086	NO ₂	Yes - Walton Road, Molesey	4.2	2.6	No	2.4
MOLESEY 10	Molesey Mart 264 Walton RD	Roadside	514169	168152	NO ₂	Yes - Walton Road, Molesey	0.1	4.9	No	2.4
OXSHOTT 1	Parking Sign outside Birdshill Farmhouse, Warren Lane Oxshott	Roadside	514558	160621	NO ₂	No	20.0	1.8	No	2.0

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)
OXSHOTT 2	Lamppost o/s Flats1/2, Braeside House, High Street, Oxshott	Roadside	514574	160493	NO ₂	No	5.0	3.0	No	2.2
WALTON 8	Leaders, 46 High St	Roadside	510154	166281	NO ₂	Yes - Walton-on-Thames High Street	2.0	2.9	No	2.6
WALTON 9	Traffic Sign, Café Nero, 18 High St	Roadside	510082	166379	NO ₂	Yes - Walton-on-Thames High Street	2.2	2.6	No	2.5
WALTON 10	The Bees Knees, 34 Church St	Roadside	510140	166522	NO ₂	Yes - Walton-on-Thames High Street	2.0	3.3	No	2.6
WALTON11	Traffic Sign, Ex Dukes Head, Hepworth Way	Roadside	510000	166401	NO ₂	Yes - Walton-on-Thames High Street	21.0	2.3	No	2.4
WALTON 12	Lamppost o/s 60 High Street, Walton on Thames, KT12 1FL	Roadside	510185	166225	NO ₂	Yes - Walton-on-Thames High Street	5.7	3.2	No	2.0
WEYBRIDGE 4	Right of 6 Monument Hill	Roadside	507705	164907	NO ₂	Yes - Weybridge High Street	5.0	2.0	No	2.4
WEYBRIDGE 5	Pizza Express, 1 Monument Hill	Roadside	507609	164966	NO ₂	Yes - Weybridge High Street	0.4	1.6	No	2.3
WEYBRIDGE 6A	Lamppost o/s 47 High St, Weybridge	Kerbside	507536	164952	NO ₂	Yes - Weybridge High Street	3.0	0.7	No	3.3

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)
WEYBRIDGE 7	Prezzo, 44 Church St	Roadside	507199	164804	NO ₂	Yes - Weybridge High Street	0.1	1.5	No	2.4
WEYBRIDGE 8	Lloyd Roberts Opticians, 60A Church St	Roadside	507150	164761	NO ₂	Yes - Weybridge High Street	0.1	4.6	No	2.4
WEYBRIDGE 13, WEYBRIDGE 14, WEYBRIDGE 15	Air Quality Station, outside 40a High Street, Weybridge	Roadside	507459	164909	NO ₂	Yes - Weybridge High Street	6.5	0.7	Yes	1.8
WEYBRIDGE 16	Lamppost Junction Parvis Road /Brookland Road, Byfleet	Roadside	507190	161340	NO ₂	No	10.4	1.6	No	1.9
WEYBRIDGE 17	CCTV Column o/s Lloyds Bank	Roadside	507365	164831	NO ₂	Yes - Weybridge High Street	2.6	0.6	No	3.2
COBHAM 1	o/s The Lemon Tree	Roadside	510813	160048	NO ₂	No	3.5	0.6	No	2.4
COBHAM 6	Harlequin Dry Cleaners, 2 Anyards Road	Roadside	510814	160099	NO ₂	No	2.2	6.0	No	2.4
COBHAM 7	Exclusively Surrey, 38A High Street	Roadside	510861	159906	NO ₂	No	4.2	3.1	No	2.4
COBHAM 8	'No Loading Sign' outside Fieldgate Court, Between Streets, Cobham	Kerbside	510300	160375	NO ₂	No	1.3	1.0	No	1.9
COBHAM 9	Sign outside 71 Portsmouth Road, Cobham	Kerbside	510348	160417	NO ₂	No	2.3	1.0	No	2.0
COBHAM 10	Lamppost o/s 41 Portsmouth Road	Kerbside	510262	160454	NO ₂	No	6.4	1.0	No	2.1
COBHAM 11	Lamppost outside West Lodge,	Roadside	509623	160616	NO ₂	No	7.1	1.5	No	2.2

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)
	Portsmouth Road, Cobham									
COBHAM 12	'No Entry Sign,' A3 East Bound off slip road, Portsmouth Road, Cobham	Roadside	509560	160720	NO ₂	No	14.3	1.5	No	2.0
COBHAM 13	Railings on Footpath, adjacent to A3 East Bound Slip Rd Cobham	Roadside	509465	160640	NO ₂	No	5.5	2.0	No	1.1

Table A.3 – Annual Mean NO₂ Monitoring Results: Automatic Monitoring (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Hampton Court Parade	515338	168292	Roadside	99.5	99.5	26	27	28	24	20
Weybridge High Street 2	507459	164909	Kerbside	93.8	93.8	24	25	25	25	23

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

Notes:

The annual mean concentrations are presented as µg/m³ and are rounded to the nearest whole number.

All means have been “annualised” as per LAQM.TG22 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%).

Table A.4 – Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg/m³)

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 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
ESHER 1	513840	164693	Roadside	100.0	100.0	25.8	28.2	32.0	27.8	23.0
ESHER 7	513982	164750	Roadside	100.0	100.0	31.1	30.2	38.9	30.3	24.1
ESHER 8	513832	164684	Roadside	100.0	100.0	30.1	29.6	30.7	27.1	22.8
ESHER 9	513821	164712	Kerbside	100.0	100.0	20.2	21.3	22.5	20.2	18.0
ESHER 11	513895	164599	Roadside	90.6	90.6	23.1	24.9	27.3	24.0	20.5
ESHER 13	513736	164489	Kerbside	100.0	100.0	24.8	23.1	25.4	22.7	19.3
ESHER 14	514034	162282	Roadside	100.0	100.0	16.8	18.1	20.7	16.6	15.0
ESHER 15	513901	164779	Roadside	92.5	92.5	25.5	24.7	22.9	20.8	17.2
HINCHLEY WOOD 1	515248	165535	Roadside	67.9	67.9	27.6	27.2	26.8	25.4	20.4
HINCHLEY WOOD 3	515728	165191	Roadside	100.0	100.0	34.7	29.6	32.6	28.5	23.6
HAMPTON COURT 1	515379	167946	Kerbside	100.0	100.0	23.7	22.7	27.6	22.9	19.3
HAMPTON COURT 2, HAMPTON COURT 3, HAMPTON COURT 4	515338	168292	Roadside	100.0	100.0	26.2	26.4	27.1	24.9	20.5
HAMPTON COURT 5	515329	168390	Roadside	75.0	75.0	20.9	22.1	23.5	20.0	16.8
MOLESEY1	514450	168134	Kerbside	100.0	100.0	22.8	23.8	24.7	23.2	19.1

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 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
MOLESEY 8	514716	167960	Roadside	100.0	100.0	27.6	27.1	27.4	27.6	22.4
MOLESEY 9	514507	168086	Roadside	83.0	83.0	24.0	22.6	25.0	23.6	19.7
MOLESEY 10	514169	168152	Roadside	100.0	100.0	19.8	20.4	20.7	19.1	16.7
OXSHOTT 1	514558	160621	Roadside	100.0	100.0	19.7	19.6	21.9	20.1	16.5
OXSHOTT 2	514574	160493	Roadside	100.0	100.0	20.4	24.8	24.5	23.6	19.4
WALTON 8	510154	166281	Roadside	100.0	100.0	25.4	23.2	24.9	26.6	20.9
WALTON 9	510082	166379	Roadside	92.5	92.5	23.1	23.0	23.5	22.8	19.7
WALTON 10	510140	166522	Roadside	100.0	100.0	28.3	28.0	27.3	27.3	22.2
WALTON 11	510000	166401	Roadside	100.0	100.0	24.2	24.4	29.6	24.0	20.7
WALTON 12	510185	166225	Roadside	100.0	100.0	24.5	22.5	23.4	22.2	18.7
WEYBRIDGE 4	507705	164907	Roadside	100.0	100.0	29.9	27.7	26.3	23.8	21.0
WEYBRIDGE 5	507609	164966	Roadside	100.0	100.0	28.4	26.3	28.0	27.2	23.5
WEYBRIDGE 6A	507536	164952	Kerbside	100.0	100.0	23.5	22.1	27.4	23.2	18.9
WEYBRIDGE 7	507199	164804	Roadside	83.0	83.0	33.1	33.6	32.8	30.7	26.8
WEYBRIDGE 8	507150	164761	Roadside	83.0	83.0	23.8	25.6	25.9	22.0	19.4
WEYBRIDGE 13, WEYBRIDGE 14,	507459	164909	Roadside	100.0	100.0	24.3	25.4	25.7	25.4	22.3

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 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
WEYBRIDGE 15										
WEYBRIDGE 16	507190	161340	Roadside	100.0	100.0	23.1	22.8	23.5	20.9	17.2
WEYBRIDGE 17	507365	164831	Roadside	100.0	100.0	25.4	23.3	23.7	22.7	19.9
COBHAM1	510813	160048	Roadside	100.0	100.0	18.3	21.6	26.5	21.9	18.0
COBHAM6	510814	160099	Roadside	92.5	92.5	18.9	19.6	21.3	18.3	15.8
COBHAM7	510861	159906	Roadside	92.5	92.5	22.7	22.8	23.9	22.8	17.9
COBHAM8	510300	160375	Kerbside	92.5	92.5	22.4	23.9	23.7	23.2	21.1
COBHAM9	510348	160417	Kerbside	92.5	92.5	21.3	22.1	27.8	23.7	16.1
COBHAM10	510262	160454	Kerbside	81.1	81.1	23.5	26.2	23.5	19.8	20.1
COBHAM 11	509623	160616	Roadside	100.0	100.0	40.9	39.2	39.1	31.4	26.7
COBHAM 12	509560	160720	Roadside	75.0	75.0	26.2	26.1	29.5	24.9	17.8
COBHAM 13	509465	160640	Roadside	90.6	90.6	24.0	25.2	26.1	24.4	17.5

Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

Diffusion tube data has 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 $\mu\text{g}/\text{m}^3$.

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG22 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%).

Figure A.1 – Trends in Annual Mean NO₂ Concentrations in Esher

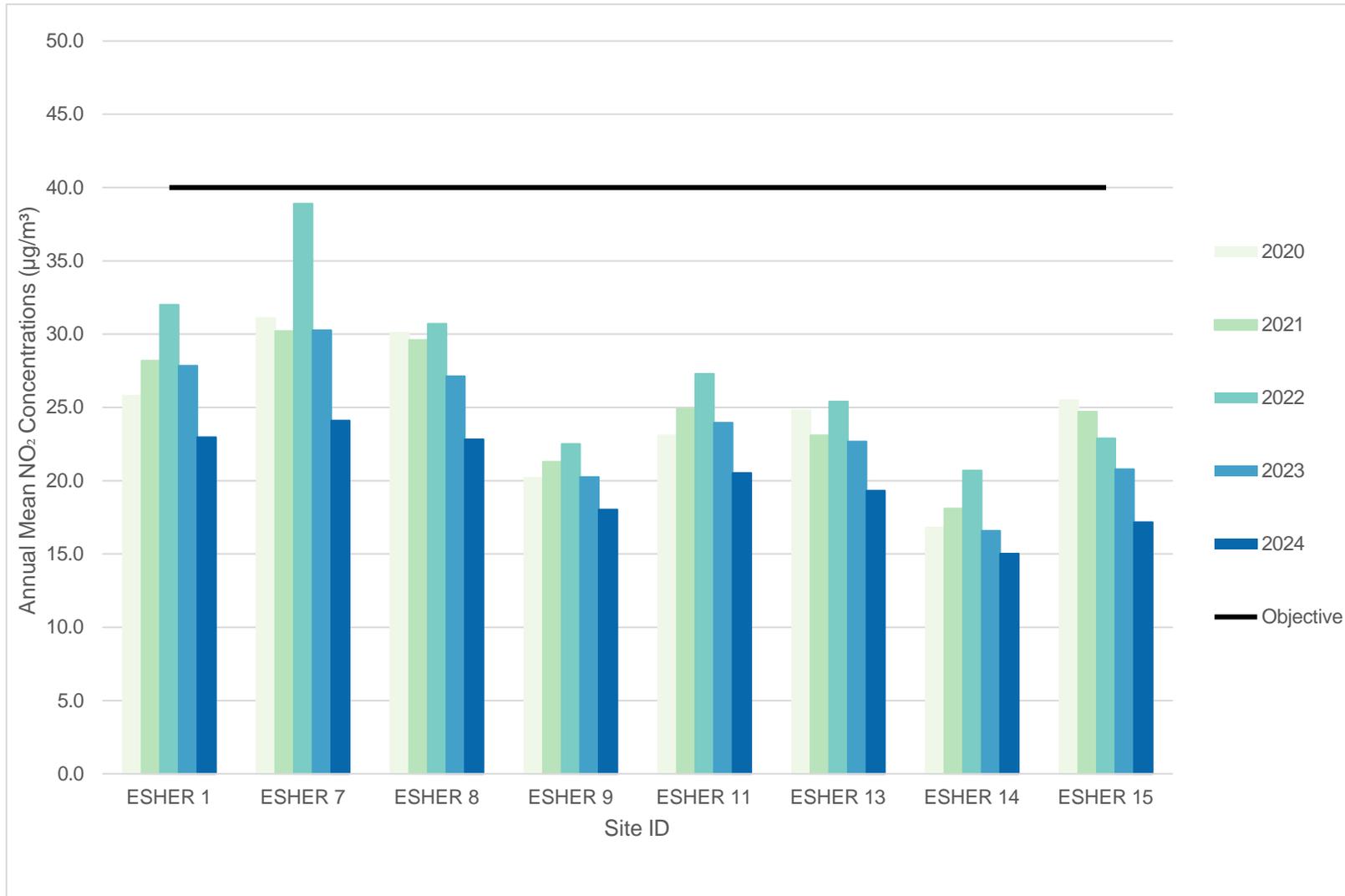


Figure A.2 – Trends in Annual Mean NO₂ Concentrations in Hinchley Wood

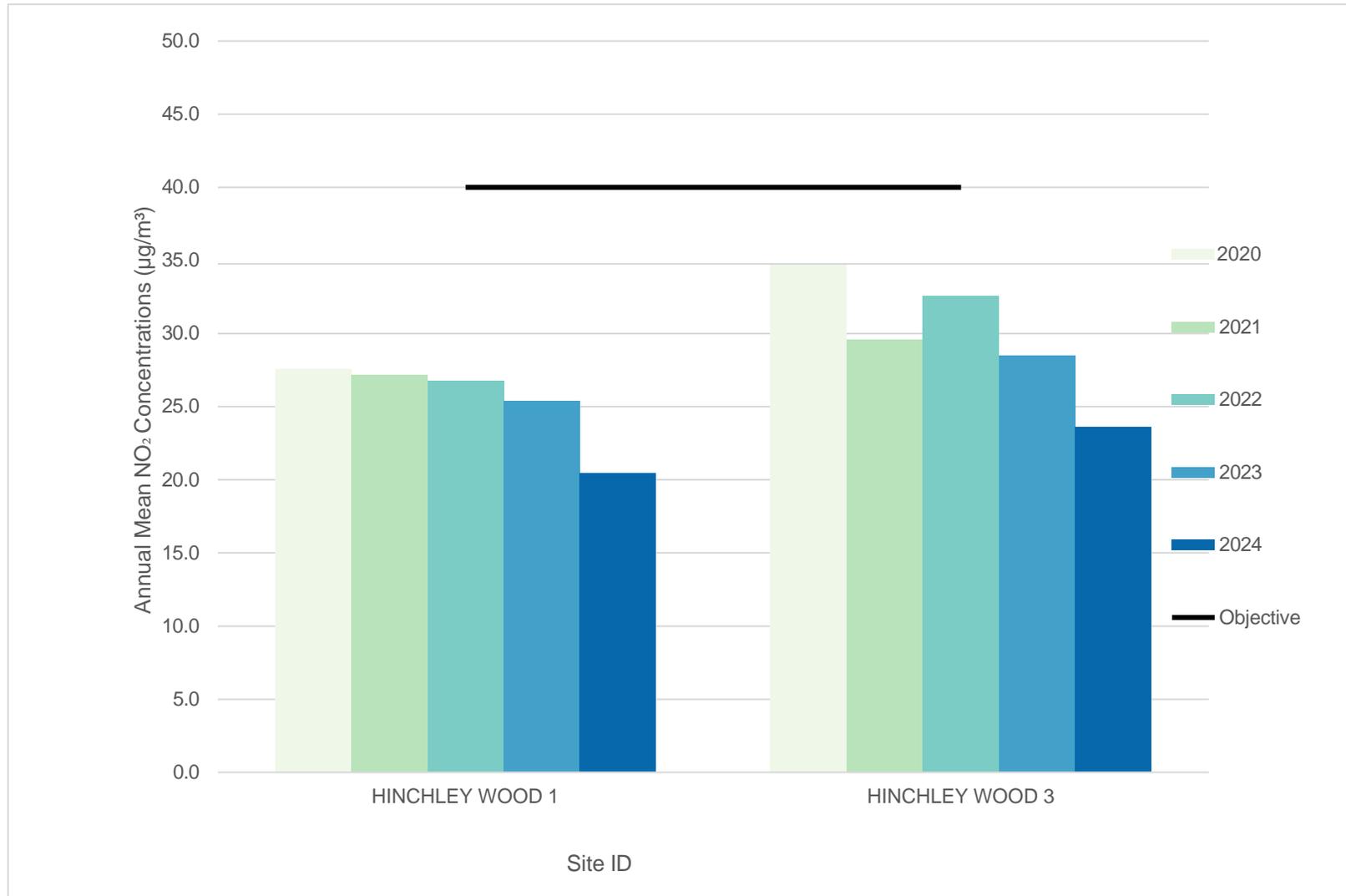


Figure A.3 – Trends in Annual Mean NO₂ Concentrations in Hampton Court

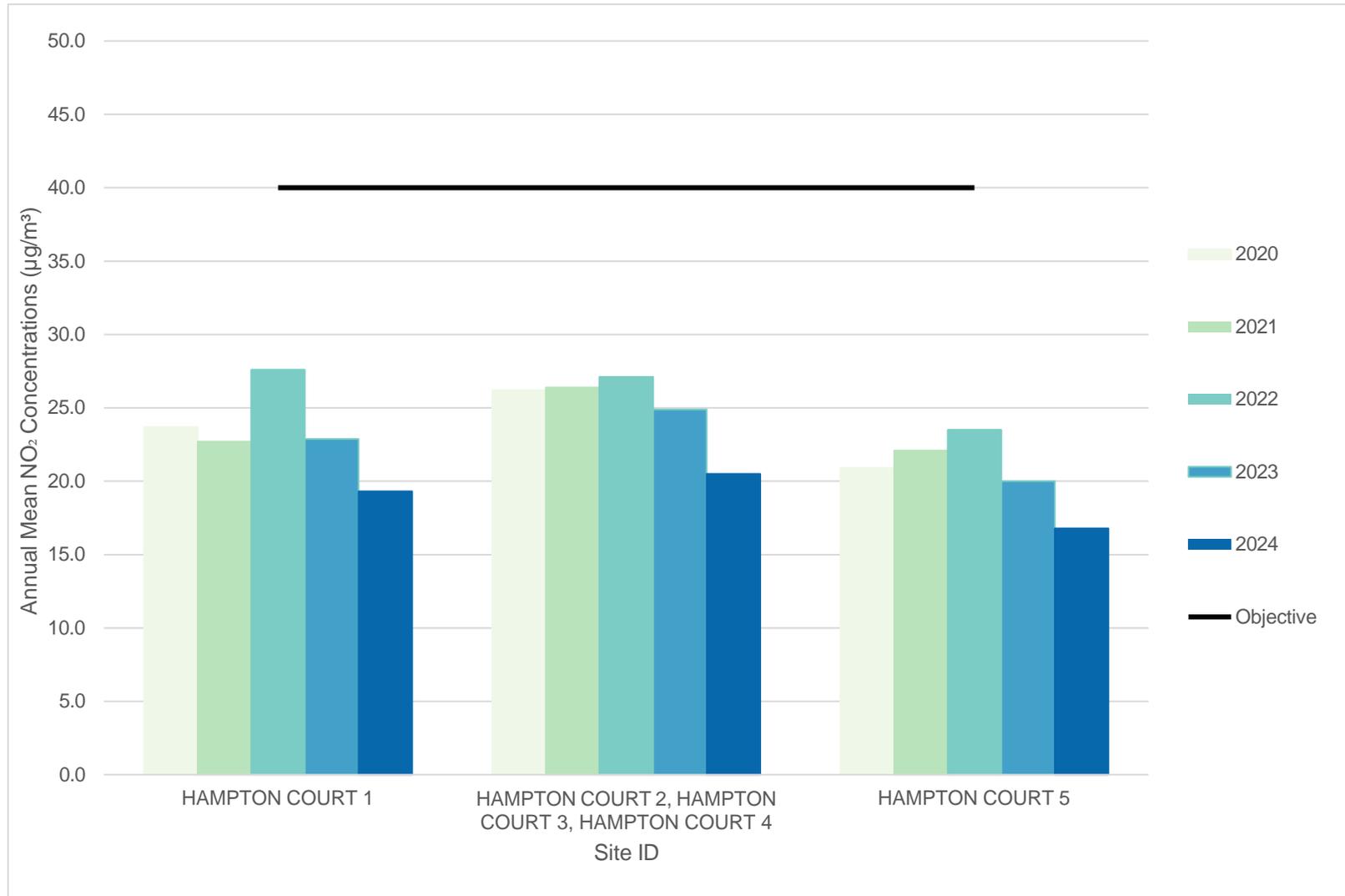


Figure A.4 – Trends in Annual Mean NO₂ Concentrations in Molesey

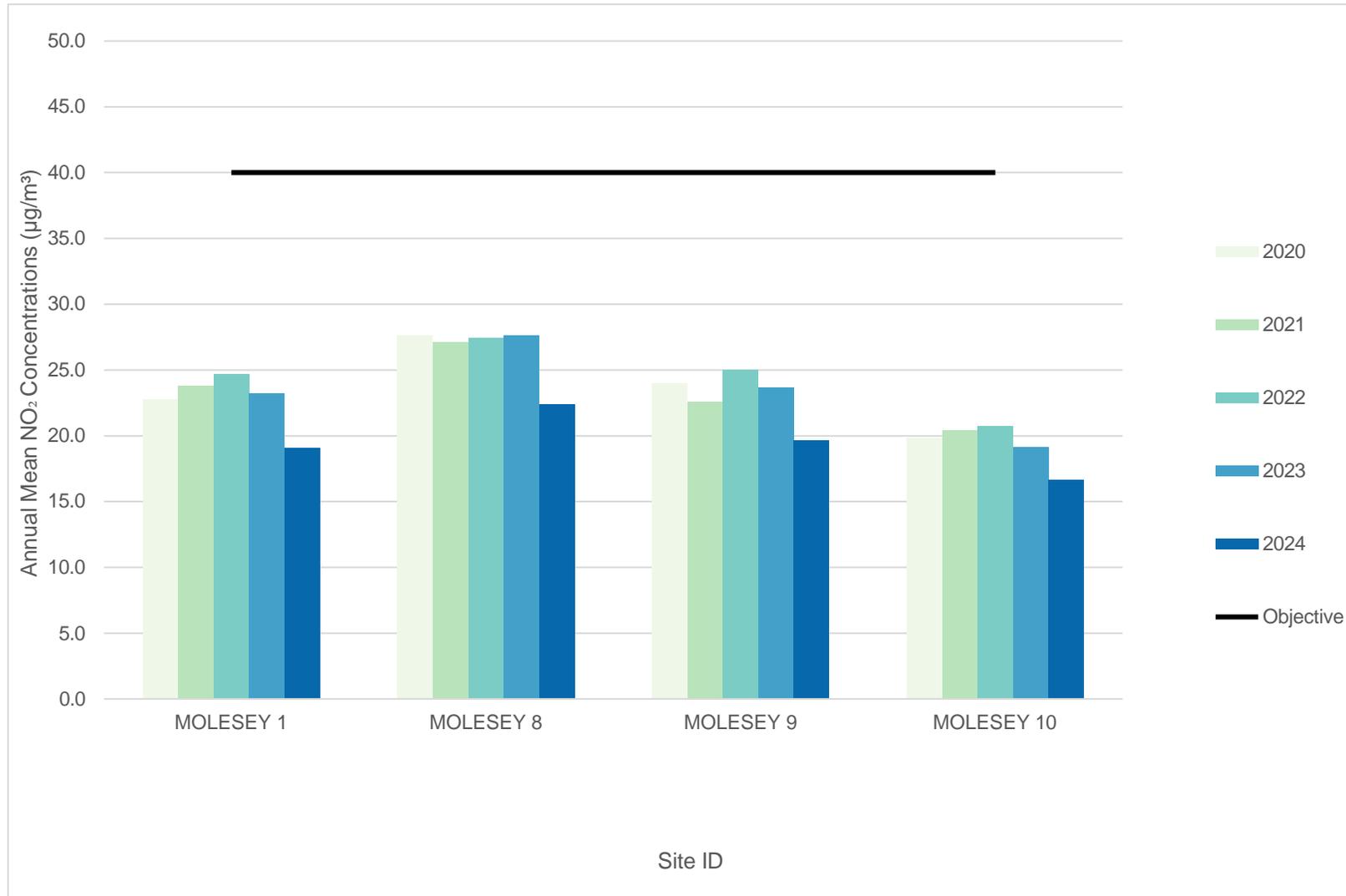


Figure A.5 – Trends in Annual Mean NO₂ Concentrations in Walton-on-Thames

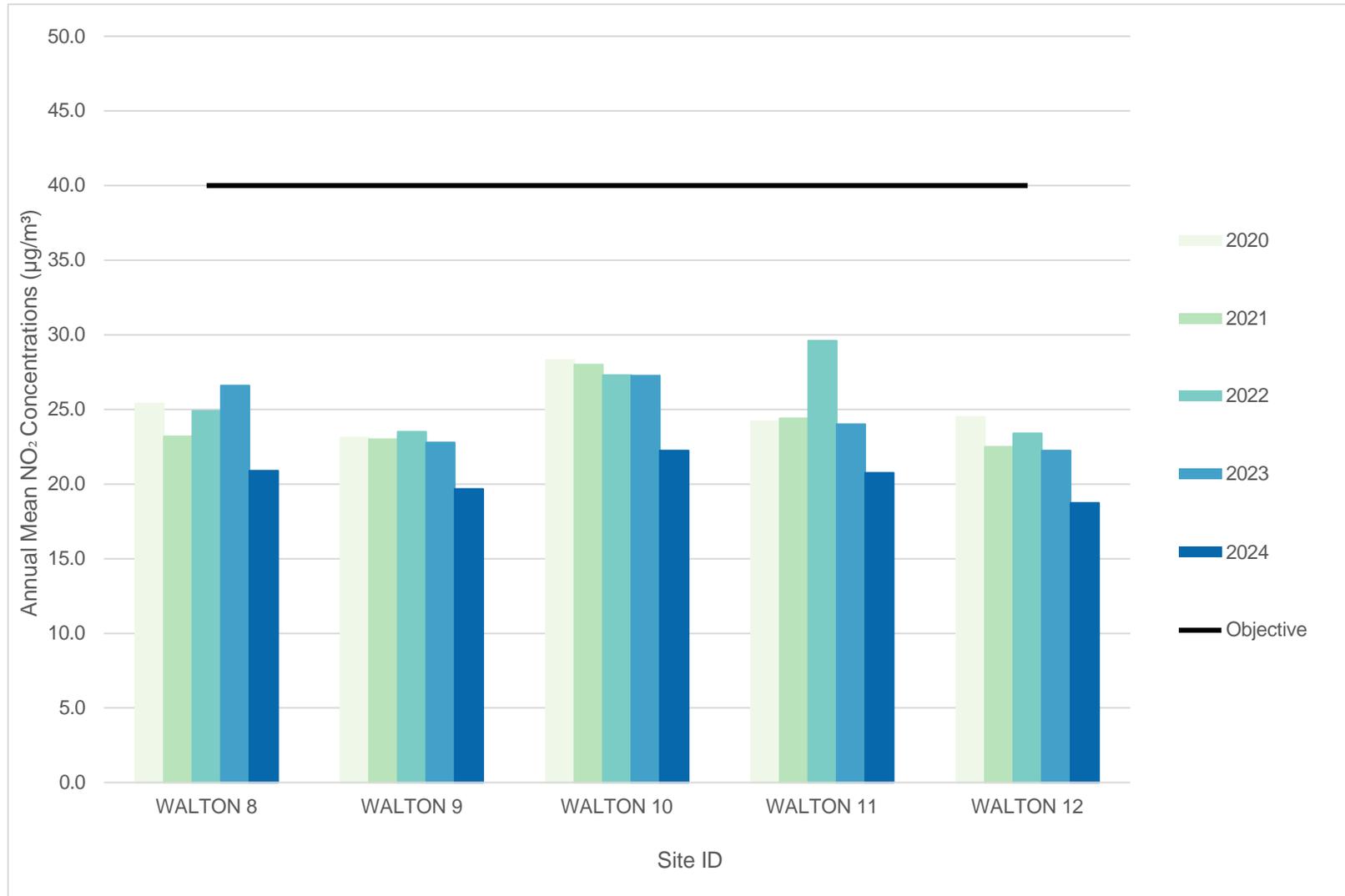


Figure A.6 – Trends in Annual Mean NO₂ Concentrations in Weybridge

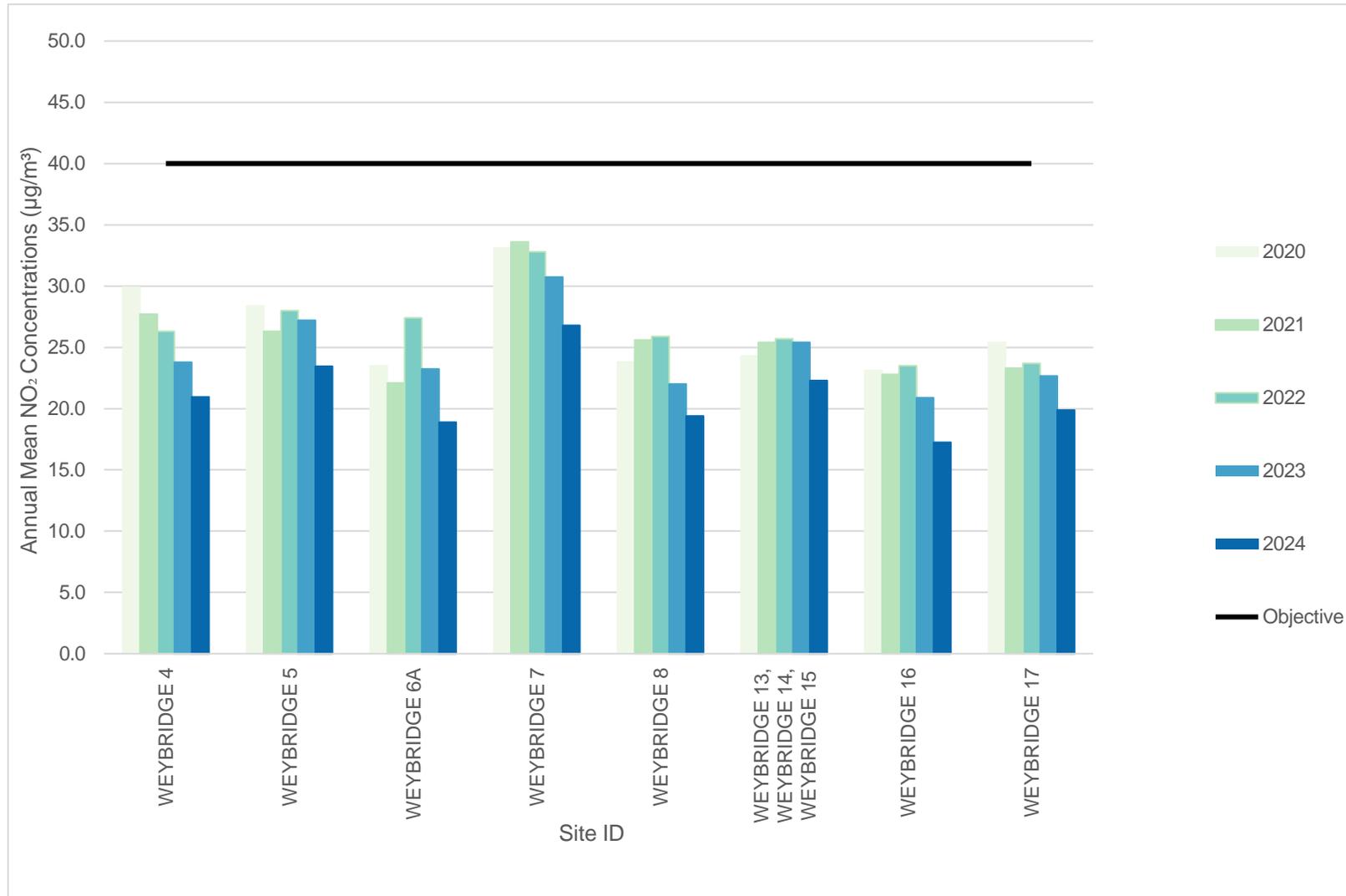


Figure A.7 – Trends in Annual Mean NO₂ Concentrations in Cobham and Oxshott

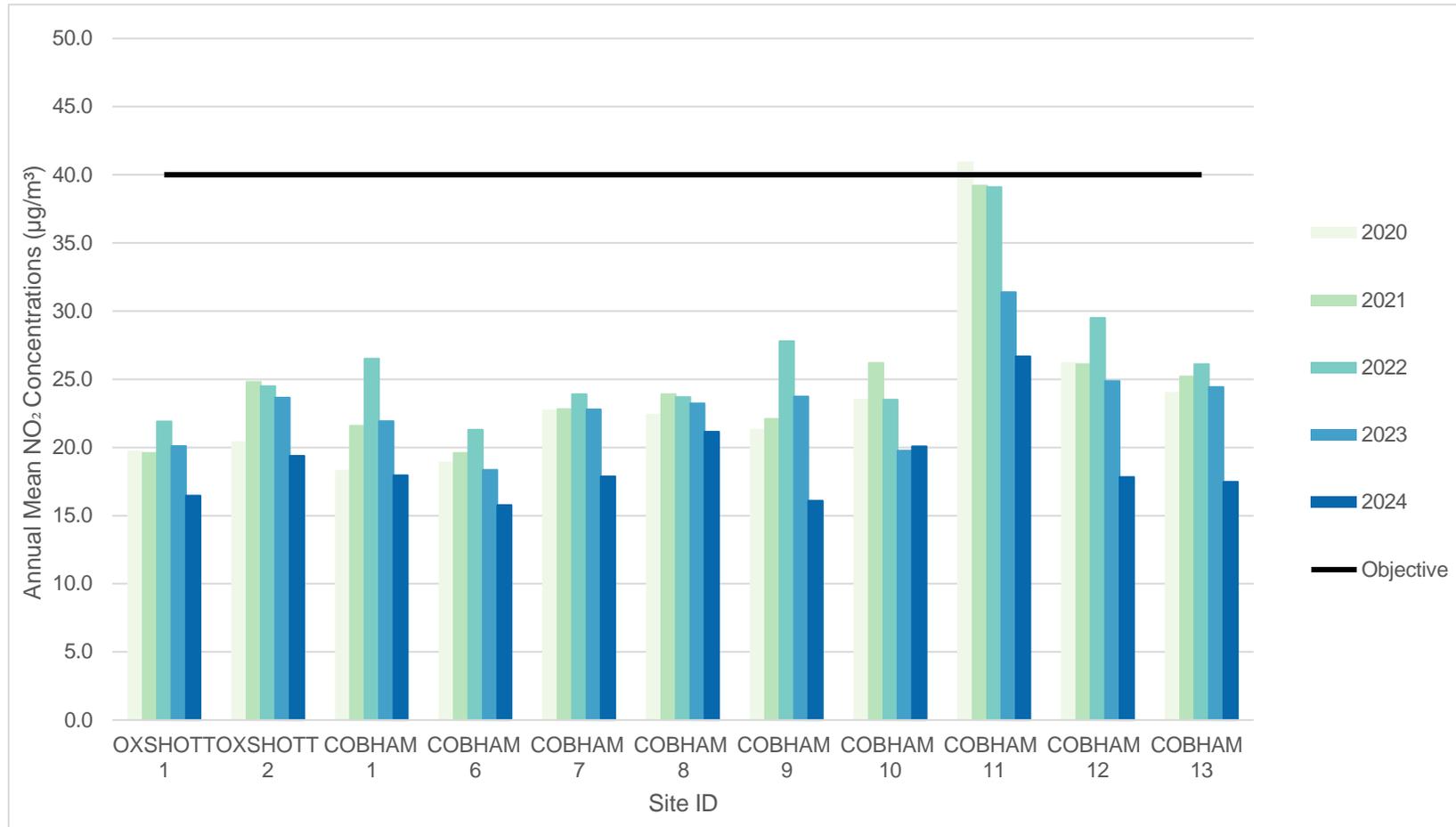


Table A.5 – 1-Hour Mean NO₂ Monitoring Results, Number of 1-Hour Means > 200µg/m³

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Hampton Court Parade	515338	168292	Roadside	99.5	99.5	0	0	0	0	0
Weybridge High Street 2	507459	164909	Kerbside	93.8	93.8	0	0	0	0	0

Notes:

Results are presented as the number of 1-hour periods where concentrations greater than 200µg/m³ have been recorded.

(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%).

Table A.6 – Annual Mean PM₁₀ Monitoring Results (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Esher High Street	513969	164765	Roadside	99.6	74.1	-	-	-	-	13

Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

Notes:

The annual mean concentrations are presented as µg/m³ and rounded to the nearest whole number.

All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

(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%).

Table A.7 – 24-Hour Mean PM₁₀ Monitoring Results, Number of PM₁₀ 24-Hour Means > 50µg/m³

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Esher High Street	513969	164765	Roadside	99.6	74.1	-	-	-	-	1 (23)

Notes:

Results are presented as the number of 24-hour periods where daily mean concentrations greater than 50µg/m³ have been recorded.

If the period of valid data is less than 85%, the 90.4th percentile of 24-hour means is provided in brackets.

(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%).

Table A.8 – Annual Mean PM_{2.5} Monitoring Results (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Esher High Street	513969	164765	Roadside	99.6	74.1	-	-	-	-	8

Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

Notes:

The annual mean concentrations are presented as µg/m³ and rounded to the nearest whole number.

All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

(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%).

Appendix B: Full Monthly Diffusion Tube Results for 2024

Table B.1 – NO₂ 2024 Diffusion Tube Results (µg/m³)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.86)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
ESHER 1	513840	164693	32.0	22.0	29.0	24.0	31.0	22.0	18.0	19.0	38.0	30.0	35.0	21.0	26.8	23.0	-	
ESHER 7	513982	164750	34.0	31.0	35.0	29.0	25.0	25.0	23.0	21.0	30.0	27.0	34.0	23.0	28.1	24.1	-	
ESHER 8	513832	164684	31.0	28.0	28.0	27.0	30.0	26.0	21.0	19.0	27.0	29.0	32.0	21.0	26.6	22.8	-	
ESHER 9	513821	164712	23.0	25.0	23.0	19.0	23.0	19.0	18.0	13.0	23.0	24.0	27.0	15.0	21.0	18.0	-	
ESHER 11	513895	164599	30.0	23.0	28.0	22.0	25.0	21.0	17.0	15.0	28.0	23.0	31.0		23.9	20.5	-	
ESHER 13	513736	164489	31.0	23.0	26.0	22.0	24.0	19.0	16.0	12.0	25.0	19.0	33.0	20.0	22.5	19.3	-	
ESHER 14	514034	162282	23.0	18.0	19.0	16.0	20.0	18.0	14.0	10.0	20.0	17.0	21.0	14.0	17.5	15.0	-	
ESHER 15	513901	164779		18.0	24.0	20.0	24.0	18.0	14.0	13.0	23.0	22.0	28.0	16.0	20.0	17.2	-	
HINCHLEY WOOD 1	515248	165535		17.0	26.0	25.0			24.0	21.0	27.0	26.0		18.0	23.0	20.4	-	
HINCHLEY WOOD 3	515728	165191	30.0	29.0	32.0	25.0	28.0	25.0	23.0	22.0	32.0	28.0	34.0	22.0	27.5	23.6	-	
HAMPTON COURT 1	515379	167946	28.0	25.0	26.0	20.0	24.0	18.0	19.0	14.0	24.0	25.0	29.0	18.0	22.5	19.3	-	
HAMPTON COURT 2	515338	168292	32.0	25.0	28.0	21.0	25.0	20.0	14.0	16.0	26.0	27.0	32.0	12.0	-	-	-	Triplicate Site with HAMPTON COURT 2, HAMPTON COURT 3 and HAMPTON COURT 4 - Annual data provided for HAMPTON COURT 4 only
HAMPTON COURT 3	515338	168292	29.0	26.0	27.0	21.0	25.0	19.0	18.0	19.0	32.0	27.0	33.0	21.0	-	-	-	Triplicate Site with HAMPTON COURT 2, HAMPTON COURT 3 and HAMPTON COURT 4 - Annual data provided for HAMPTON COURT 4 only
HAMPTON COURT 4	515338	168292	29.0	23.0	27.0	20.0	23.0	21.0	17.0	12.0	24.0	24.0	33.0	22.0	23.6	20.5	-	Triplicate Site with HAMPTON COURT 2, HAMPTON COURT 3 and HAMPTON COURT 4 - Annual data provided for HAMPTON COURT 4 only
HAMPTON COURT 5	515329	168390	24.0	19.0	23.0	18.0	21.0		13.0	11.0	22.0	25.0			19.6	16.8	-	
MOLESEY 1	514450	168134	30.0	21.0	24.0	18.0	20.0	17.0	16.0	17.0	26.0	26.0	32.0	20.0	22.3	19.1	-	
MOLESEY 8	514716	167960	32.0	27.0	28.0	24.0	25.0	24.0	23.0	19.0	29.0	27.0	34.0	21.0	26.1	22.4	-	
MOLESEY 9	514507	168086	31.0	25.0	26.0	20.0	21.0	20.0	14.0		26.0	24.0		22.0	22.9	19.7	-	
MOLESEY 10	514169	168152	24.0	19.0	21.0	19.0	18.0	18.0	15.0	11.0	17.0	21.0	26.0	24.0	19.4	16.7	-	
OXSHOTT 1	514558	160621	24.0	18.0	22.0	18.0	21.0	17.0	13.0	13.0	22.0	21.0	26.0	15.0	19.2	16.5	-	
OXSHOTT 2	514574	160493	29.0	22.0	26.0	20.0	25.0	20.0	17.0	17.0	20.0	23.0	28.0	24.0	22.6	19.4	-	
WALTON 8	510154	166281	29.0	24.0	25.0	22.0	24.0	22.0	22.0	19.0	26.0	26.0	32.0	21.0	24.3	20.9	-	
WALTON 9	510082	166379	27.0	23.0	25.0	20.0	26.0	18.0		16.0	20.0	25.0	31.0	21.0	22.9	19.7	-	
WALTON 10	510140	166522	32.0	26.0	31.0	24.0	26.0	23.0	20.0	20.0	29.0	27.0	32.0	21.0	25.9	22.2	-	
WALTON 11	510000	166401	31.0	27.0	28.0	20.0	24.0	22.0	20.0	18.0	21.0	26.0	33.0	20.0	24.2	20.7	-	

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.86)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
WALTON 12	510185	166225	28.0	22.0	24.0	21.0	23.0	19.0	15.0	11.0	24.0	25.0	31.0	19.0	21.8	18.7	-	
WEYBRIDGE 4	507705	164907	31.0	25.0	23.0	23.0	29.0	24.0	23.0	18.0	27.0	24.0	28.0	18.0	24.4	21.0	-	
WEYBRIDGE 5	507609	164966	30.0	33.0	34.0	28.0	27.0	25.0	24.0	18.0	25.0	28.0	34.0	22.0	27.3	23.5	-	
WEYBRIDGE 6A	507536	164952	27.0	23.0	31.0	20.0	21.0	18.0	18.0	14.0	22.0	23.0	28.0	19.0	22.0	18.9	-	
WEYBRIDGE 7	507199	164804	35.0	30.0	30.0	32.0	35.0	32.0	25.0	23.0		31.0	39.0		31.2	26.8	-	
WEYBRIDGE 8	507150	164761	30.0	23.0	25.0	24.0	24.0	23.0	18.0	13.0	26.0			20.0	22.6	19.4	-	
WEYBRIDGE 13	507459	164909	34.0	27.0	28.0	24.0	28.0	23.0	18.0	19.0	29.0	26.0	33.0	23.0	-	-	-	Triplicate Site with WEYBRIDGE 13, WEYBRIDGE 14 and WEYBRIDGE15 - Annual data provided for WEYBRIDGE15 only
WEYBRIDGE 14	507459	164909	31.0	26.0	27.0	25.0	28.0	24.0	21.0	21.0	29.0	25.0	34.0	22.0	-	-	-	Triplicate Site with WEYBRIDGE 13, WEYBRIDGE 14 and WEYBRIDGE15 - Annual data provided for WEYBRIDGE15 only
WEYBRIDGE15	507459	164909	33.0	25.0	27.0	25.0	27.0	24.0	21.0	17.0	29.0	26.0	33.0	23.0	26.0	22.3	-	Triplicate Site with WEYBRIDGE 13, WEYBRIDGE 14 and WEYBRIDGE15 - Annual data provided for WEYBRIDGE15 only
WEYBRIDGE 16	507190	161340	26.0	19.0	24.0	20.0	20.0	17.0	13.0	9.0	23.0	23.0	28.0	19.0	20.1	17.2	-	
WEYBRIDGE 17	507365	164831	29.0	24.0	26.0	23.0	24.0	17.0	19.0	19.0	23.0	23.0	31.0	20.0	23.2	19.9	-	
COBHAM 1	510813	160048	26.0	21.0	24.0	19.0	21.0	17.0	19.0	14.0	23.0	23.0	26.0	18.0	20.9	18.0	-	
COBHAM 6	510814	160099	24.0	18.0	22.0	17.0	19.0	16.0	14.0	12.0	25.0	18.0		17.0	18.4	15.8	-	
COBHAM 7	510861	159906	30.0	22.0	9.0		22.0	20.0	19.0	17.0	23.0	20.0	28.0	19.0	20.8	17.9	-	
COBHAM 8	510300	160375	29.0	23.0	25.0	24.0	23.0		20.0	16.0	25.0	30.0	35.0	21.0	24.6	21.1	-	
COBHAM 9	510348	160417		20.0	24.0	17.0	20.0	23.0	9.0	7.0	21.0	21.0	28.0	16.0	18.7	16.1	-	
COBHAM 10	510262	160454	28.0	24.0	25.0	22.0		20.0	16.0		23.0	24.0	30.0	22.0	23.4	20.1	-	
COBHAM 11	509623	160616	35.0	32.0	39.0	31.0	29.0	31.0	29.0	22.0	35.0	28.0	38.0	24.0	31.1	26.7	-	
COBHAM 12	509560	160720	29.0	20.0	27.0	20.0	22.0		14.0	14.0	19.0	22.0			20.8	17.8	-	
COBHAM 13	509465	160640	27.0	22.0	24.0	18.0		15.0	16.0	13.0	19.0	21.0	29.0	20.0	20.4	17.5	-	

- All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1.
- Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.
- Local bias adjustment factor used.
- Elmbridge Borough Council confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

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 Elmbridge Borough Council During 2024

As part of the Governments Road Investment Strategy 2015 to 2020, improvements will be made to the M25 Junction 10 / A3 Wisley Interchange. These works are scheduled to be completed in spring 2026.

As part of the improvements diverted traffic will reroute within Elmbridge. Improvement works started in December 2022 and a large proportion of the project has been completed to date. Throughout 2024, construction activities included the demolition of the old Clearmount Bridge, construction of new east and west bridges as well as the new Clearmount and Wisley bridges. To accommodate new slip roads, jet lanes were implemented to avoid traffic signals and new slip roads were built at Junction 10 to increase the capacity of the roundabout which was enlarged. These construction activities have resulted in additional traffic being routed through Elmbridge on the A3, A425 and A320.

Additional Air Quality Works Undertaken by Elmbridge Borough Council During 2024

Elmbridge has not completed any additional works within the reporting year of 2024.

QA/QC of Diffusion Tube Monitoring

The diffusion tubes in 2024 were prepared and analysed by Lambeth Scientific Services using a preparation method of 50% TEA in acetone.

All diffusion tubes were changed over on the dates outlined in the Defra 2024 Diffusion Tube Monitoring Calendar.

Lambeth Scientific Services take part in the analytical proficiency testing scheme (AIR-PT) operated by LGC Standards and supported by the Health and Safety Laboratory (HSL). During 2024, 50% of samples were determined to be satisfactory in the 1st quarter, 2nd

quarter, and 3rd quarter and 100% of samples were determined to be satisfactory in the 4th quarter.

Diffusion Tube Annualisation

Where data capture is less than 75% for a full calendar year, diffusion tube results were annualised following the methodology in LAQM TG (22). Annualisation was carried out at one diffusion tube monitoring site, Hinchley Wood 1, which had a data capture of 67.9% in 2024.

Continuous monitoring data from London Hillingdon, London North Kensington, London Westminster and London Bloomsbury urban background sites, part of the Automatic Urban and Rural Network (AURN) were used for diffusion tube annualisation. Details of the annualisation are provided in Table C.1.

Table C.1 – Annualisation Summary (concentrations presented in $\mu\text{g}/\text{m}^3$)

Site ID	Annualisation Factor London Hillingdon	Annualisation Factor London North Kensington	Annualisation Factor London Westminster	Annualisation Factor London Bloomsbury	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean
HINCHLEY WOOD 1	1.0	1.1	1.1	1.0	1.0	23.0	23.8

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2025 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.TG22 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.

Elmbridge Borough Council have applied a local bias adjustment factor of **0.86** to the 2024 monitoring data. A summary of bias adjustment factors used by Elmbridge Borough Council over the past five years is presented in Table C.2.

There are two triplicate co-location sites within Elmbridge. A local bias adjustment factor of 0.83 has been derived from Weybridge High Street 2 co-location site and a local bias adjustment factor of 0.88 has been derived from Hampton Court Parade co-location site.

Therefore, the combined local bias adjustment factor is 0.86. The local bias adjustment calculations for the Hampton Court Parade and Weybridge High Street 2 co-location sites are provided in Table C.3.

As highlighted in LAQM TG22, there are a number of factors which should be considered when deciding which bias-adjustment factor to use (local or national). It is considered that the local bias adjustment factor is more suitable for adjusting the measured diffusion tube data from 2024 due to the following factors:

- Both the Weybridge High Street 2 and the Hampton Court Parade automatic monitors had good overall precision and data capture in 2024 for use in local bias adjustment.
- The local bias adjustment factor (0.86) is slightly higher than the national bias adjustment factor (0.84) so leads to higher measured diffusion tube concentrations once bias adjusted.
- The national bias adjustment factor for Lambeth Scientific Services was only calculated from two studies.

Table C.2 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	Local	-	0.86
2023	National	v03_24	0.85
2022	Local	-	0.92
2021	Local	-	0.93
2020	Local	-	1.01

Table C.3 – Local Bias Adjustment Calculation

	Local Bias Adjustment Input 1 (Hampton Court Parade)	Local Bias Adjustment Input 2 (Weybridge High Street 2)
Periods used to calculate bias	11	11
Bias Factor A	0.83 (0.77 - 0.92)	0.88 (0.84 - 0.93)
Bias Factor B	20% (9% - 31%)	13% (8% - 19%)
Diffusion Tube Mean (µg/m ³)	24.6	25.4
Mean CV (Precision)	6.0%	3.5%
Automatic Mean (µg/m ³)	20.5	22.4
Data Capture	100%	99%
Adjusted Tube Mean (µg/m ³)	20 (19 - 23)	22 (21 - 24)

NO₂ Fall-off with Distance from the Road

No diffusion tube NO₂ monitoring locations within Elmbridge Borough Council required distance correction during 2024.

QA/QC of Automatic Monitoring

Air Quality Data Management provide the data management services and carry out Local Site Operator duties for the Hampton Court Parade, Weybridge High Street 2 and Esher High Street automatic monitors. All data has been validated and ratified to the standards outlined in LAQM TG.22. The 2024 data presented in this ASR is fully ratified.

PM₁₀ and PM_{2.5} Monitoring Adjustment

The type of PM₁₀/PM_{2.5} monitor (a FIDAS instrument) utilised within Elmbridge Council does not require the application of a correction factor.

Automatic Monitoring Annualisation

Both the Hampton Court Parade and Weybridge High Street 2 Automatic NO₂ monitors had a data capture of greater than 75% in 2024 therefore it was not required to annualise the monitoring data. However, due to the Esher High Street PM₁₀/PM_{2.5} monitor only becoming operational in April 2024, the valid data capture was less than 75% therefore the monitoring data was annualised. Details of the Esher High Street monitoring site annualisation are provided in Table C.4 and Table C.5.

Table C.4 – Automatic PM₁₀ Annualisation Summary (concentrations presented in µg/m³)

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	Esher High Street	
			Period Mean (P _m)	Ratio (A _m / P _m)
London Hillingdon	99.7	12.9	12.7	1.0
London N. Kensington	99.3	11.7	11.8	1.0
London Bloomsbury	94.0	12.4	12.4	1.0
Average (R _a)			1.0	
Raw Data Annual Mean (M)			12.7	
Annualised Annual Mean (M x R _a)			12.8	

Table C.5 – Automatic PM_{2.5} Annualisation Summary (concentrations presented in $\mu\text{g}/\text{m}^3$)

Background Site	Annual Data Capture (%)	Annual Mean (A_m)	Esher High Street	
			Period Mean (P_m)	Ratio (A_m / P_m)
London Hillingdon	99.7	7.3	7.1	1.0
London N. Kensington	99.3	7.1	7.0	1.0
London Bloomsbury	94.0	7.3	7.2	1.0
Average (R_a)			1.0	
Raw Data Annual Mean (M)			7.4	
Annualised Annual Mean ($M \times R_a$)			7.5	

NO₂ Fall-off with Distance from the Road

No automatic NO₂ monitoring locations within Elmbridge required distance correction during 2024.

Appendix D: Map(s) of Monitoring Locations and AQMAs

Figure D.1 – Automatic Monitoring Locations in Elmbridge

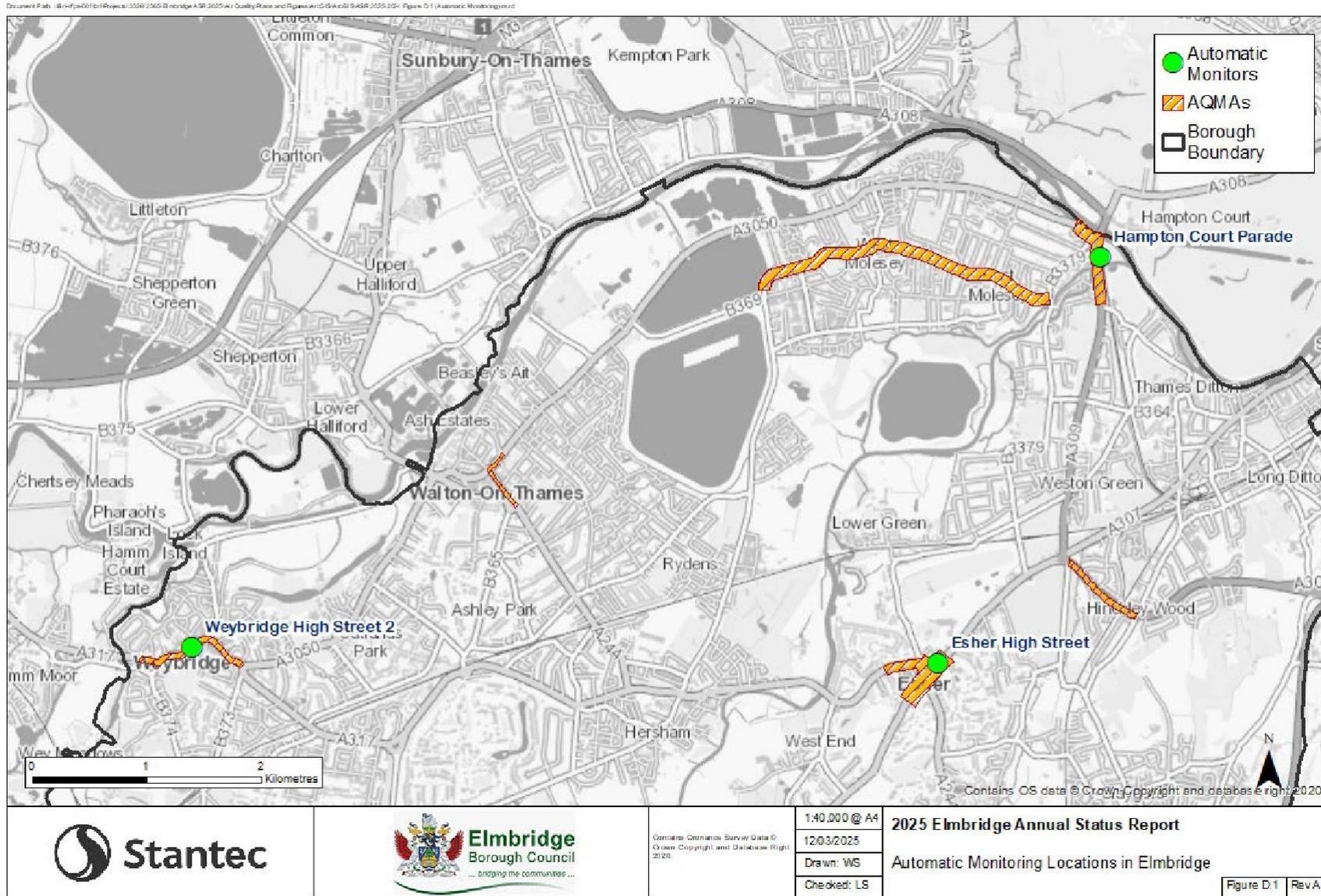


Figure D.2 – Monitoring Locations in Elmbridge

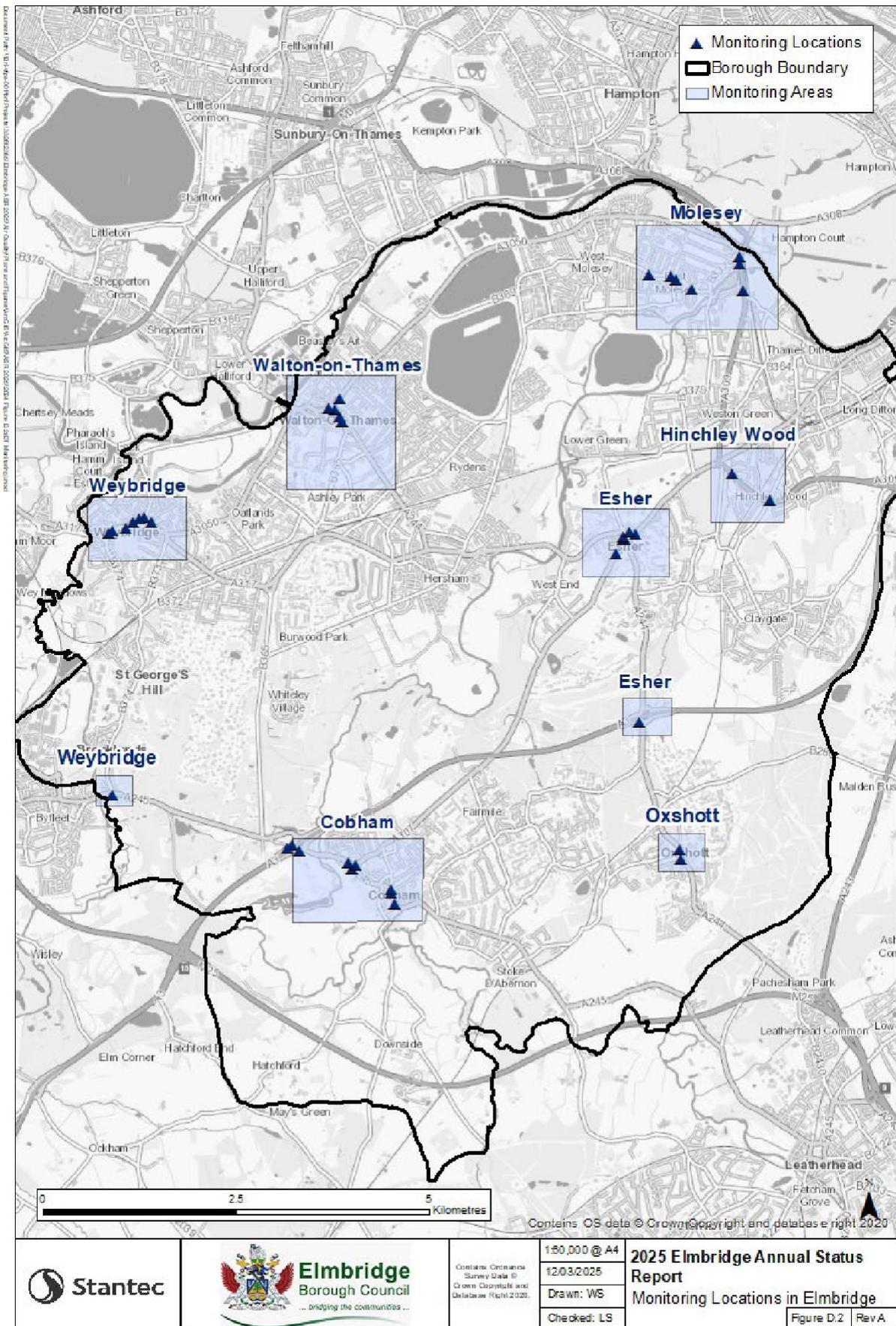


Figure D.4 – Monitoring Locations in Walton-on-Thames

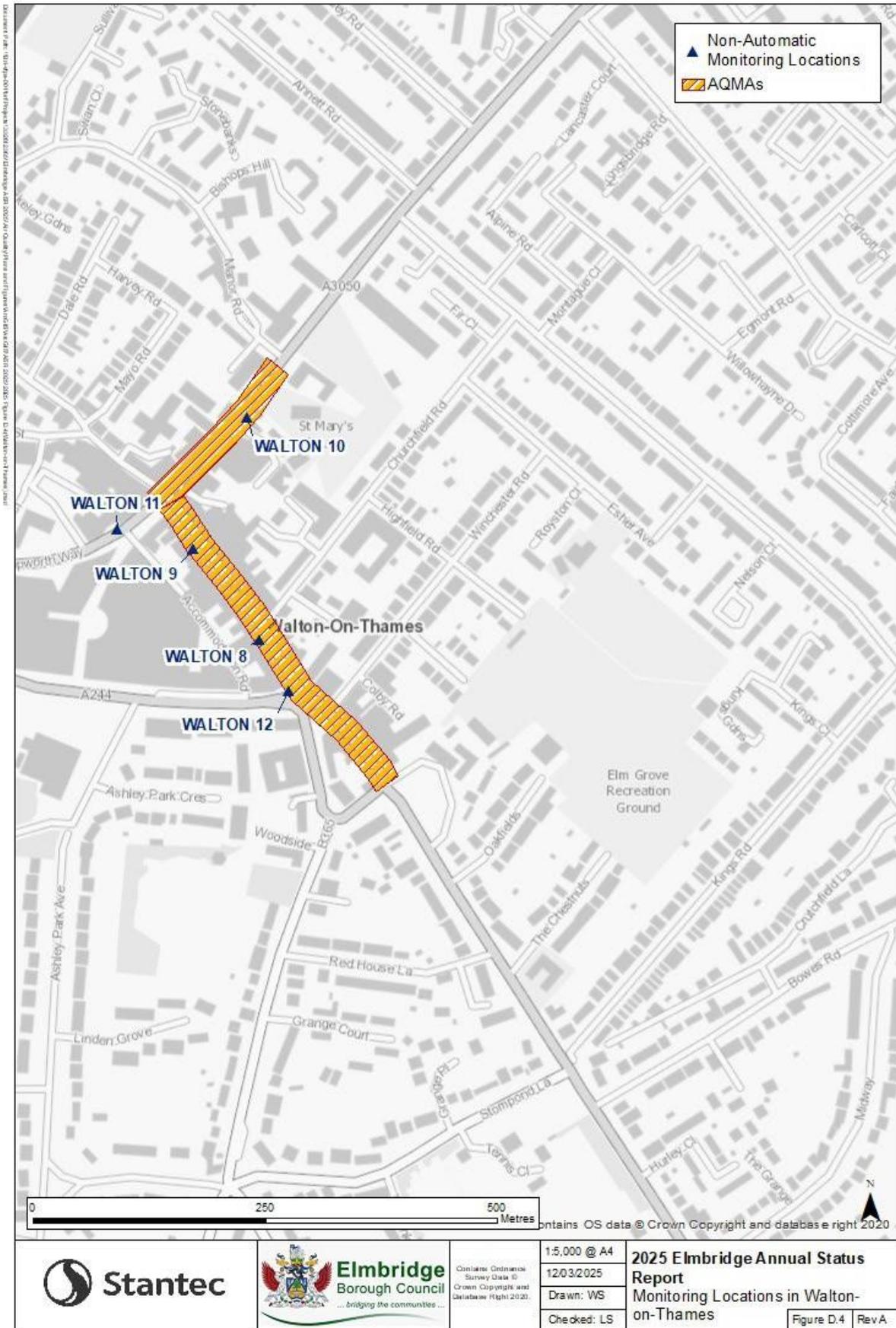


Figure D.5 – Monitoring Locations in Weybridge

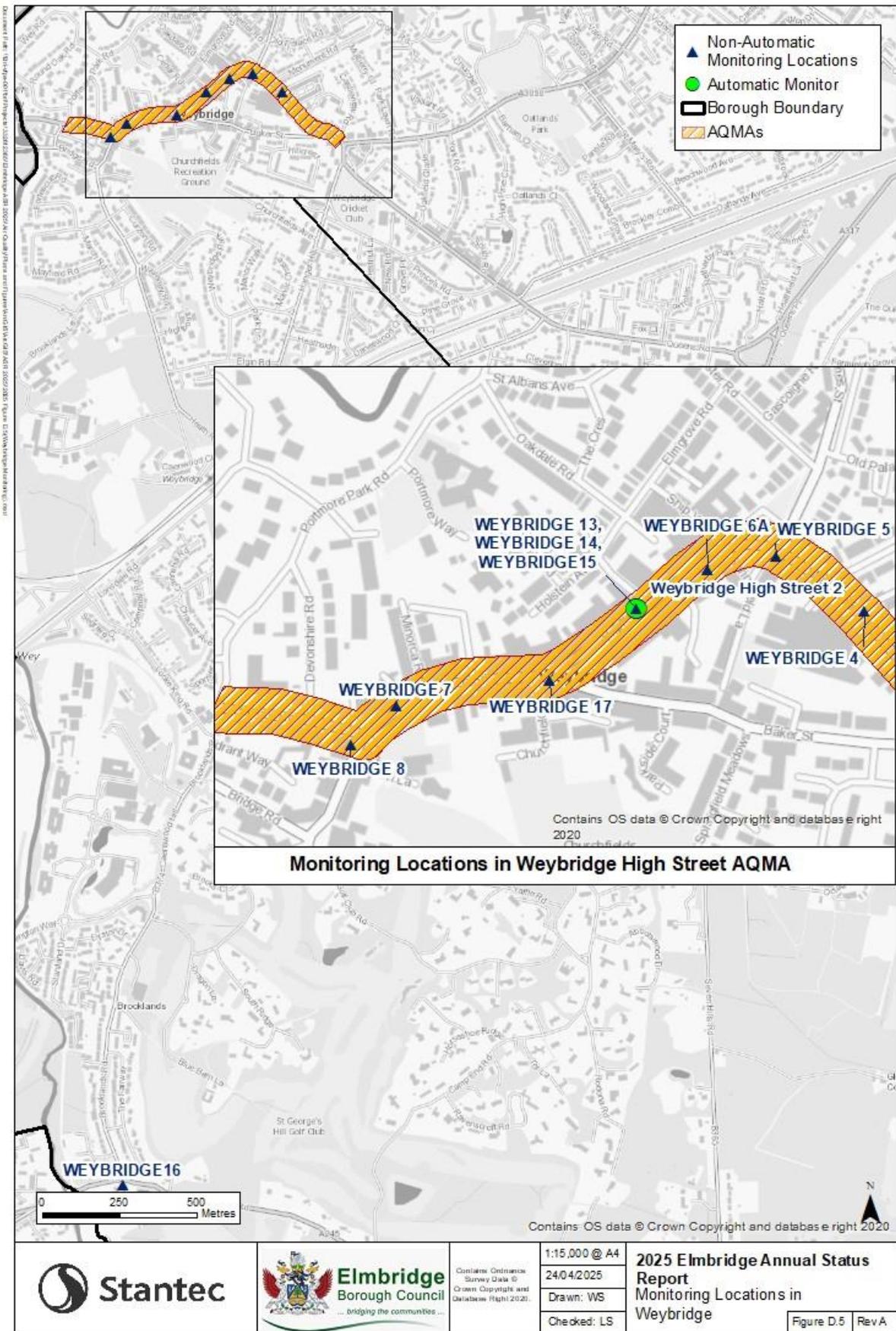


Figure D.7 – Monitoring Locations in Esher

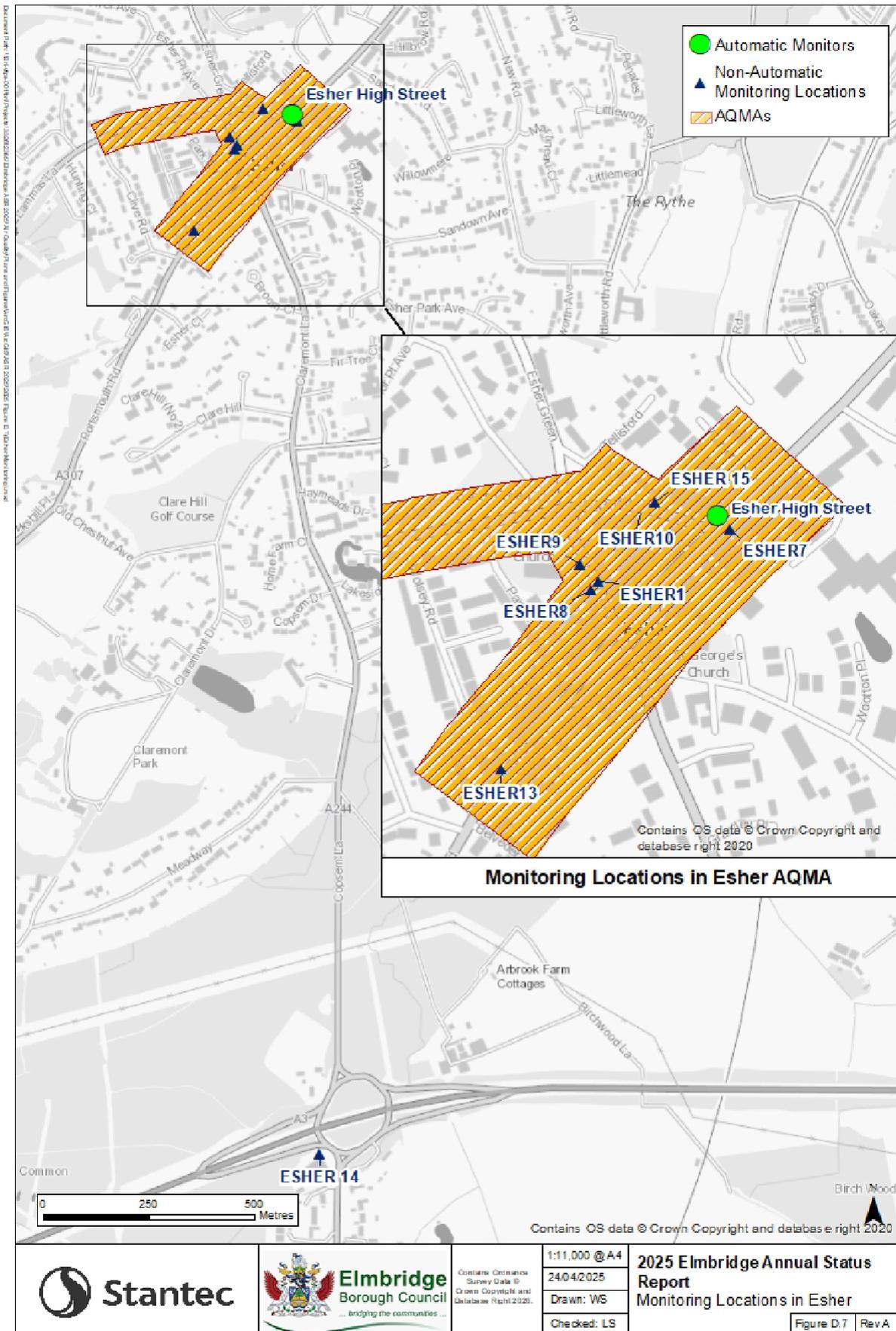
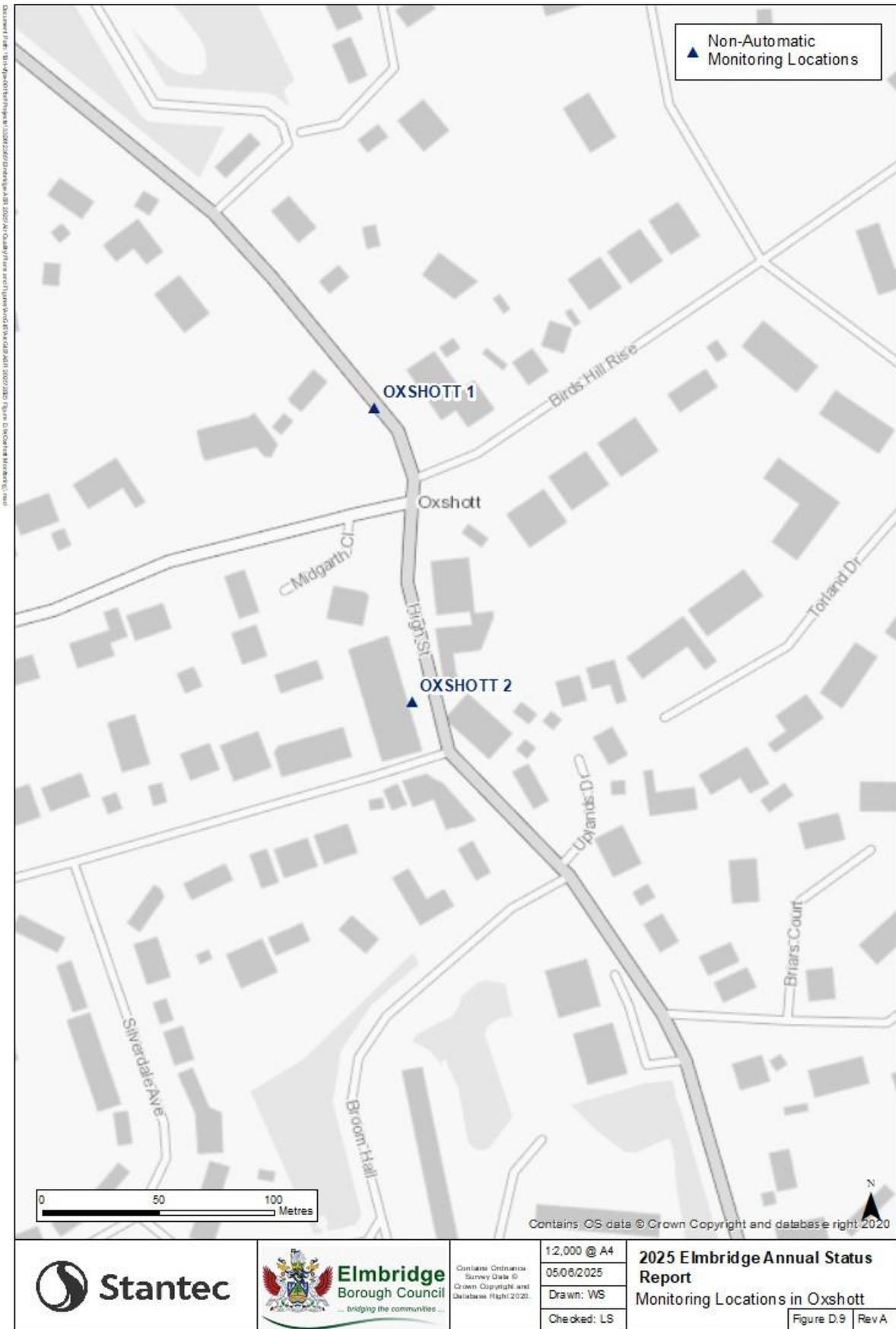


Figure D.8 – Monitoring Locations in Cobham



Figure D.9 – Monitoring Locations in Oxshott



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England²⁸

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
Nitrogen Dioxide (NO ₂)	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
Particulate Matter (PM ₁₀)	40µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO ₂)	125µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO ₂)	266µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

²⁸ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
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
CERC	Cambridge Environmental Research Consultants
CIL	Community Infrastructure Levy
CMRP	Carbon Management and Reduction Plan
Defra	Department for Environment, Food and Rural Affairs
EBC	Elmbridge Borough Council
GAP	Global Action Plan
HCC	Hertfordshire County Council
JSNA	Joint Strategic Needs Assessment
LAQM	Local Air Quality Management
LCWIP	Local Cycling and Walking Infrastructure Plan
LEZ	Low Emission Zone
LTP4	Surrey County Council's Local Transport Plan 4
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
SAA	Surrey Air Quality Alliance
SAMHE	Schools' Air Quality Monitoring for Health Education
SO ₂	Sulphur Dioxide
SPD	Supplementary Planning Document
SSC	Surrey County Council

Abbreviation	Description
Stantec	Stantec UK Limited
The Borough	Elmbridge
The Council	Elmbridge Borough Council
ULEZ	Ultra Low Emission Zone
WHO	World Health Organisation

References

- Local Air Quality Management Technical Guidance LAQM.TG22. August 2022. 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.PG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Chemical hazards and poisons report: Issue 28. June 2022. Published by UK Health Security Agency.
- Air Quality Strategy – Framework for Local Authority Delivery. August 2023. Published by Defra.
- Spreadsheet of Diffusion Tube Bias Adjustment Factors, version 03_25 Available at: <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/national-bias/>.