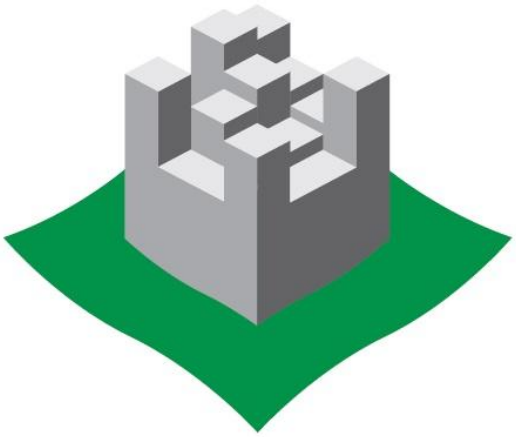


Exeter City Council

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

Information	Exeter City Council Details
Local Authority Officer	Martin Chan
Department	Environmental Health Services
Address	Civic Centre, Paris Street, Exeter, EX1 1 RQ
Telephone	01392 265147
E-mail	environmental.health@exeter.gov.uk
Report Reference Number	ASR 2024
Date	June 2025

Local Responsibilities and Commitment

This annual status report was prepared by the Environmental Health Services of Exeter City Council with the support and agreement of the following officers and departments:

Exeter City Council - City Development

Exeter City Council – Active and Healthy People Programme

Devon County Council - Highways

This ASR has been approved by:

Head of Environment and Waste. Once the report has been checked by DEFRA it will be presented to members at committee.

This ASR has been signed off by Devon County Council's Director of Public Health.

If you have any comments on this annual status report please send them to Head of Environment and Waste at:

Exeter City Council, Environmental Health Services, Civic Centre, Paris Street, Exeter EX1 1RQ

01392 265147

Email: environmental.health@exeter.gov.uk

Executive Summary: Air Quality in Our Area

Air Quality in Exeter

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.

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)	Nitrogen dioxide is a gas which is generally emitted from high-temperature combustion processes such as road transport or energy generation.
Sulphur Dioxide (SO_2)	Sulphur dioxide (SO_2) is a corrosive gas which is predominantly produced from the combustion of coal or crude oil.
Particulate Matter (PM_{10} and $PM_{2.5}$)	Particulate matter is everything in the air that is not a gas. 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. PM_{10} refers to particles under 10 micrometres. Fine particulate matter or $PM_{2.5}$ are particles under 2.5 micrometres.

Exeter City Council has a monitoring network that is designed to identify the areas with the highest levels of nitrogen dioxide, at the locations where the objectives apply. Most of the monitoring sites are therefore on residential properties in close proximity to the busiest roads and junctions in the city. The results of the monitoring conducted by the City Council

is not generally representative of typical or average conditions across the city. Instead, it is indicative of the worst-case locations.

Exeter City Council declared an Air Quality Management Area (AQMA) in 2011 because levels of nitrogen dioxide (NO_2) exceeded both the annual average and the short-term objectives for that pollutant. A map of the area can be found in Appendix D. The Air Quality Action Plan (AQAP) contains measures to reduce pollution levels in the AQMA. The current AQAP covers the period 2019-2024. It was published following a significant consultation and engagement process which reached nearly 3000 people. The plan is available online at this link. The Council recognises that this Action Plan has expired and proposed a timetable for review of the AQMA boundary and revision of the AQAP in the last Annual Status Report (in 2024). However, DEFRA's appraisal of that report stated 'we advise ECC to wait until compliance has been achieved in 2022, 2023 and 2024 in the areas where ECC are proposing to remove the AQMA, before proceeding with plans to amend the AQMA.' The current Air Quality Action Plan (AQAP) expired at the end of 2024, but we do plan on publishing a new AQAP which focuses on the amended AQMA. 'We have repeatedly sought clarification from DEFRA on how to proceed with the action plan, but at the time of submitting this ASR have received no response.

Review of the AQMA boundary is required because concentrations of NO_2 have fallen significantly since the AQMA was declared. The diffusion tube data show that no locations measured an exceedance of the proxy for the hourly objective in 2024 (an annual average of 60 $\mu g/m^3$). 2024 was also the first year in which no sites in the city exceeded the annual average objective either. In 2023, just one site at East Wonford Hill (DT57) had exceeded this objective. In 2024, it was 1.9 $\mu g/m^3$ below the objective of 40$\mu g/m^3$. This marks a significant improvement in air quality over the lifetime of the AQMA.

Prior to 2020, the annual average objective was regularly exceeded at a number of places in the city. A significant fall in concentrations was seen in 2020 as a result of a reduction in traffic flows during COVID-19. This rebounded in 2021 but not back to pre-pandemic levels. There was then a further fall in concentrations seen at most sites in 2022, with concentrations roughly stable since then. The improvement since 2019 is likely to have been caused by a combination of traffic flows generally still being slightly below those seen before COVID, the ongoing improvement in vehicle emissions technologies and measures taken by the City Council and partners to implement the Air Quality Action Plan.

It seems certain that previous exceedences at the Blackboy Road / Pinhoe Road junction (DT42 and DT43) have been permanently resolved given that they had fallen below 40 µg/m^3 in 2018 and therefore have been below the objective for more than six years. Other sites (Alphington Street DT19, Livery Dole DT52, Salutary Mount DT54, Fore Street Heavitree inbound DT56 and Honiton Road DT58) were above the objective in 2019 but have not been since. This means that there have now been five years of results that are below the objective level, three of which were unaffected by COVID and its lockdowns. The only site where levels over the annual average objective have been measured in any of the last three years is East Wonford Hill (DT57), but results from this location exhibit a consistent downward trend.

The Council therefore intends to follow the approach in the statutory guidance and the last DEFRA Annual Status Report Appraisal Report (published in 2024); that is to amend the AQMA to reflect areas of compliance in 2022, 2023 and 2024. The proposal is to reduce the AQMA to just the area which was above the objective level in 2023 at East Wonford Hill. Following the subsequent consultation and agreement of a new AQMA, a new AQAP will be produced focussing on the new AQMA area. The proposed timetable for this process is as follows:

Date	Actions
June 2025	Submit ASR, announcing need for amendment of AQMA (with proposed new boundary) as well as timetable for consultation and publication of new AQAP
November Executive committee (date TBC)	ASR presented to committee for approval and start of consultation period on new AQMA order.
By end of January 2026	Consideration of consultation responses for AQMA order.
By end of February 2026	Final draft AQMA order submitted to DEFRA for approval
By end of April 2026	New AQMA order signed.
March / April 2026	Pre-Election period
June 2026	Provisional start of public consultation on draft AQAP following comments back from DEFRA. Consultation to last 10 weeks.
June 2026	Submit ASR with update on progress and timetable
September 2026 Executive committee (date TBC)	ASR presented to committee with consultation results of AQAP.

Following advice from DEFRA, the AQMA boundary can be reviewed this year because we now have at least three years of compliance post COVID. The drafting, consultation and adoption of a new AQAP has to take place within 18 months of the adoption of a new AQMA. The revised AQAP will be based upon the revised AQMA. Full public consultation

will be undertaken as part of the production of the plan, so those affected will have the opportunity to comment on it.

The proposed new AQMA boundary and an explanation of how this has been derived is included in Appendix F.

In September 2023 temporary changes were made to prohibit through traffic in the Heavitree residential area. In June 2024 the HaTOC committee voted to end the trial. This only affected parts of the 2023 (September to December) and 2024 (January to July) monitoring years reported so any changes in traffic flows or nitrogen dioxide levels as a result would not be as significant as if the change had co-incided with the calendar year.

The 2024 Annual Status Report reported that no impact from these temporary changes could be seen in the 2023 data. This report considers the period of the trial that occurred during 2024. It shows again that no difference can be seen between the data for monitoring locations close to the Heavitree area and those distant from it.

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 Council and its partners have taken the following actions in the past year:

1. Devon County Council (DCC) continues to implement the 2020 Transport Strategy. This has three themes: Greater Connectivity, Greater Places for People and Greater Innovation. Key targets within the strategy include:
    a) 50% of trips by foot or cycle within the city;
    b) Removal of air quality exceedances in the city.
2. DCC adopted the Exeter Local Cycling and Walking Infrastructure Plan (LCWIP) in January 2024.
3. Work has taken place to deliver the E12 (‘north-south’) cycle route. This includes:
    a. construction of a segregated cycle route on Rifford Road, with options to connect into the E9 route or beyond towards the Valley Park / River Exe Estuary,
    b. completion of designs for the Polsloe Bridge Toucan Crossing and the Honiton Road Sparrow Crossing, and
    c. early design of the “Heart of Wonford” scheme.

4. A new station opened at Marsh Barton in July 2023, providing easy rail access to Marsh Barton (Exeter's largest industrial estate) as well as Exeter Canal/ Riverside Valley Park and it is the closest station to the new developments in South West Exeter. It is located on the line between Paignton and Exmouth, with half-hourly services at peak times.
5. The Okehampton railway line has reopened to hourly services daily. This provides a valuable alternative to car travel for people coming into the city from the area north of Dartmoor and increased service frequency from Crediton. Design work is underway to deliver the Okehampton Interchange, which is a 'Parkway style' station, funded through DfT Levelling Up Funds. It will serve the wider rural catchment areas of west Devon, Torridge and north Cornwall.
6. Bus patronage has recovered to some extent from the effect of COVID-19 lockdowns. DCC have obtained £14m funding (over 3 years) for its Bus Service Improvement Plan (BSIP). This includes plans for improving bus priority on four key Exeter corridors (the Eastern, Central, Western and Northern corridors). Proposals include improving bus priority using technology, bus lane operation time changes, and physical infrastructure improvements. DCC also have been successful in a joint bid with Stagecoach to provide electric ('Zebra') buses on routes 4, A, and C. These buses will be entering service in 2025/26. Work has also commenced at Matford bus depot for charging infrastructure.
7. The Exeter Plan will be the new Local Plan for Exeter. It will shape the future of Exeter for the next 20 years, to 2041, and will be the basis for how the city continues to evolve and meet the needs of the community. It will be the main planning document for the Exeter City, setting out where development should take place and providing the policies which will be used in making decisions on planning applications. During 2024, work progressed on further evidence and the draft plan such that the Publication Draft was published on 12 December 2024 for formal representations prior to submission to the Secretary of State in summer 2025.
8. Scrutiny of planning applications for air quality impacts has continued, including making objections to developments on air quality grounds where this is justified and the negotiation of mitigation in accordance with Council and national planning policies.
9. DEFRA grant funding was obtained for a project to develop a virtual monitoring network to model pollution concentrations in the Heavitree corridor. It aims to provide better spatial and temporal resolution than the current monitoring. This will

be overlaid with health information, enabling more informed choices by the travelling public. Work on the project progressed according to the project plan during 2024. 17 Internet-of-Thing air quality sensors were installed during 2023. Since then, virtual sensing algorithms have been developed and trained using diffusion tube monthly data and live AURN data. An offline rapid prototype model was developed. The most recent information on the project is available at this link.

10. Further refinement of the net zero plan for Exeter. Executive & Council have agreed for the City Council to take on the leadership role for city wide net zero. A programme manager was recruited and started in August 2024, since then has been working with organisations, businesses and communities across Exeter for reducing their carbon emissions. A new Climate and Nature Group (including organisations, business and community groups) has been set up as part of The Exeter Partnership.
11. The large solar array with battery storage at Water Lane installed by Exeter City Council is operational. During 2024 it successfully powered the first three of an intended fleet of electric refuse collection vehicles along with a number of other electric vehicles that the Council has added to its fleet.
12. From 1st January 2020 adopted policy required the Hackney carriage fleet to be 50% Euro 6 wheelchair accessible vehicles and 50% ULEV saloon cars with a stated emission level of 75g km CO_2 or below. This policy continues to be implemented.
13. The Council has achieved a reduction in NO_x emissions from buildings as a result of a variety of measures intended primarily to address fuel poverty and carbon emissions. These include:
    a. building PassivHaus standard homes, an Extra Care facility and leisure centre,
    b. continued implementation of district heating schemes to provide heating and hot water to 2800 homes at Monkerton, Tithebarn, Mosshayne, Pinn Court, Park Farm, and Exeter Science Park
    c. working with a number of other city public sector partners to create a new District Heat Network across the city centre, and
    d. receiving a grant to replace gas boilers with heat pumps at the RAMM and the Riverside leisure centre in a two-year project, to be completed by April 2025. This will reduce NO_x emissions from the old boilers.

14. Plans were developed for the roll out of EV charging infrastructure across City Car Parks to commence in 2025/26, to support the transition to electric vehicles.
15. Car park charges were increased by 5% in October 2024 as planned. Mary Arches surface and MSCP is expected to be sold in late 2025. Harlequins Car park is expected to close late 2024 / early 2025, as part of the wider redevelopment of the Harlequins Shopping Centre, so total car park provision will reduce as a measure to encourage travels by public transport.
16. Devon and Torbay Local Transport Plan 4, which sets out a vision for improving transport across Devon and Torbay in the period 2025 – 2040, has been endorsed by DCC's Cabinet and is planned to be submitted to the Devon and Torbay Combined County Authority for adoption.

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

- Neighbouring local authorities
- Devon County Council

The principal challenges and barriers to implementation that Exeter City Council anticipates facing, are further funding constraints within Local Government and available officer time.

Conclusions and Priorities

No areas in the city are thought to exceed the objectives for nitrogen dioxide, $PM_{2.5}$ and PM_{10} concentrations in 2024. NO_2 levels in Exeter in 2024 are below those measured in 2023 and well below pre-pandemic concentrations. There is now sufficient data to confirm that only one location (East Wonford Hill) has been above the annual mean objective in any of the last three years, prior to 2024. It is proposed to reduce the AQMA boundary as described in Appendix F so that it only includes East Wonford Hill and allows a new, focussed Action Plan to be produced. A timetable for these changes is shown above.

Exeter City Council's priorities for the coming year shall be the implementation of the process for the amendments to the AQMA order and AQMA boundary and starting the process of developing a new AQAP.

How to get Involved

Local air pollution currently has a high profile within the city. For example, nearly 3000 people were involved in the consultation on the current AQAP and Devon County Council have committed in their Transportation Strategy to resolve exceedances of the objective.

The Wellbeing Exeter Community Builders are actively engaging with local communities to increase active travel, social inclusion, improve the public realm for walking and cycling and to benefit air quality.

Further enquiries about pollution levels and actions to improve air quality should be made to environmental.health@exeter.gov.uk.

Table of Contents

Figures

Tables

1 Local Air Quality Management

This report provides an overview of air quality in Exeter 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 Air Quality Action Plan (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 Exeter City 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 E1.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 18 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 the Exeter City Council AQMA can be found in Table 2.1. This is the only AQMA that is currently designated within Exeter. Appendix D: Map(s) of Monitoring Locations and AQMAs provides maps of the area and the air quality monitoring locations in relation to it. The air quality objectives pertinent to the current AQMA designation are:

- NO_2 annual mean;
- NO_2 hourly mean.

We propose to amend the current Exeter AQMA by reducing its extent significantly, such that the amended AQMA only covers East Wonford Hill in the Heavitree area. We also propose to remove the NO_2 hourly objective from the AQMA order.

These amendments were initially proposed in ASR 2024, however DEFRA in its Appraisal Report stated ‘we advise ECC to wait until compliance has been achieved in 2022, 2023 and 2024 in the areas where ECC are proposing to remove the AQMA, before proceeding with plans to amend the AQMA.’

The 2024 data supports the previous proposal to significantly reduce the area of the AQMA. Our previous justifications for these amendments remain valid and are summarised below:

- East Wonford Hill is the only monitoring site with exceedances above the NO_2 annual mean objective in any of the last three years prior to 2024.
- The air quality monitoring data across the city as a whole exhibits a consistent downward trend.
- The NO_2 hourly objective has not been exceeded within Exeter in any of the past five years.

The Council is confident that compliance in the areas that will be removed from the AQMA is representative of typical conditions and will be maintained after the revocation as required by the Environmental Acts 1995 and 2021.

The proposed new AQMA boundary and an explanation of how this has been derived is included in Appendix F. An Equality Impact Assessment for the proposed change is also included.

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
Exeter AQMA 1	Declared 2007, Amended 2011	NO_2 Annual Mean	An area encompassing the radial routes into the city and other major routes	No	70 µg/m^3	N/A	1 year	Exeter AQAP 2019-2024	www.exeter.gov.uk/airpollution
Exeter AQMA 1	Declared 2007, Amended 2011	NO_2 Hourly Mean	An area encompassing the radial routes into the city and other major routes	No	65 µg/m^3	N/A	6 years	Exeter AQAP 2019-2024	www.exeter.gov.uk/airpollution

☒ **Exeter City Council confirm the information on UK-Air regarding their AQMA(s) is up to date.**

☒ **Exeter City Council confirm that all current AQAPs have been submitted to Defra.**

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

DEFRA's appraisal of last year's ASR concluded "the report is well structured, detailed, and provides the information specified in the Guidance".

Exeter City Council has taken forward several 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. Seventeen measures are included within Table 2.2, with the type of measure and the progress Exeter City 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 the AQAP, the Physical Activity Strategy, the Local Walking and Cycling Infrastructure Plan, the Bus Service Improvement Plan and Transport Strategy. Key completed measures are:

1. Devon County Council (DCC) continues to implement the 2020 Transport Strategy. This has three themes: Greater Connectivity, Greater Places for People and Greater Innovation. Key targets within the strategy include:
    - 50% of trips by foot or cycle within the city;
    - Removal of air quality exceedances in the city.
2. DCC adopted the Exeter Local Cycling and Walking Infrastructure Plan (LCWIP) in January 2024.
3. Work has taken place to deliver the E12 ('north-south') cycle route. This includes:
    - construction of a segregated cycle route on Rifford Road, with options to connect into the E9 route or beyond towards the Valley Park / River Exe Estuary,
    - completion of designs for the Polsloe Bridge Toucan Crossing and the Honiton Road Sparrow Crossing, and
    - early design of the "Heart of Wonford" scheme.
4. A new station opened at Marsh Barton in July 2023, providing easy rail access to Marsh Barton (Exeter's largest industrial estate) as well as Exeter Canal/ Riverside Valley Park and it is the closest station to the new developments in South West

Exeter. It is located on the line between Paignton and Exmouth, with half-hourly services at peak times.

5. The Okehampton railway line has reopened to hourly services daily. This provides a valuable alternative to car travel for people coming into the city from the area north of Dartmoor and increased service frequency from Crediton. Design work is underway to deliver the Okehampton Interchange, which is a 'Parkway style' station, funded through DfT Levelling Up Funds. It will serve the wider rural catchment areas of west Devon, Torridge and north Cornwall.
6. Bus patronage has recovered to some extent from the effect of COVID-19 lockdowns. DCC have obtained £14m funding (over 3 years) for its Bus Service Improvement Plan (BSIP). This includes plans for improving bus priority on four key Exeter corridors (the Eastern, Central, Western and Northern corridors). Proposals include improving bus priority using technology, bus lane operation time changes, and physical infrastructure improvements. DCC also have been successful in a joint bid with Stagecoach to provide electric ('Zebra') buses on routes 4, A, and C. These buses will be entering service in 2025/26. Work has also commenced at Matford bus depot for charging infrastructure.
7. The Exeter Plan will be the new Local Plan for Exeter. It will shape the future of Exeter for the next 20 years, to 2041, and will be the basis for how the city continues to evolve and meet the needs of the community. It will be the main planning document for the Exeter City, setting out where development should take place and providing the policies which will be used in making decisions on planning applications. During 2024 work progressed on further evidence and the draft plan such that the Publication Draft was published on 12 December 2024 for formal representations prior to submission to the Secretary of State in summer 2025.
8. Scrutiny of planning applications for air quality impacts has continued, including making objections to developments on air quality grounds where this is justified and the negotiation of mitigation in accordance with Council and national planning policy.
9. DEFRA grant funding was obtained for a project to develop a virtual monitoring network to model pollution concentrations in the Heavitree corridor. It aims to provide better spatial and temporal resolution than the current monitoring. This will be overlaid with health information, enabling more informed choices by the travelling public. Work on the project progressed according to the project plan during 2024. Seventeen Internet-of-Thing air quality sensors were installed during

2023. Since then, virtual sensing algorithms have been developed and trained using diffusion tube monthly data and AURN data. An offline rapid prototype model was also developed. The information of the project is available at this link.

10. Further refinement of the net zero plan for Exeter. Executive & Council have agreed for the City Council to take on the leadership role for city wide net zero. A programme manager was recruited and started in August 2024, since then, has been working with organisations, businesses and communities across Exeter for reducing their carbon emissions. A new Climate and Nature Group (including organisations, business and community groups) has been set up as part of The Exeter Partnership.
11. The large solar array with battery storage at Water Lane installed by Exeter City Council is operational. During 2024 it successfully powered the first three of an intended fleet of electric refuse collection vehicles along with a number of other electric vehicles that the Council has added to its fleet.
12. From 1st Jan 2020 adopted policy required the Hackney carriage fleet to be 50% Euro 6 wheelchair accessible vehicles and 50% ULEV saloon cars with a stated emission level of 75g km CO_2 or below. This policy continues to be implemented.
13. The Council has achieved a reduction in NO_x emissions from buildings as a result of a variety of measures intended primarily to address fuel poverty and carbon emissions. These include:
    a. building PassivHaus standard homes, an Extra Care facility and leisure centre,
    b. continued implementation of district heating schemes to provide heating and hot water to 2800 homes at Monkerton, Tithebarn, Mosshayne, Pinn Court, Park Farm, and Exeter Science Park
    c. working with a number of other city public sector partners to create a new District Heat Network across the city centre, and
    d. receiving a grant to replace gas boilers with heat pumps at the RAMM and the Riverside leisure centre in a two-year project to be completed by April 2025. This will reduce NO_x emissions from the old boilers.
14. Plans were developed for the roll out of EV charging infrastructure across City Car Parks to commence in 2025/26, to support the transition to electric vehicles.
15. Car park charges were increased by 5% in October 2024 as planned. Mary Arches surface and MSCP is expected to be sold in late 2025. Harlequins Car park is expected to close late 2024 / early 2025, as part of the wider redevelopment of the

Harlequins Shopping Centre, so total car park provision will reduce as a measure to encourage travel by public transport.

16. Devon and Torbay Local Transport Plan 4, which sets out a vision for improving transport across Devon and Torbay in the period 2025 – 2040, has been endorsed by DCC's Cabinet and is planned to be submitted to the Devon and Torbay Combined County Authority for adoption.

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

- Neighbouring local authorities
- Devon County Council

Exeter City Council expects the following key measures to be completed over the course of the next reporting year:

- Amendment of the AQMA and the commencement of work on a new AQAP, with key partners such as Devon County Council and the Devon and Torbay Combined Authority.
- Continued implementation of the Transport Strategy, Local Cycling and Walking Implementation plan and Bus Service Improvement Plan. The intent of these measures is to further improve the air quality of Exeter (from the Transport Strategy).
- Development of the E12 cycle route
- Introduction of electric buses to the Stagecoach fleet
- Provision of electric vehicle chargers in Council car parks

The principal challenges and barriers to implementation that Exeter City Council anticipates facing are further funding constraints within Local Government and available officer time.

Exeter City Council's priority for the coming year shall be the implementation of the process for the amendments to the AQMA order and AQMA boundary and starting the process of developing a new AQAP.

Whilst the measures stated above and in Table 2.2 already help to contribute towards compliance, Exeter City Council anticipates that further additional measures not yet prescribed may be required in subsequent years to achieve continuous compliance of the nitrogen dioxide annual means with the objective for two more consecutive years, thus enabling the revocation of the amended Exeter AQMA. This will be discussed further in the revised AQAP.

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	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
1 (green measure)	Filtered permeability projects to be considered for the city with an initial focus on the Heavitree corridor area and including a feasibility study for corridor improvements	Policy Guidance and Development Control	Other policy	2019	Ongoing Programme	DCC via Transport Strategy and Exeter City Futures, Sport England Local Delivery Pilot	SELDP, DCC, Developer Contributions, Grant Funding where available and ECC	Partially Funded	£50k - £100k	Implementation	The target for design of permanent changes to the Heavitree corridor area will be to eliminate exceedances. Details will be finalised as the design emerges, but it is currently expected that a reduction in emissions of between 39 and 78% will be required	Implementation of scheme(s)	Pop up measures introduced in 2020, including a new 5km cross city route (E9 Newcourt/Pynes Hill to City centre) have been made permanent with road closures and modal filters on Ludwell Lane, Dryden Road, Wonford Road and Magdalen Road. School streets introduced at Whipton Barton School and Ladysmith School. A wider package of measures, including play streets is being developed by the Sport England team.	Plans need community ownership to be successful
2 (amber measure)	Access Fund and cycle/walking network, Local Walking and Cycling Infrastructure Plan (LCWIP)	Transport Planning and Infrastructure	Other	2019	Ongoing Programme	DCC via Transport Strategy	Access Fund	Partially Funded	£1 million - £10 million	Planning	4% reduction in emissions at East Wonford Hill (shared across all measures which will in combination achieve the targeted reduction in private car commutes)	Adoption of LCWIP	Modal filters introduced under emergency active travel fund made permanent to deliver sections of the E9 route between Pynes Hill and City centre via the RD&E. E12 route on Rifford Road under construction. Bi-directional route on Sweetbrier Lane delivered. The LCWIP was adopted in January 2024	Consultation and obtaining relevant permissions, consents and traffic orders as well as bringing together necessary funding
3 (amber measure)	New transport links and Park & Change facilities to make it easier for those living outside the city to choose active and sustainable travel modes	Transport Planning and Infrastructure	Other	2019	Ongoing Programme	DCC via Transport Strategy	DCC, grant funding as available and developer contributions	Partially Funded	£100k - £500k	Implementation	4% reduction in emissions at East Wonford Hill (shared across all measures which will in combination achieve the targeted reduction in private car commutes)	Implementation of schemes	Pinhoe and Science Park Park and Change sites delivered. Okehampton line reopened for hourly, daily travel and new station delivered at Marsh Barton. Improved walking and cycling infrastructure delivered on Rydon Lane connecting Woodbury to the Exe Estuary Trail. Further consultation held to close the lane to motorised traffic. Modal filter on Langaton Lane constructed, delivering quiet lane link between Pinhoe area, Exeter Science Park and wider East Devon	Consultation and obtaining relevant permissions, consents and traffic orders as well as bringing together necessary funding

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
													strategic employment sites. Balls Farm Road modal filter near Alphington constructed to improve quiet lane linkages between Ide and Exeter. Plans being developed for improving bus priority to reduce journey times and improve reliability. Funding obtained for electric buses on routes 4, A and Green P&R.	
4 (yellow measure)	Changes to parking charges to discourage car travel in peak times, encourage longer stays in the city centre and support other measures in this plan, such as active travel	Traffic Management	Other	2019	Ongoing Programme	ECC via Local Plan	ECC	Not Funded	£100k - £500k	Planning	<1% reduction in emissions. This measure is expected to have an indirect effect on emissions, such that it is not possible to reliably quantify the impact of this measure alone.	Implementation of changes	Parking charges across Exeter are designed to balance the need for parking against the harm that private car travel into the city centre can cause, especially at peak times.	The need to balance action against any real or perceived impact on local businesses.
5	Maximise efficiency of existing highway network	Transport Planning and Infrastructure	Other	2019	Ongoing Programme	DCC via Transport Strategy and Exeter City Futures	DCC, ECC, grant funding as available and developer contributions	Partially Funded	£500k - £1 million	Planning	TBC, based on predicted changes to traffic parameters provided by DCC as plans for specific locations emerge and are consulted upon	Implementation of scheme(s)	In planning phase	Consultation and obtaining relevant permissions, consents and traffic orders as well as bringing together necessary funding
6 (amber measure)	Consider access restrictions which will reduce the dominance of private cars, including in the city centre	Policy Guidance and Development Control	Other policy	2019	Ongoing Programme	DCC via Transport Strategy and Exeter City Futures	DCC, grant funding as available and developer contributions	Partially Funded	£100k - £500k	Planning	4% reduction in emissions at East Wonford Hill (shared across all measures which will in combination achieve the targeted reduction in private car commutes)	Implementation of scheme(s)	Traffic reduction scheme for Bartholomew Street West, one way system for Queen Street (allowing for the footway to be widened). Liveable Exeter vision for the city published, which includes development on car parks, and a reduction in road space for cars. Quay to City route improvements made (Quay Hill two-way cycling allowed, a plant box introduced at Commercial Road to prevent cars blocking walking and cycling access and a contra-flow cycle lane provided at West Street). Local Walking and Cycling Implementation Plan adopted January 2024.	Consultation and obtaining relevant permissions, consents and traffic orders as well as bringing together necessary funding.
7 (amber measure)	Expand school and community projects, car free events and events	Promoting Travel Alternatives	Other	2019	Ongoing Programme	ECC via Sport England Local	Sport England funding	Partially Funded	£50k - £100k	Implementation	4% reduction in emissions at East Wonford Hill	School Streets introduced	Trials at three primary schools in 2020, two made	Plans will be developed in

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
	promoting active travel, building on the success of the Heavitree pilot					Delivery Pilot & Exeter City Futures					(shared across all measures which will in combination achieve the targeted reduction in private car commutes)		permanent (Whipton Barton and Ladysmith). Community Builders and new SELDP local Physical Activity Organisers delivered play street 'non car events'	individual areas with local communities.
8 (amber measure)	Use social prescribing and community building to help individuals get and stay active	Public Information	Other	2019	Ongoing Programme	ECC via Sport England Local Delivery Pilot and local Health Service providers	Sport England funding	Partially Funded	£100k - £500k	Implementation	4% reduction in emissions at East Wonford Hill (shared across all measures which will in combination achieve the targeted reduction in private car commutes)	Implementation of scheme	Behaviour change training delivered for all Community Builders and Community Connectors to provide support to people to lead active lifestyles. New social prescribing posts recruited to support health & wellbeing of Children and Young Families.	
9 (amber measure)	High quality parks, play areas, sport and leisure facilities	Promoting Travel Alternatives	Other	2019	Ongoing Programme	ECC via Physical Activity Strategy, Sport England Local Delivery Pilot & Local Plan	Sport England funding	Partially Funded	£50k - £100k	Planning	4% reduction in emissions at East Wonford Hill (shared across all measures which will in combination achieve the targeted reduction in private car commutes)	Implementation of scheme(s)	Physical Activity Strategy published and flagship programmes in development - Wonford Health & Wellbeing Centre to be delivered first. Focus on sites becoming more accessible for sustainable transport and increased active travel infrastructure	Obtaining necessary permissions and consents, and funding
10 (yellow measure)	Communications plan, to support measures that will achieve modal shift	Public Information	Other	2019	Ongoing Programme	ECC via Sport England Local Delivery Pilot & Exeter City Futures	ECC via existing internal budgets, Sport England Local Delivery Pilot & Exeter City Futures	Partially Funded	£10k - 50k	Implementation	<1% reduction in emissions. The purpose of this measure is to enable the Council to explain why it is taking action. The measure itself is unlikely to have significant impact on its own.	Completion of DEFRA grant project for Heavitree area	DEFRA grant funding obtained for project to develop air quality information and communications specific to the Heavitree area. Communications strategy developed through SELDP - 'Let's Move'. Focus on small steps for 'least active' residents and communities to move more in their local neighbourhoods. Walking & Cycling central to this communications strategy	
11 (yellow measure)	Promote and expand Co-Bikes network, and support the roll out of electric car club vehicles to more locations	Promoting Travel Alternatives	Other	2019	Ongoing Programme	DCC, ECC via Transport Strategy, Sport England Local Delivery Pilot & Exeter City Futures	Ongoing programme, dependent on funding availability	Partially Funded	£100k - £500k	Implementation	<1% reduction in emissions. This measure will have indirect benefits for air quality by facilitating active travel and supporting a change in car ownership patterns. It is not possible to	Implementation of expansions to schemes, as funding is obtained	A substantial network of bikes and cars was created	Devon County Council considering the procurement of a new provider

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
											reliably model the impact of this measure alone on emissions			
12 (amber measure)	An improved multi-modal public transport network, incorporating cleaner bus technologies	Transport Planning and Infrastructure	Other	2019	Ongoing Programme	DCC via GESP, Transport Strategy and Exeter City Futures	TBC	Partially Funded	> £10 million	Planning	4% reduction in emissions at East Wonford Hill (shared across all measures which will in combination achieve the targeted reduction in private car commutes). As an example, 33% bus electrification would achieve 5% fall in emissions at East Wonford Hill and 66% electrification would achieve 10% reduction.	Implementation of agreed plans	14 Euro 6 busses have entered the fleet and significant new additions to the city's bus network. Devon County Council's Bus Service Improvement Plan will deliver improved services and access across the County. Funding obtained for electric buses on routes 4, A and C	Dependent on funding availability and future demand for public transport.
13	Developers to mitigate the effects of their development on air quality	Policy Guidance and Development Control	Other policy	2019	Ongoing Programme	ECC via the Exeter Plan	Within existing ECC resources	Funded	£50k - £100k	Planning	The purpose of this measure is to limit the impact of new development. It is not intended to reduce emissions on the current baseline (although some reduction may be achieved as a result in practice)	Developments delivered	The Exeter Plan will replace the GESP, as the new Local Plan for Exeter. The Publication draft was released in December 2024 for representations. It will be submitted to the Secretary of State in summer 2025 for examination.	The AQAP originally envisaged that this would be delivered by the GESP. The Exeter Plan will shape the future of Exeter for the next 20 years to 2041. It will be the main planning document for Exeter, setting out where development should take place and providing the policies which will be used in making decisions on planning applications. In fact, the Exeter Plan has already brought forward the Water Lane redevelopment.
14	Policies deliver development where private car use is not the only realistic travel choice	Policy Guidance and Development Control	Other policy	2019	Ongoing Programme	ECC via the Exeter Plan	Within existing ECC resources	Funded	£50k - £100k	Planning	The purpose of this measure is to limit the impact of new development. It is not intended to reduce emissions on the current baseline (although some reduction may be achieved as a result in practice)	Developments delivered	Liveable Exeter vision for development in the city which is not reliant on car travel. Until the Exeter Plan is published, officers will be implementing current policy in a robust manner e.g. when considering retail park applications and new housing.	Work on the Liveable Exeter project continues alongside the Exeter Plan. The Liveable Water Lane Supplementary Planning Document, including a design code, was adopted by ECC in 2024. Liveable Exeter held the 'This Is Our City' community engagement event at the RAMM.
15 (yellow measure)	More things to see/do in the City Centre, encouraging longer stays and supporting events which promote sustainable travel, active and healthy lifestyles.	Policy Guidance and Development Control	Other policy	2019	Ongoing Programme	ECC, BID, DCC and developers	TBC once strategy adopted	Partially Funded		Planning	<1% reduction in emissions. This measure will not have a significant direct impact on emissions but will support the step change in behaviour which will be required to meet the City	Completion of Strategy and then implementation	St Sidwells Point leisure centre open. South Street plan completed and awaiting funding to deliver. Consultants are reviewing City Centre Strategy	

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
											Council's aspirations for active and healthy travel.			
16	Better information to raise awareness and improve the level of understanding of air pollution and transport issues within communities	Public Information	Other	2019	Ongoing Programme	ECC	Internal ECC budgets	Partially Funded	£10k - 50k	Planning	Enable the Council to explain why it is taking action. Measure itself is unlikely to have significant impact on its own.	Completion of DEFRA grant funded project	DEFRA grant funding obtained for project to develop air quality information and communications specific to the Heavitree area. Baseline evidence report completed subject to annual review following publication of each year's measurement data and any new research, national guidance etc.	ECC and EGP have decided to use a webpage as the basis of the dissemination tool.
17	An air pollution monitoring network that supports the measures in this action plan	Public Information	Other	2019	Ongoing Programme	ECC	Internal ECC budgets or grant funding if available	Funded	< £10k	Implementation	This measure would not in itself deliver reductions in emissions, but would support the other measures in this plan	monitoring equipment operational	Diffusion tube monitoring network remains under review. DEFRA grant funding obtained for project to develop air quality information and communications specific to the Heavitree area which includes use of new sensor technologies.	Seventeen IoT air quality sensors were installed. Virtual sensing algorithms were developed, using monthly DT data and RAMM AURN data as training data. An offline rapid prototype model was then created.

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 Strategy[1], 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.

Department of Health & Social Care's Public Health Outcomes Framework tool shows that the fraction of mortality attributable to particulate air pollution in Exeter for 2023 was 4.2% (no more recent data is available). This is below the regional figure for the south west (4.3%) and the national level of 5.2%. Exeter therefore has levels of particulate matter which are causing harm, but this problem is less severe than in the majority of the country. The data is available at this link. These mortality fractions are based on $PM_{2.5}$ annual mean concentrations of 5.6 µg/m^3 (for Exeter as a whole), 5.7 µg/m^3 (for the south west) and 7.0 µg/m^3 (England). These indicate that concentrations of fine particulate matter in Exeter are slightly lower the south west regional figure, and much lower than the national figure.

Since August 2018, Exeter City Council has been directly monitoring roadside $PM_{2.5}$ concentrations in Exeter at two sites, i.e. CM1 at RAMM and CM2 at Alphington Street. However, faults with the equipment at CM1 mean that data from this site is not available for this reporting period. In 2024, the $PM_{2.5}$ annual mean concentration at the CM2 roadside measurement location was 8.5 µg/m^3.

The annual average EU limit value for $PM_{2.5}$ is 25 µg/m^3 so there is no suggestion that this level is being exceeded in Exeter. The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 introduce a target for national government of 10 µg/m^3 as an annual mean, to be achieved by 2040. The Regulations also introduce a population exposure reduction target for national government; that there is at least a 35% reduction in population exposure by the end of 31st December 2040, as compared with the average

[1] Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

population exposure in the three-year period from 1st January 2016 to 31st December 2018.

DEFRA has brought forward the Environmental Improvement Plan 2023 for England, in order to achieve these targets. The Plan set interim targets that by January 2028: an annual average of 12 μg/m^3 for $PM_{2.5}$ is not exceeded at any monitoring station; and population exposure to $PM_{2.5}$ is at least 22 per cent less than in 2018. The $PM_{2.5}$ annual mean at CM2 in 2024, is already below the interim target.

Despite these being targets for central government, Exeter City Council still has a duty to reduce emissions of and exposure to this pollutant. The measures discussed above to reduce NO_2 emissions will also be effective in reducing many local $PM_{2.5}$ sources.

Approximately 60% of Exeter is designated as Smoke Control Areas. Controls on solid fuel combustion appliances and fuels are likely to have restricted $PM_{2.5}$ emissions in these areas to some extent.

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

This section sets out the monitoring undertaken within 2024 by Exeter City Council 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

Exeter City Council undertook automatic (continuous) monitoring at two sites during 2024. Table A.1 in Appendix A shows the details of the automatic monitoring sites. NB. Local authorities do not have to report annually on the following pollutants: 1,3 butadiene, benzene, carbon monoxide and lead, unless local circumstances indicate there is a problem. The Council website page presents automatic monitoring results for Exeter, with automatic monitoring results also available through the UK-Air website.

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

Exeter City Council undertook non- automatic (i.e. passive) monitoring of NO_2 at eighty-four sites during 2024, including one site with two co-located diffusion tubes alongside the continuous monitor at the RAMM museum (for determining the local bias adjustment factor).

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 or via the Council website. 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 (NO_2)

Table A.3 and Table A.4 in Appendix A present the ratified and adjusted monitored NO_2 annual mean concentrations for the past five years. 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.

The following changes were made to the monitoring network in 2024:

- Removal of the diffusion tube on Pinn Lane. The existing site at Pinhoe Station was considered more representative of worst case conditions along this road, making the Pinn Lane site redundant.
- Removal of the Northernhay Gardens diffusion tube. Data capture was historically very low here and as this was located in a city centre park some distance from relevant receptors it has not been replaced.
- Addition of two diffusion tubes close to the road junctions of Magdalen Street, Holloway Street, South Street and Western Way. Significant development, including changes to the road layout have been proposed in this area so additional monitoring would be beneficial (although not anticipating any exceedences of the objective would occur).

The national bias adjustment figure (0.84, from the April 2025 spreadsheet) has been used to adjust the diffusion tube data in this Annual Status Report because the data capture by the Exeter Roadside (CM1) continuous analyser was below 90%. Further information is available in Appendix C.

No sites measured an exceedence of the annual average objective in 2024. This is the first year when all measurements have been below the objective and marks a significant milestone in the continued improvement of the city's air quality.

East Wonford Hill (DT57) was the only site which was above the objective in 2023. In 2024 it was 1.9 µg/m^3 below the objective of 40µg/m^3. The general trend in the data for all monitoring sites is a significant fall between 2019 and 2020 with a partial rebound in 2021, and levels since then being roughly stable (see Figure A.1, and also refer to Table A.4 of this and the last year reports). This can be attributed to changes in traffic flows (see Table 3.1) as a result of COVID-19, its subsequent new travel & working behaviours, as well as ongoing improvements in vehicle emission technologies and the impact of measures in the Air Quality Action Plan. Some inter-annual variability is also expected as a result of road works, weather patterns etc.

Table 3.1 shows that work-day traffic flow data for 2020 and 2024 remain below 2015 levels, except for Heavitree Road, where traffic flows were 4% above 2015 levels in 2024. In 2020, reductions at all locations were significant, ranging from -15% to -26%.

Table 3. 1 - Traffic Flow Data (24-hr average)

Site Name	2015	2020	2024	% change from 2015 to 2020	% change from 2015 to 2024
Pinhoe Road (Whipton)	20830	16538	18678	-21%	-10%
Heavitree Road	17507	14832	18248	-15%	4%
Honiton Road	26832	22789	26519	-15%	-1%
Topsham Road (King George)	26057	20702	24774	-21%	-5%
Alphington St	28799	22012	25558	-24%	-11%
Cowick St	14840	10913	11850	-26%	-20%
Total	**134865**	**107786**	**125627**	**-20%**	**-7%**

In September 2023 temporary changes were made to prohibit through traffic in the Heavitree residential area. In June 2024 the HaTOC committee voted to end the trial. This only affected part of the 2023 (September to December) and 2024 (January to July)

monitoring years so any changes in annual average traffic flows or nitrogen dioxide levels as a result would not be as significant as if the change had co-incided with the calendar year. The 2023 ASR found that no impact of the highway changes could be seen in the 2023 data set for the monitoring sites that would be expected to have been impacted (see Appendix H), and the same in 2024. There does not appear to be a different trend between the two sets of data which correspond to monitoring locations close to and distant from the Heavitree area. We believe other factors also influence pollution levels on a year-to-year basis, making it challenging to isolate the impact of the highway changes. This has been further detailed in Appendix H.

Table A.5 in Appendix A compares the ratified continuous monitored NO_2 hourly mean concentrations for the past five years with the air quality objective of 200µg/m^3, not to be exceeded more than 18 times per year. Data capture from the continuous analyser CM1 is low, because the operation of the equipment was affected for a proportion of the year by essential repairs to the roof of the building housing it (the RAMM museum). This means that the measured concentrations cannot be compared directly to the hourly objective. Instead the 99.8th percentile of hourly results is compared to the limit of 200 µg/m^3. In 2024 the 99.8th percentile was 69.4 µg/m^3 which indicates that concentrations are well below the objective. They were also similar to the previous year (a 99.8th percentile of 63.3 µg/m^3).

The diffusion tube data show no locations measured an exceedance of the proxy for the hourly objective in 2024 (an annual average of 60 µg/m^3).

It seems certain that previous exceedences of the objective at the Blackboy Road / Pinhoe Road junction (DT42 and DT43) have been permanently resolved given that they had fallen below 40 µg/m^3 in 2018 and therefore have been below the objective for more than six years. Other sites (Alphington Street DT19, Livery Dole DT52, Satutary Mount DT54, Fore Street Heavitree inbound DT56 and Honiton Road DT58) were above the annual average objective in 2019 but have not been since then. This means that there have now been five years of results that are below the objective level, three of which were unaffected by COVID-19 and lockdowns. The only site where levels over the annual average objective have been measured in any of the last three years, prior to 2024, is East Wonford Hill (DT57) and results from this location exhibit a consistent downward trend.

The Council therefore intends to follow the approach in the statutory guidance and the last DEFRA Annual Status Report Appraisal Report (published in 2024); that is to amend the AQMA to reflect areas of compliance in 2022, 2023 and 2024. The proposal is to reduce the AQMA to just the East Wonford Hill area. Following the subsequent consultation and agreement of a new AQMA, a new AQAP will be produced focussing on the new AQMA

Date	Actions
June 2025	Submit ASR, announcing need for amendment of AQMA (with proposed new boundary) as well as timetable for consultation and publication of new AQAP
November Executive committee (date TBC)	ASR presented to committee for approval and start of consultation period on new AQMA order.
By end of January 2026	Consideration of consultation responses for AQMA order.
By end of February 2026	Final draft AQMA order submitted to DEFRA for approval
By end of April 2026	New AQMA order signed.
March / April 2026	Pre-Election period
June 2026	Provisional start of public consultation on draft AQAP following comments back from DEFRA. Consultation to last 10 weeks.
June 2026	Submit ASR with update on progress and timetable
September 2026 Executive committee (date TBC)	ASR presented to committee with consultation results of AQAP.

Following advice from DEFRA, the AQMA boundary can be reviewed this year because we now have at least three years of compliance post COVID. The drafting, consultation and adoption of a new AQAP has to take place within 18 months of the adoption of a new AQMA. The revised AQAP will be based upon the revised AQMA. Full public consultation will be undertaken as part of the production of the plan, so those affected will have the opportunity to comment on it.

The proposed new AQMA boundary and an explanation of how this has been derived is included in Appendix F.

Exeter City Council considers that the monitoring network in 2024 had a good coverage of all areas where exceedences might occur at a relevant location, as well as any areas which might be expected to see significant traffic growth (as a result of new developments, etc). Monitoring was focused at expected hotspots and relevant worst-case locations. No amendements to the existing network have taken place for 2024.

3.2.2 Particulate Matter (PM_{10})

Table A.6 in Appendix A: Monitoring Results compares the ratified and adjusted monitored PM_{10} annual mean concentrations for the past five years with the air quality objective of 40µg/m^3.

Table A.7 in Appendix A compares the ratified continuous monitored PM_{10} daily mean concentrations for the past five years with the air quality objective of 50µg/m^3, not to be exceeded more than 35 times per year.

Since August 2018, Exeter City Council has operated two continuous PM_{10} analysers. However, faults with the equipment at CM1 (RAMM) mean that data from this site is not available for this reporting period. In 2024, the PM_{10} annual mean concentration at the CM2 roadside measurement location was 14.1 µg/m^3.

The annual average concentrations rose in 2022 and 2023 compared to the previous three years. The longer-term trend in annual concentrations as shown in Figure A.2 is a decline since 2005 or 2006. The data will be monitored over the coming years to identify whether this recent increase is part of an emerging trend or caused by expected inter-annual variability because of weather patterns etc.

There were no exceedances of an hourly mean of 50µg/m^3 in 2024 for CM2 monitoring site.

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.

Since August 2018, Exeter City Council has operated two continuous $PM_{2.5}$ analysers. However, the same faults with the equipment at CM1 as mentioned above mean that data from this site is not available for this reporting period. The measured annual mean in 2024 for CM2 was 8.5 µg/m^3, which is well below the limit and the 2040 interim target. Trends in $PM_{2.5}$ concentrations will continue to be monitored in coming years.

3.2.4 Ozone (O_3)

Table A.9 in Appendix A compares the ratified continuous monitored ozone concentrations for the past 5 years, with the air quality objective of 100µg/m^3, not to be exceeded more than 10 times per year.

Ozone is not a local air pollutant, so Exeter City Council is not legally responsible for reporting or mitigating any exceedances of the above objective. This is the responsibility of DEFRA.

However, Exeter City Council has the facility to measure ozone levels. Figure A.4 presents the long-term ozone trends we measured. In 2020, the number of occasions when there was an 8-hour running mean of >100 micrograms per cubic meter increased significantly. This could have been caused by the interaction between NO_x and ozone in the atmosphere. With lower concentrations of NO being emitted during lockdowns, less ozone would be converted to oxygen (O_2).

Because of the essential roof repairs at the RAMM museum, data capture at this site was low in 2024. We therefore have calculated the 95th percentile of the 8-hour running mean which is 69.6 µg/m^3 and this is well below the objective of 100µg/m^3.

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)
CM1	Exeter Roadside	Kerbside	291939	92830	NO_2 PM_{10} $PM_{2.5}$ O_3	YES	AQMA 1	Chemiluminescent; Optical Light Scattering; UVA	0	1	1.7
CM2	Alphington Street	Roadside	291670	91773	PM_{10} $PM_{2.5}$	YES	AQMA 1	Optical Light Scattering	12	3	1.7

Notes:

(1) N/A if not applicable

(2) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

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)
DT1	High Street /Castle Street	Kerbside	292199	92814	NO_2	YES, Exeter AQMA	50.0	0.5	No	2.0
DT2	Longbrook Street	Kerbside	292315	93016	NO_2	NO	0.0	1.0	No	1.7
DT3	New North Road	Kerbside	292185	93049	NO_2	YES, Exeter AQMA	0.0	1.0	No	2.0
DT4	Queen Street	Roadside	291779	93011	NO_2	YES, Exeter AQMA	0.0	1.5	No	2.0
DT5, DT6	RAMM 2	Kerbside	291944	92826	NO_2	YES, Exeter AQMA	0.0	1.0	Yes	1.7
DT7	High Street Guildhall	Roadside	291984	92626	NO_2	YES, Exeter AQMA	0.0	2.0	No	2.0
DT8	North Street	Kerbside	291895	92569	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT9	South Street	Roadside	291943	92511	NO_2	YES, Exeter AQMA	4.0	2.5	No	2.0
DT10	Market Street	Kerbside	291833	92433	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT11	Magdalen Street	Roadside	292291	92292	NO_2	YES, Exeter AQMA	6.0	2.0	No	1.7
DT12	Magdalen Street façade	Kerbside	292422	92320	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT13	Archibald Road	Roadside	292590	92743	NO_2	NO	0.0	1.5	No	1.7

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)
DT14	Heavitree Road inbound	Roadside	292832	92731	NO_2	YES, Exeter AQMA	0.0	10.0	No	2.0
DT15	Heavitree Road outbound	Kerbside	292703	92807	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT16	Holloway Street	Kerbside	292378	92039	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT17	Carder's Court, Shilhay	Roadside	291699	92091	NO_2	NO	0.0	15.0	No	1.7
DT18	Rear of Gervase Avenue	Roadside	291657	91973	NO_2	YES, Exeter AQMA	5.0	18.0	No	2.0
DT19	Alphington Street	Kerbside	291669	91812	NO_2	YES, Exeter AQMA	0.0	1.0	No	2.0
DT20	Alphington Road inbound	Roadside	291532	91349	NO_2	YES, Exeter AQMA	0.0	2.0	No	1.7
DT21	Queen's Road	Urban Background	291460	91390	NO_2	NO	8.0	2.0	No	1.7
DT22	Alphington Road outbound	Roadside	291509	91151	NO_2	YES, Exeter AQMA	0.0	8.0	No	1.7
DT23	Alphington Road outer	Roadside	291518	90813	NO_2	YES, Exeter AQMA	15.0	2.0	No	1.7
DT24	Church Road Alphington	Roadside	291691	90425	NO_2	YES, Exeter AQMA	0.0	1.5	No	1.7
DT25	Church Road II	Kerbside	291767	90160	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT26	Alphington Cross	Roadside	291520	90531	NO_2	YES, Exeter AQMA	0.0	1.8	No	1.7

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)
DT27	Cowick Street (Cowick Lane)	Kerbside	290864	91725	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT28	Cowick Street (inbound)	Roadside	291249	91874	NO_2	YES, Exeter AQMA	0.0	4.0	No	1.7
DT29	Cowick Street (outbound)	Roadside	291376	91944	NO_2	YES, Exeter AQMA	0.0	1.5	No	1.7
DT30	Cowick Street (Exe Bridges)	Roadside	291500	92055	NO_2	YES, Exeter AQMA	0.0	2.0	No	1.7
DT31	Okehampton Street	Roadside	291351	92169	NO_2	YES, Exeter AQMA	0.0	4.0	No	1.7
DT32	Station Road	Roadside	290826	93598	NO_2	NO	0.0	2.1	No	1.7
DT33	Bonhay Road (St Clements Lane)	Roadside	291253	93299	NO_2	YES, Exeter AQMA	0.0	2.0	No	2.0
DT34	Red Cow Village	Kerbside	291242	93483	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT35	Red Cow II	Kerbside	291272	93468	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT36	Cowley Bridge Road	Roadside	291054	94399	NO_2	YES, Exeter AQMA	0.0	4.0	No	1.7
DT37	Pennsylvania Road	Kerbside	292391	93291	NO_2	NO	0.0	1.0	No	1.7
DT38	York Road School	Roadside	292469	93245	NO_2	NO	3.5	2.5	No	1.7
DT39	York Road	Kerbside	292579	93146	NO_2	NO	1.5	0.1	No	1.7

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)
DT40	Union Road	Roadside	293047	93877	NO_2	NO	0.0	1.0	No	1.7
DT41	Pinhoe Road inbound	Roadside	293405	93395	NO_2	YES, Exeter AQMA	0.0	3.0	No	1.7
DT42	Pinhoe Road (Polsloe Road)	Kerbside	293251	93375	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT43	Blackboy Road (Polsloe Road)	Roadside	293227	93356	NO_2	YES, Exeter AQMA	0.0	2.0	No	1.7
DT44	Beacon Heath	Kerbside	295068	94487	NO_2	NO	10.0	1.0	No	1.7
DT45	Venny Bridge	Kerbside	295888	94101	NO_2	NO	8.0	1.0	No	1.7
DT46	Pinhoe	Kerbside	296418	94470	NO_2	NO	20.0	0.1	No	1.7
DT47	Langaton Lane	Urban Background	296984	94327	NO_2	NO	12.0	0.5	No	1.7
DT48 (Removed)	Pinn Lane	Roadside	296494	93782	NO_2	NO	9.5	1.0	No	2.0
DT49	Pinhoe Road (Fairfield Avenue)	Roadside	295413	93689	NO_2	YES, Exeter AQMA	0.0	5.0	No	1.7
DT50	East John Walk	Urban Background	293091	92825	NO_2	NO	1.5	N/A	No	1.7
DT51	Magdalen Road (Barrack Road)	Kerbside	293448	92419	NO_2	YES, Exeter AQMA	0.0	1.0	No	1.7
DT52	Livery Dole	Roadside	293418	92497	NO_2	YES, Exeter AQMA	0.0	1.5	No	1.7

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)
DT53	Rowancroft	Kerbside	293533	92473	NO_2	YES, Exeter AQMA	0.0	0.2	No	2.0
DT54	Salutary Mount	Roadside	293738	92396	NO_2	YES, Exeter AQMA	4.5	1.5	No	1.7
DT55	Fore Street Heavitree outbound	Roadside	293781	92409	NO_2	YES, Exeter AQMA	6.0	4.0	No	1.7
DT56	Fore Street Heavitree inbound	Roadside	294043	92359	NO_2	YES, Exeter AQMA	0.0	2.0	No	1.7
DT57	East Wonford Hill	Roadside	294410	92310	NO_2	YES, Exeter AQMA	0.0	2.0	No	1.7
DT58	Honiton Road	Roadside	295203	92378	NO_2	YES, Exeter AQMA	20.0	1.5	No	2.0
DT59	Honiton Road façade	Roadside	295191	92395	NO_2	NO	0.0	15.0	No	1.7
DT60	Sidmouth Road lamp post	Roadside	295466	92365	NO_2	YES, Exeter AQMA	7.0	2.0	No	2.0
DT61	Sidmouth Road Middlemoor	Roadside	295636	92232	NO_2	YES, Exeter AQMA	0.0	10.0	No	1.7
DT62	Newcourt Way	Roadside	295710	90571	NO_2	NO	17.0	2.0	No	2.0
DT63	Topsham Road (Countess Wear)	Roadside	294694	90001	NO_2	YES, Exeter AQMA	0.0	5.0	No	2.0
DT64	Bridge Road (Countess Wear)	Roadside	294652	89974	NO_2	NO	0.0	15.0	No	1.7

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)
DT65	High Street Topsham	Kerbside	296415	88477	NO_2	NO	0.0	1.0	No	1.7
DT66	Topsham Road (Tollards Road)	Roadside	294227	90435	NO_2	YES, Exeter AQMA	0.0	1.5	No	1.7
DT67	Topsham Road (Barrack Road)	Roadside	293213	91245	NO_2	YES, Exeter AQMA	0.0	10.0	No	1.7
DT68	Riverside Valley Park	Urban Background	292291	91678	NO_2	NO	n/a	N/A	No	2.0
DT69	Cowick Barton Playing Fields	Urban Background	291016	91304	NO_2	NO	n/a	N/A	No	1.7
DT70	Exwick Playing Fields	Urban Background	291298	92593	NO_2	NO	n/a	N/A	No	2.0
DT71	Heavitree Pleasure Ground	Urban Background	294387	92611	NO_2	NO	n/a	N/A	No	2.0
DT72	Ladysmith School/Pretoria Road	Roadside	293617	93090	NO_2	NO	1.5	1.5	No	1.7
DT73	Pennsylvania	Urban Background	293052	94185	NO_2	NO	6.0	2.0	No	2.0
DT74 (Removed)	Northernhay Gardens	Urban Background	292056	93043	NO_2	NO	n/a	N/A	No	2.0
DT75	Chudleigh Road	Roadside	291721	89727	NO_2	YES, Exeter AQMA	0.0	4.0	No	2.0
DT76	Mill Lane	Urban Background	291555	90449	NO_2	NO	8.5	1.0	No	2.0
DT77	Sidwell Street	Kerbside	292553	93082	NO_2	YES, Exeter AQMA	6.0	1.0	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)
DT78	Station Road Pinhoe	Other	296415	94165	NO_2	NO	1.5	1.5	No	1.7
DT79	Tithebarn Link Road	Roadside	296827	93886	NO_2	NO	2.0	2.0	No	2.0
DT80	Exeter Road	Roadside	295967	88876	NO_2	NO	14.5	3.0	No	2.0
DT81	St. Leonards Road	Roadside	292637	91991	NO_2	NO	0.0	2.0	No	1.7
DT82	Newtown	Urban Background	292847	92911	NO_2	NO	0.0	3.5	No	2.0
DT83	New Bridge St	Roadside	291655	92258	NO_2	YES, Exeter AQMA	0.0	2.0	No	2.0
DT84	Lower Coombe St	Roadside	291897	92217	NO_2	NO	2.0	10.0	No	1.7
DT85	Bonhay Road bridge	Roadside	291375	92935	NO_2	YES, Exeter AQMA	3.0	2.0	No	1.7
DT86 (new)	Western Way (Acorn)	Roadside	292281	92246	NO_2	YES, Exeter AQMA	3.0	1.0	No	2.0
DT87 (new)	South Gate	Roadside	292206	92190	NO_2	YES, Exeter AQMA	3.0	1.0	No	2.0

Notes:

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

(2) N/A if not applicable.

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

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
CM1	291939	92830	Kerbside	N/A	37.8	18.8	19.2	17.9	16.4	17.1

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

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

☒ **Where exceedances of the NO_2 annual mean objective occur at locations not representative of relevant exposure, the fall-off with distance concentration has been calculated and reported concentration provided in brackets for 2024.**

Notes:

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

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

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 NO_2 Monitoring Results: Non-Automatic Monitoring (µg/m^3)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
DT1	292199	92814	Kerbside	N/A	100.0	17.0	20.9	15.7	17.5	18.1
DT2	292315	93016	Kerbside	N/A	100.0	17.5	21.4	19.0	20.0	18.9
DT3	292185	93049	Kerbside	N/A	100.0	18.8	22.6	20.1	19.6	19.0
DT4	291779	93011	Roadside	N/A	92.5	16.2	19.0	16.6	17.4	16.1
DT5, DT6	291944	92826	Kerbside	N/A	100.0	18.5	21.3	17.8	17.3	17.9
DT7	291984	92626	Roadside	N/A	100.0	15.7	20.4	18.1	18.3	19.6
DT8	291895	92569	Kerbside	N/A	83.0	22.6	27.9	24.0	23.9	28.8
DT9	291943	92511	Roadside	N/A	90.6	18.7	24.2	20.6	20.2	20.5
DT10	291833	92433	Kerbside	N/A	100.0	18.6	23.4	20.7	20.1	19.7
DT11	292291	92292	Roadside	N/A	100.0	19.5	24.7	22.5	22.0	21.0
DT12	292422	92320	Kerbside	N/A	100.0	20.0	23.8	22.9	18.7	18.6

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
DT13	292590	92743	Roadside	N/A	92.5	13.2	16.8	15.2	15.7	14.3
DT14	292832	92731	Roadside	N/A	100.0	13.2	16.5	14.6	14.5	14.0
DT15	292703	92807	Kerbside	N/A	100.0	22.3	28.0	24.0	25.8	23.8
DT16	292378	92039	Kerbside	N/A	100.0	21.3	26.6	21.9	21.5	23.5
DT17	291699	92091	Roadside	N/A	90.6	15.5	18.3	15.7	15.9	16.1
DT18	291657	91973	Roadside	N/A	90.6	15.8	19.2	17.5	17.6	17.5
DT19	291669	91812	Kerbside	N/A	92.5	28.5	35.7	33.1	34.3	31.5
DT20	291532	91349	Roadside	N/A	100.0	22.4	27.4	24.3	24.5	23.6
DT21	291460	91390	Urban Background	N/A	90.6	9.1	11.7	10.1	9.9	9.7
DT22	291509	91151	Roadside	N/A	100.0	17.7	21.2	20.6	18.4	17.2
DT23	291518	90813	Roadside	N/A	100.0	15.3	20.6	18.7	18.1	16.5
DT24	291691	90425	Roadside	N/A	100.0	18.3	24.3	18.5	17.8	17.2
DT25	291767	90160	Kerbside	N/A	90.6	16.2	19.8	20.9	22.1	20.1

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
DT26	291520	90531	Roadside	N/A	90.6	20.4	25.6	22.5	23.8	22.9
DT27	290864	91725	Kerbside	N/A	100.0	26.8	31.6	30.1	31.2	29.9
DT28	291249	91874	Roadside	N/A	100.0	15.6	19.9	17.5	18.1	17.1
DT29	291376	91944	Roadside	N/A	100.0	24.3	29.8	28.7	29.2	28.1
DT30	291500	92055	Roadside	N/A	83.0	22.1	28.2	26.7	27.5	26.5
DT31	291351	92169	Roadside	N/A	100.0	17.3	20.6	18.7	19.0	18.6
DT32	290826	93598	Roadside	N/A	100.0	17.7	21.2	20.3	20.7	19.6
DT33	291253	93299	Roadside	N/A	90.6	19.2	24.7	21.8	22.6	22.8
DT34	291242	93483	Kerbside	N/A	100.0	26.5	32.1	29.7	31.7	27.1
DT35	291272	93468	Kerbside	N/A	100.0	21.5	26.0	23.1	24.2	23.1
DT36	291054	94399	Roadside	N/A	100.0	22.9	27.5	26.5	25.9	24.2
DT37	292391	93291	Kerbside	N/A	100.0	18.3	23.2	21.6	21.5	20.5
DT38	292469	93245	Roadside	N/A	100.0	18.1	23.0	20.7	20.3	19.0

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
DT39	292579	93146	Kerbside	N/A	100.0	23.3	31.2	27.8	26.9	25.2
DT40	293047	93877	Roadside	N/A	100.0	16.7	21.0	19.3	18.7	17.7
DT41	293405	93395	Roadside	N/A	100.0	20.9	24.0	22.3	23.5	22.3
DT42	293251	93375	Kerbside	N/A	100.0	25.6	30.6	28.0	29.6	28.6
DT43	293227	93356	Roadside	N/A	92.5	19.2	23.5	20.6	21.0	21.8
DT44	295068	94487	Kerbside	N/A	100.0	13.6	15.1	13.6	14.6	12.8
DT45	295888	94101	Kerbside	N/A	100.0	14.2	16.6	15.3	15.2	15.6
DT46	296418	94470	Kerbside	N/A	100.0	18.4	21.8	18.6	20.5	19.1
DT47	296984	94327	Urban Background	N/A	83.0	13.3	15.1	12.7	13.1	10.8
DT48 (Removed)	296494	93782	Roadside	N/A	0.0	12.8	15.5	14.3	16.2	-
DT49	295413	93689	Roadside	N/A	100.0	12.6	15.8	15.9	13.7	13.8
DT50	293091	92825	Urban Background	N/A	100.0	9.7	11.6	10.4	9.7	9.6
DT51	293448	92419	Kerbside	N/A	100.0	24.3	29.4	27.6	27.9	26.4

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
DT52	293418	92497	Roadside	N/A	100.0	31.1	34.9	32.3	34.7	32.0
DT53	293533	92473	Kerbside	N/A	100.0	27.4	32.1	27.2	28.6	27.1
DT54	293738	92396	Roadside	N/A	100.0	32.7	37.3	33.5	32.2	31.4
DT55	293781	92409	Roadside	N/A	100.0	19.8	23.4	20.7	20.9	19.9
DT56	294043	92359	Roadside	N/A	100.0	29.0	32.2	30.5	30.6	28.5
DT57	294410	92310	Roadside	N/A	100.0	38.2	**42.2**	**40.4**	**40.5**	38.1
DT58	295203	92378	Roadside	N/A	100.0	33.2	35.4	31.7	33.5	32.2
DT59	295191	92395	Roadside	N/A	100.0	14.8	16.0	14.9	14.9	13.7
DT60	295466	92365	Roadside	N/A	92.5	23.5	26.8	25.0	24.7	23.6
DT61	295636	92232	Roadside	N/A	100.0	15.5	19.2	17.5	17.5	16.6
DT62	295710	90571	Roadside	N/A	100.0	11.5	14.7	13.6	13.5	12.6
DT63	294694	90001	Roadside	N/A	100.0	18.1	20.7	17.4	19.1	17.7
DT64	294652	89974	Roadside	N/A	92.5	17.8	16.9	15.6	15.0	13.8

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
DT65	296415	88477	Kerbside	N/A	100.0	17.2	22.1	18.7	18.7	17.7
DT66	294227	90435	Roadside	N/A	100.0	25.0	30.0	27.9	28.8	27.5
DT67	293213	91245	Roadside	N/A	100.0	15.9	19.1	19.2	18.3	17.2
DT68	292291	91678	Urban Background	N/A	90.6	9.4	11.7	9.9	10.3	10.1
DT69	291016	91304	Urban Background	N/A	75.0	7.6	9.3	8.9	8.3	7.2
DT70	291298	92593	Urban Background	N/A	90.6	12.3	15.9	13.9	12.7	15.1
DT71	294387	92611	Urban Background	N/A	100.0	7.6	9.1	8.7	7.8	7.2
DT72	293617	93090	Roadside	N/A	100.0	10.6	12.2	10.5	10.9	9.7
DT73	293052	94185	Urban Background	N/A	90.6	7.5	8.3	7.8	7.6	7.2
DT74 (Removed)	292056	93043	Urban Background	N/A	0.0	8.3	10.7	8.4	9.4	-
DT75	291721	89727	Roadside	N/A	90.6	11.1	13.7	12.6	12.3	12.1
DT76	291555	90449	Urban Background	N/A	90.6	9.6	12.3	11.3	11.5	11.0
DT77	292553	93082	Kerbside	N/A	92.5	18.6	23.8	20.5	21.6	22.5

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
DT78	296415	94165	Other	N/A	100.0	10.6	13.4	12.5	13.5	12.1
DT79	296827	93886	Roadside	N/A	100.0	14.5	17.3	15.4	15.8	15.2
DT80	295967	88876	Roadside	N/A	100.0	14.3	16.4	16.6	16.6	15.2
DT81	292637	91991	Roadside	N/A	100.0	11.2	13.9	12.2	11.9	11.1
DT82	292847	92911	Urban Background	N/A	100.0	10.8	12.6	12.0	11.9	11.3
DT83	291655	92258	Roadside	N/A	92.5	19.5	24.0	22.5	22.7	21.8
DT84	291897	92217	Roadside	N/A	100.0	15.5	18.6	15.4	16.5	17.0
DT85	291375	92935	Roadside	N/A	100.0	-	-	26.9	27.1	26.6
DT86 (new)	292281	92246	Roadside	N/A	100.0	-	-	-	-	28.0
DT87 (new)	292206	92190	Roadside	N/A	100.0	-	-	-	-	22.4

☒ **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 µg/m^3.

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

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

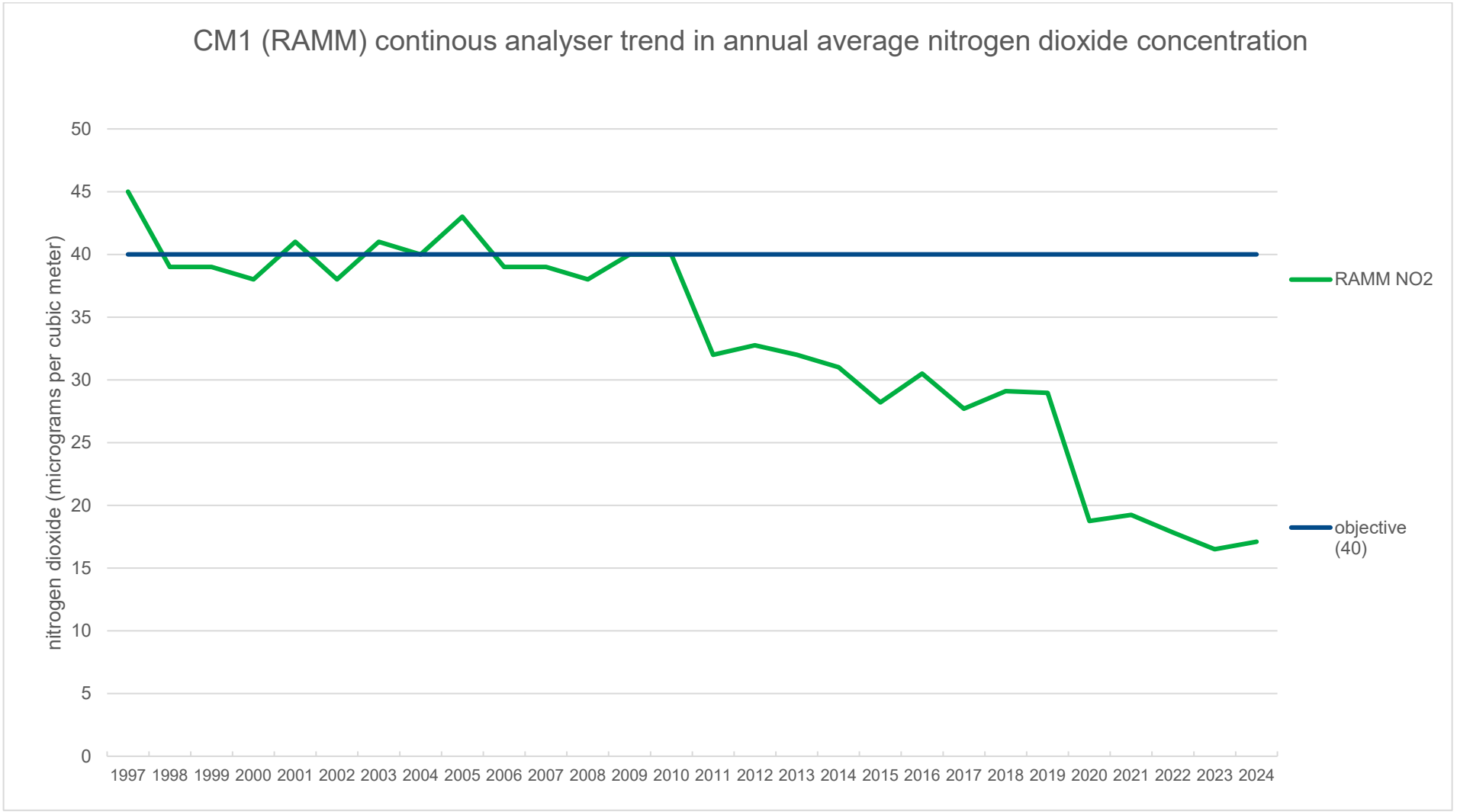
Means for diffusion tubes have been corrected for bias. All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

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

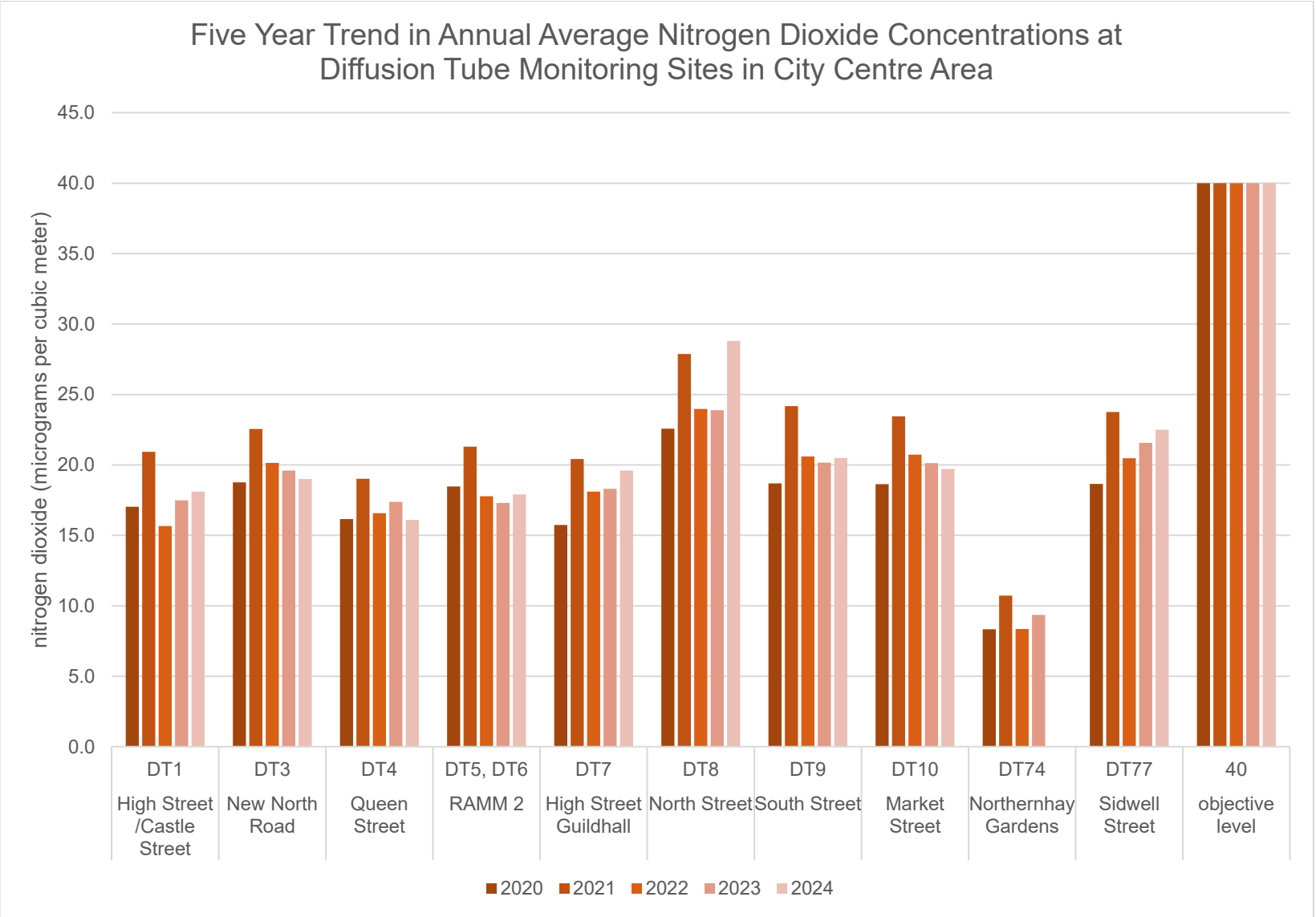
(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(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%).

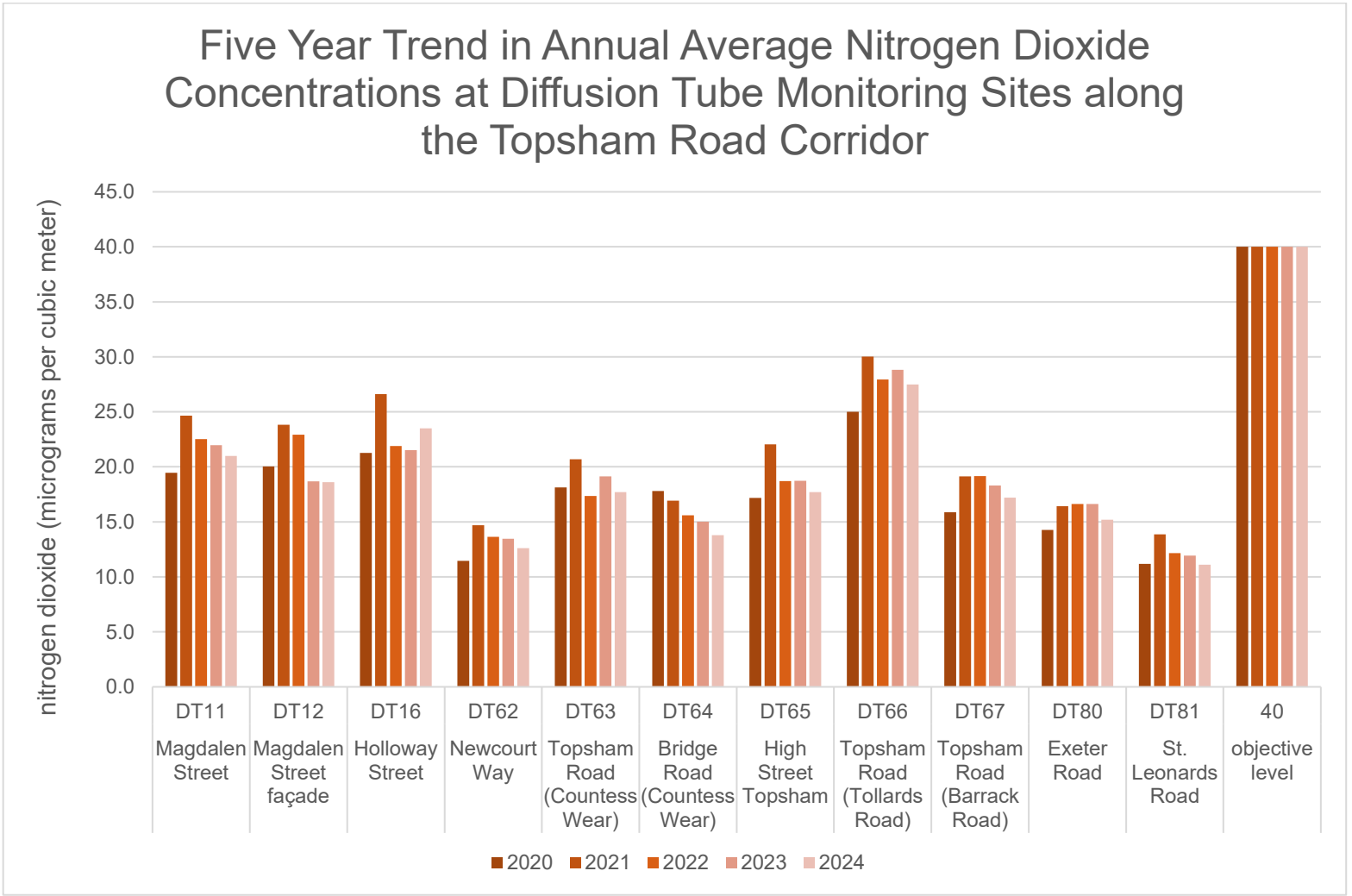
Figure A.1 – Trends in Annual Mean NO_2 Concentrations



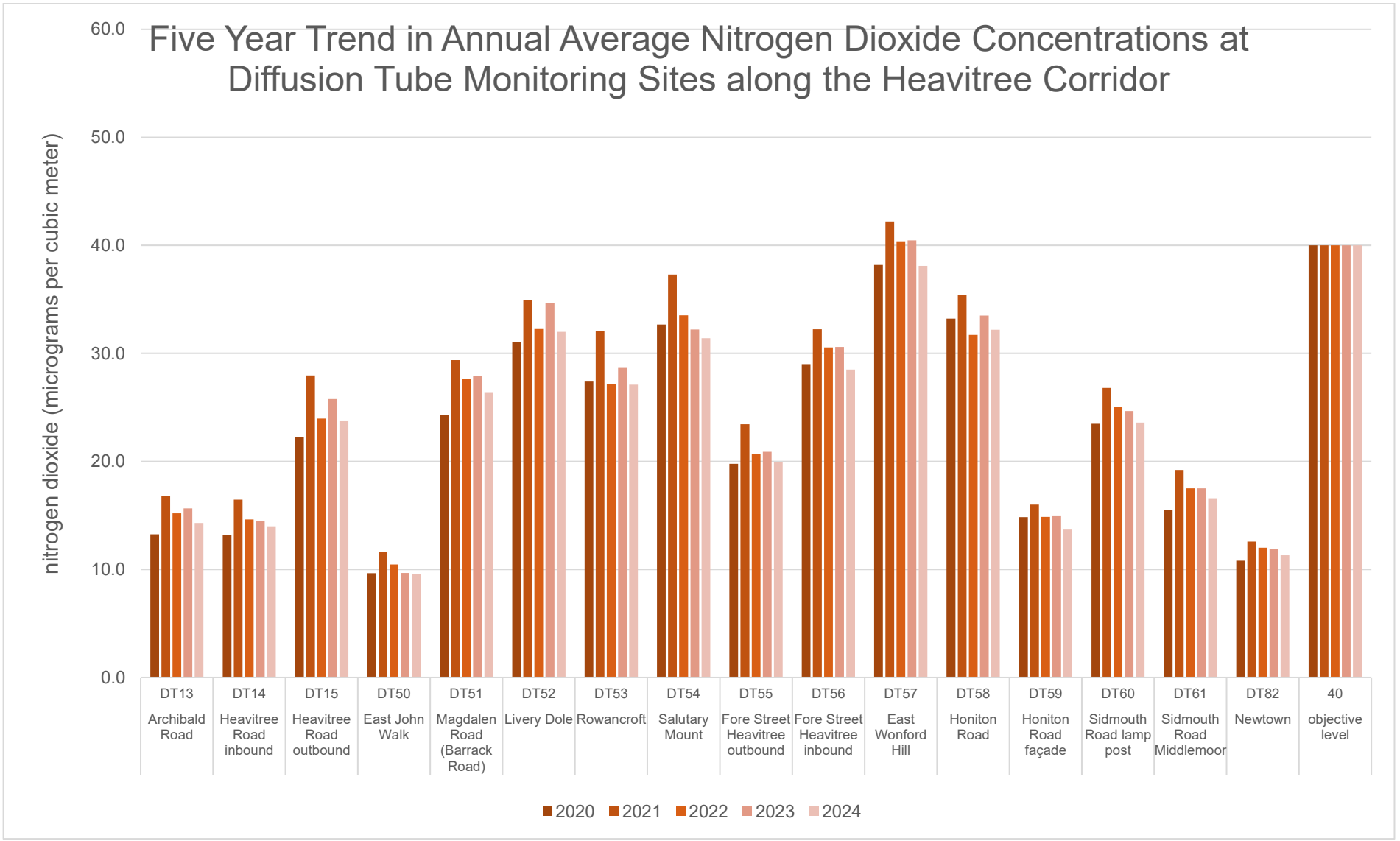
This figure presents NO_2 annual mean concentrations at the RAMM continuous monitoring site between years 1997 and 2024. There are no exceedances of the annual mean objective in 2024. There is a general trend of reduction since 2010.



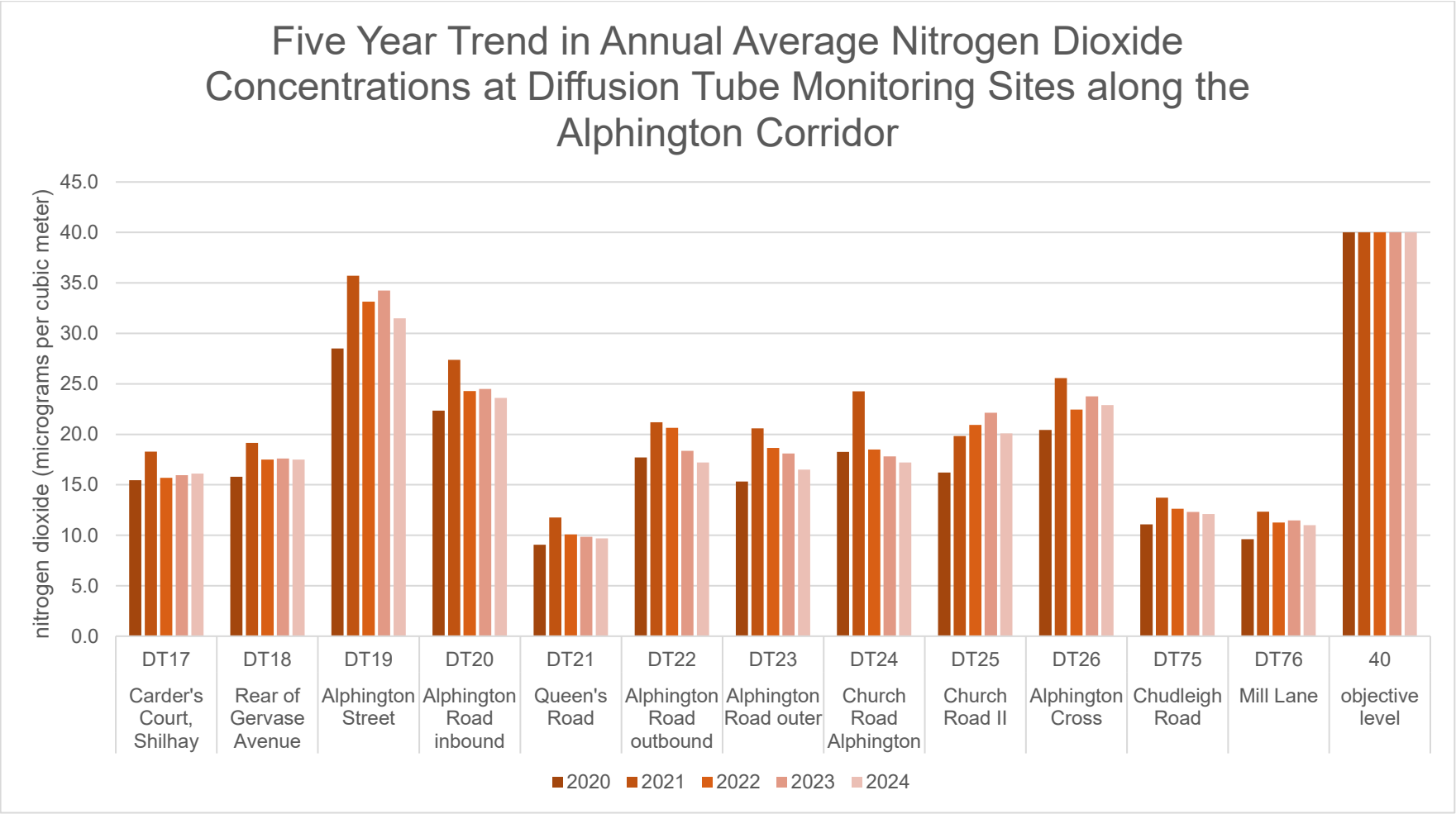
This figure presents NO_2 annual mean concentrations for sites in the city centre between 2020 and 2024. There are no exceedances of the annual mean objective in 2024 and there is a general trend of reduction experienced across the sites.



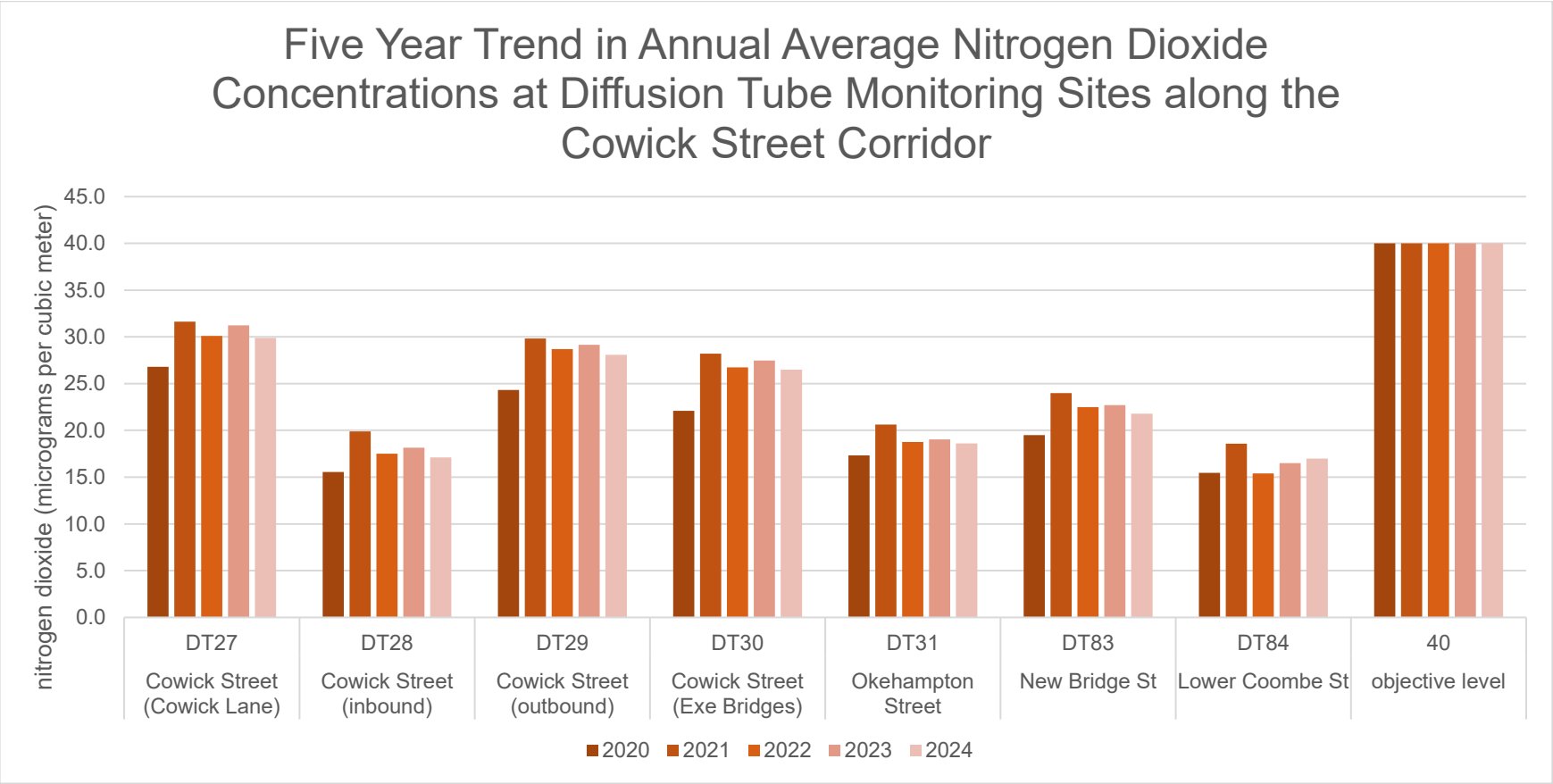
This figure presents NO_2 annual mean concentrations for sites along the Topsham Road corridor between 2020 and 2024. There are no exceedances of the annual mean objective in 2024 and there is a general trend of reduction experienced across the sites.



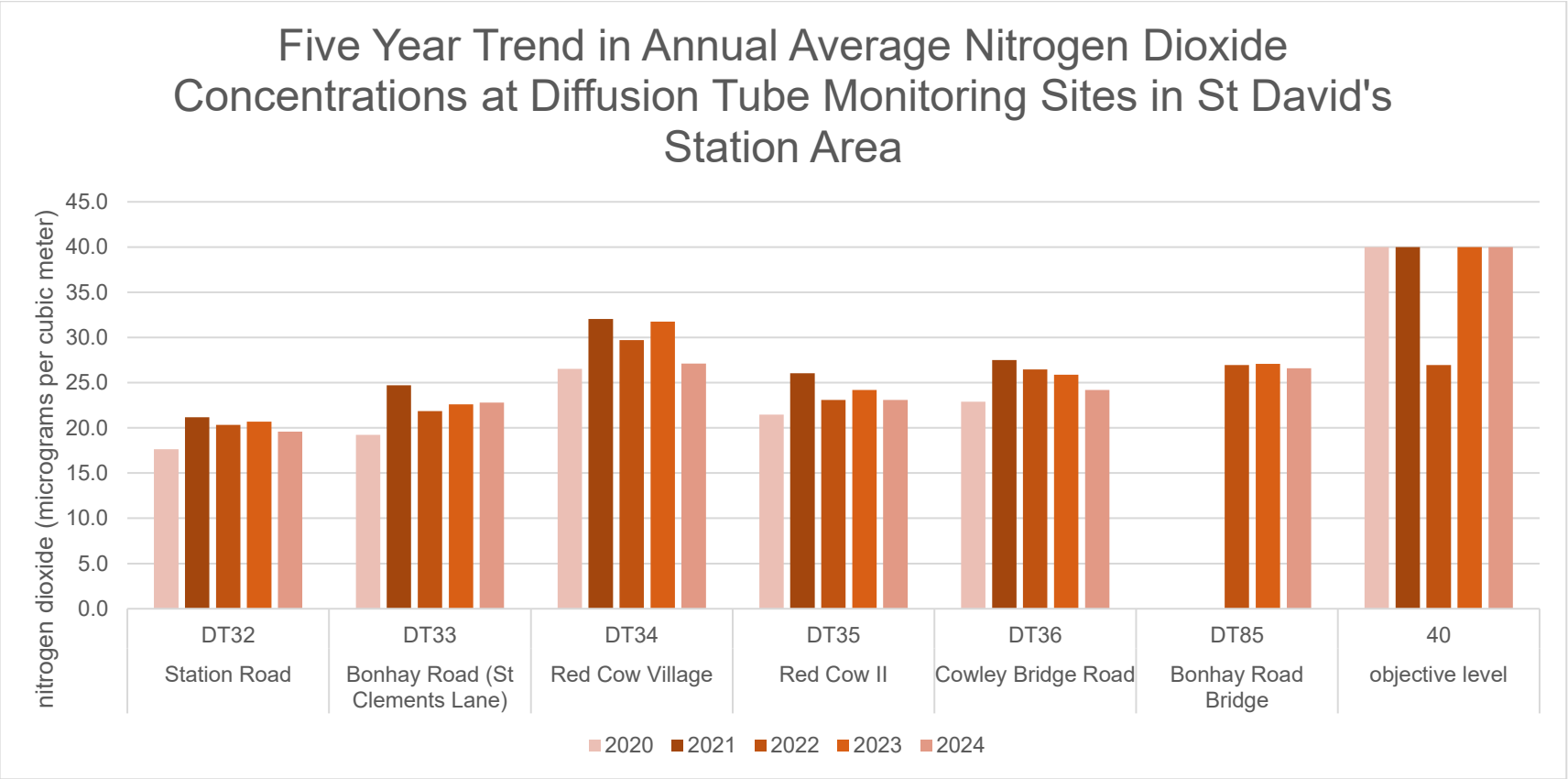
This figure presents NO_2 annual mean concentrations for sites along the Heavitree corridor between 2020 and 2024. There are no exceedances of the annual mean objective in 2024 and there is a general trend of reduction across the sites.



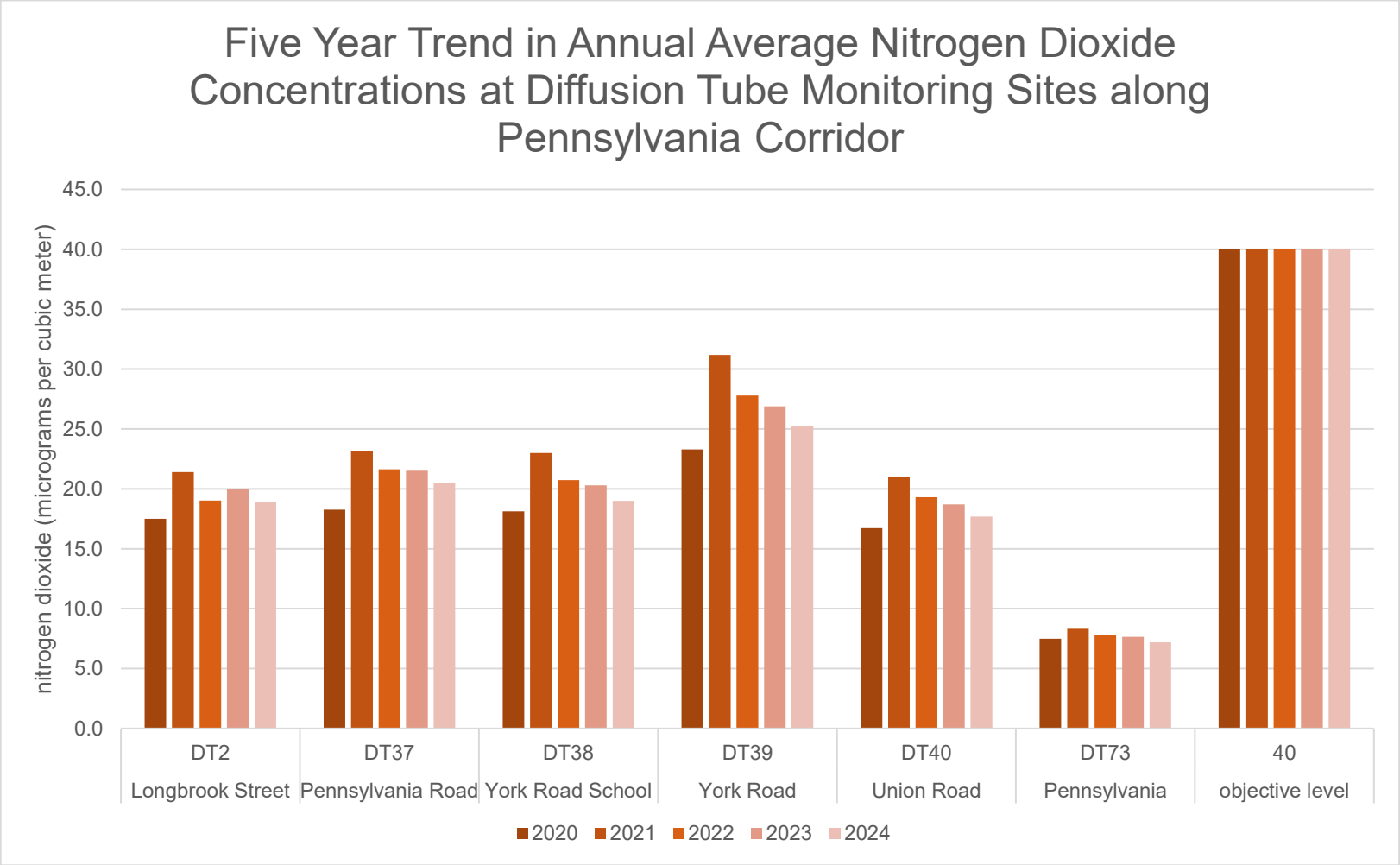
This figure presents NO_2 annual mean concentrations for sites along the Alphington corridor between 2020 and 2024. There are no exceedances of the annual mean objective in 2024 and there is a general trend of reduction experienced across the sites.



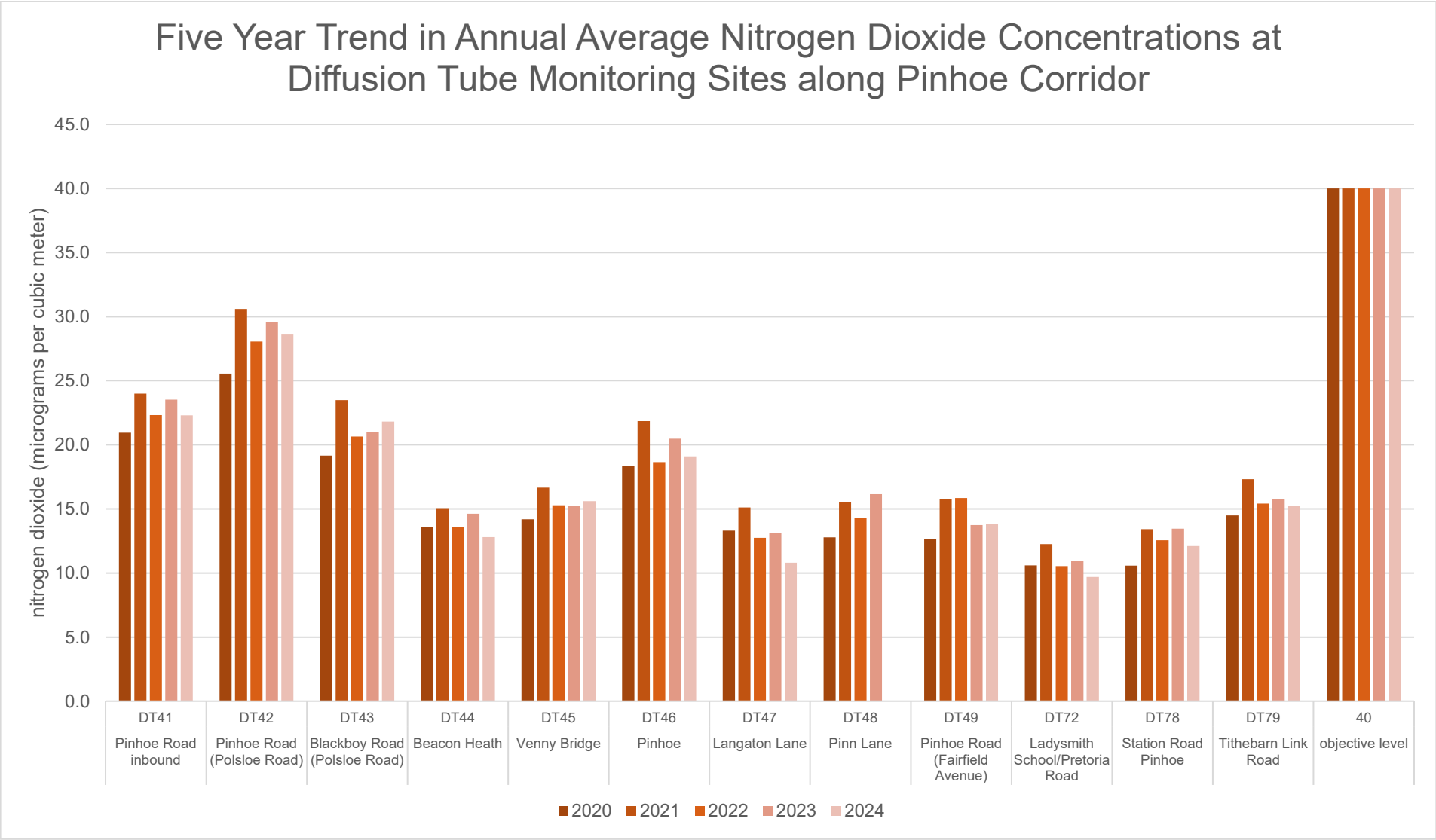
This figure presents NO_2 annual mean concentrations for sites along the Cowick Street corridor between 2020 and 2024. There are no exceedances of the annual mean objective in 2024 and there is a general trend of reduction experienced across the sites.



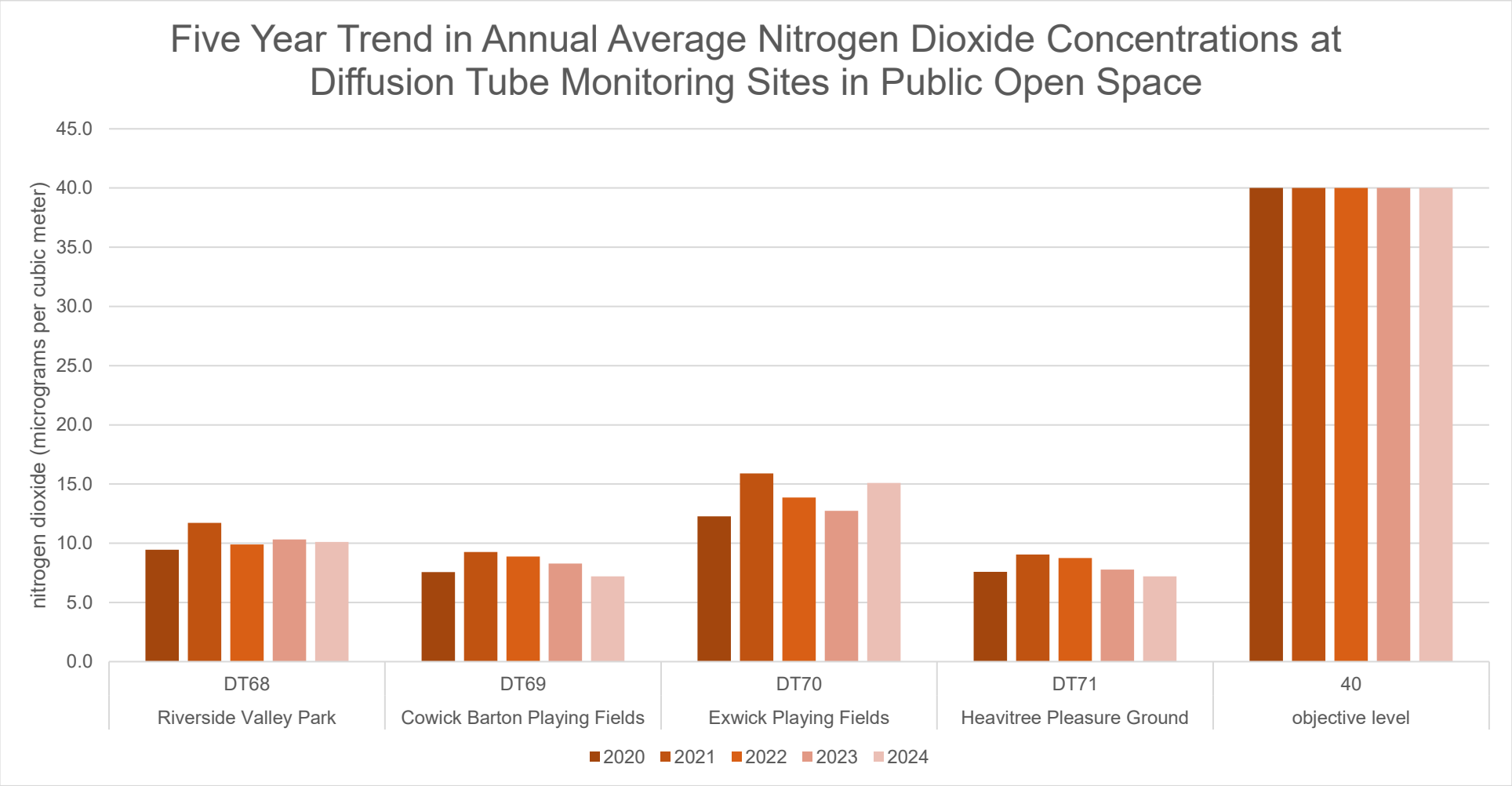
This figure presents NO_2 annual mean concentrations for sites in the St David's area between 2020 and 2024. There are no exceedances of the annual mean objective in 2024 and there is a general trend of reduction experienced across the sites.



This figure presents NO_2 annual mean concentrations for sites in the Pennsylvania area between 2020 and 2024. There are no exceedances of the annual mean objective in 2024 and there is a general trend of reduction experienced across the sites.



This figure presents NO_2 annual mean concentrations for sites along the Pinhoe corridor between 2020 and 2024. There are no exceedances of the annual mean objective in 2024 and there is a general trend of reduction experienced across the sites.



This figure presents NO_2 annual mean concentrations for sites in public open space between 2020 and 2024. There are no exceedances of the annual mean objective in 2024 and there is a general trend of reduction experienced across the sites.

Table A.5 – 1-Hour Mean NO_2 Monitoring Results, Number of 1-Hour Means > 200µg/m^3

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
CM1	291939	92830	Kerbside	N/A	38	0	0	0	0 (63.3)	0 (69.4)

Notes:

Results are presented as the number of 1-hour periods where concentrations greater than 200µg/m^3 have been recorded.

Exceedances of the NO_2 1-hour mean objective (200µg/m^3 not to be exceeded more than 18 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-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.6 – Annual Mean PM_{10} Monitoring Results ($\mu g/m^3$)

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
CM1	291939	92830	Kerbside	N/A	0	14.1	13.9	17.1 (19.2)	18.8 (20.1)	-
CM2	291670	91773	Roadside	N/A	100	11.5	12.0	14.7	15.2	14.1

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

Notes:

The annual mean concentrations are presented as $\mu g/m^3$.

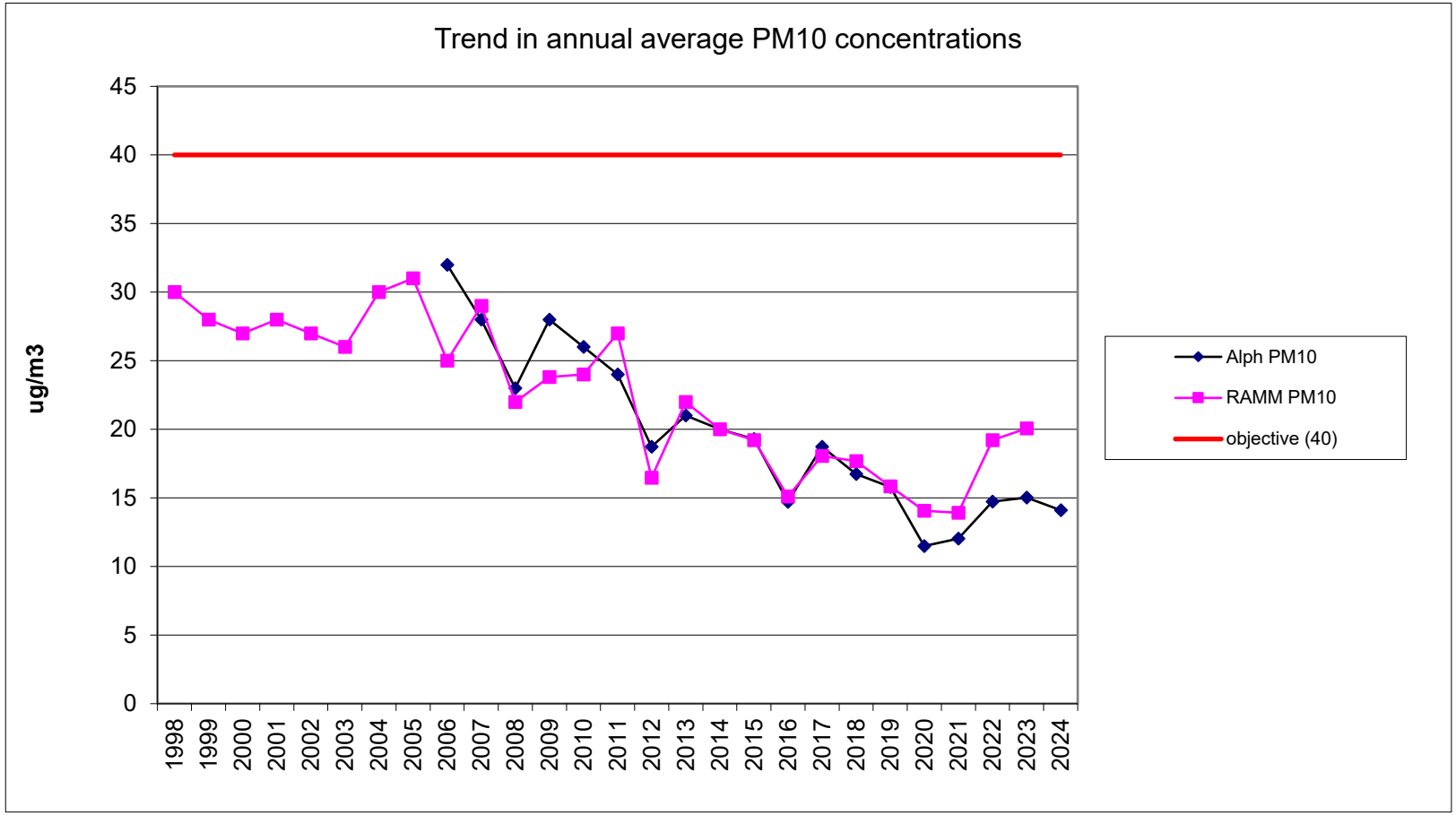
Exceedances of the PM_{10} annual mean objective of $40\mu g/m^3$ are shown in **bold**.

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%).

Figure A.2 – Trends in Annual Mean PM_{10} Concentrations



This figure presents PM_{10} annual mean concentrations for the two monitoring sites in Exeter between 1998 and 2024. There are no exceedances of the annual mean objective in 2024 although concentrations have increased since 2021. Otherwise, there is a general trend of reduction experienced across both sites.

Table A.7 – 24-Hour Mean PM_{10} Monitoring Results, Number of PM_{10} 24-Hour Means > 50µg/m^3

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
CM1	291939	92830	Kerbside	N/A	0	1	1	2 (29.9)	0 (30.3)	-
CM2	291670	91773	Roadside	N/A	100	0 (19.2)	0	1	0	0

Notes:

Results are presented as the number of 24-hour periods where daily mean concentrations greater than 50µg/m^3 have been recorded.

Exceedances of the PM_{10} 24-hour mean objective (50µg/m^3 not to be exceeded more than 35 times/year) are shown in **bold**.

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 ($\mu g/m^3$)

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
CM1	291939	92830	Kerbside	N/A	0	8.6	8.4	11.1 (12.7)	13.2	-
CM2	291670	91773	Roadside	N/A	100	6.8	7.5	9.0	8.8	8.5

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

Notes:

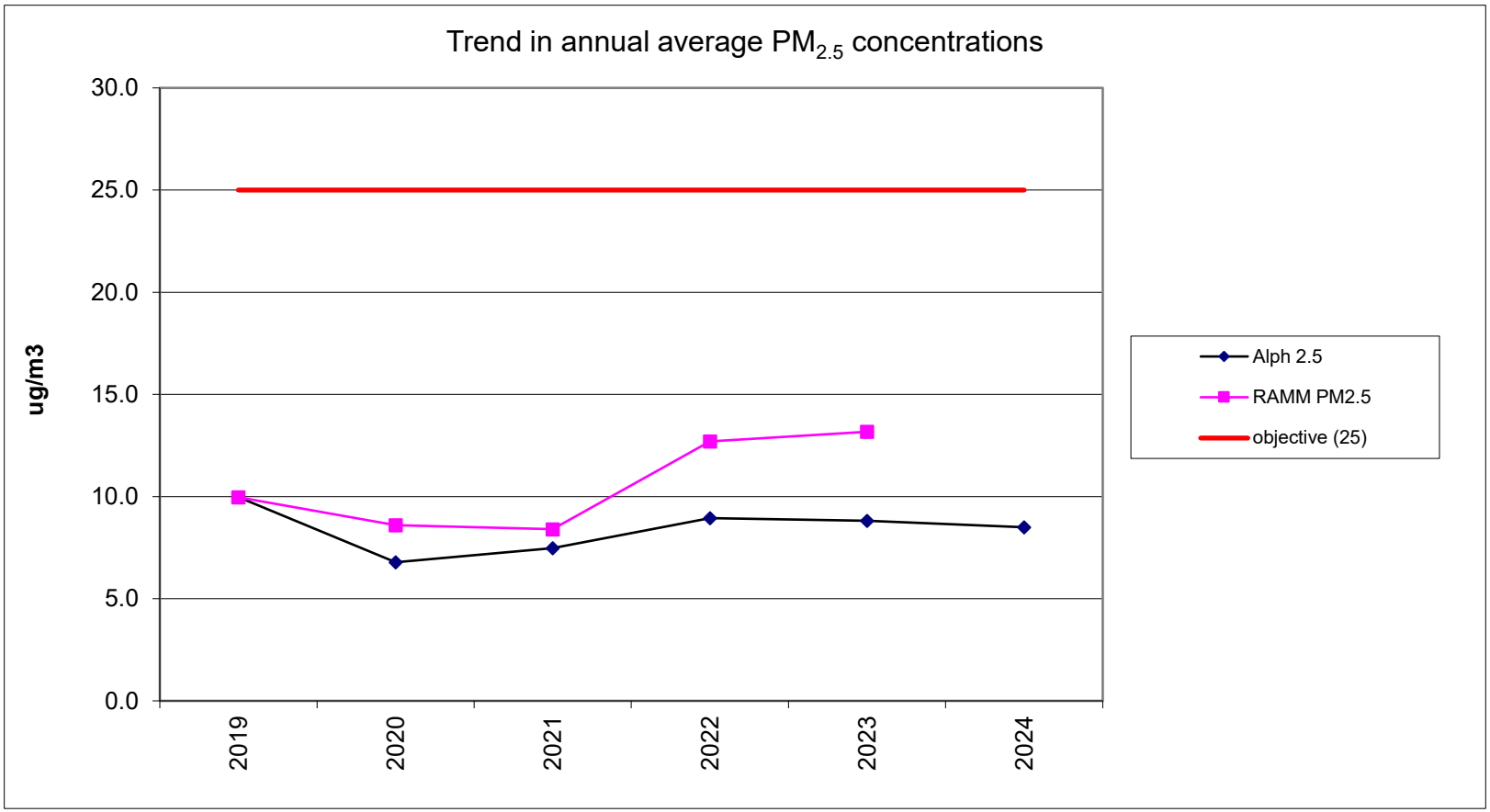
The annual mean concentrations are presented as $\mu g/m^3$.

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%).

Figure A.3 – Trends in Annual Mean $PM_{2.5}$ Concentrations



This figure presents $PM_{2.5}$ annual mean concentrations for the two monitoring sites in Exeter between 2019 and 2023. There are no exceedances of the annual mean objective in 2024 although concentrations have increased since 2021. There is no clear trend over a five-year period.

Table A.9 – O_3 Monitoring Results, Number of 8-Hour Means > 100µg/m^3

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
CM1	291939	92830	Kerbside	N/A	38	87	0	0	8 (74.6)	0 (69.5)

Notes:

Results are presented as the number of instances where monitored concentrations are greater than the objective concentration.

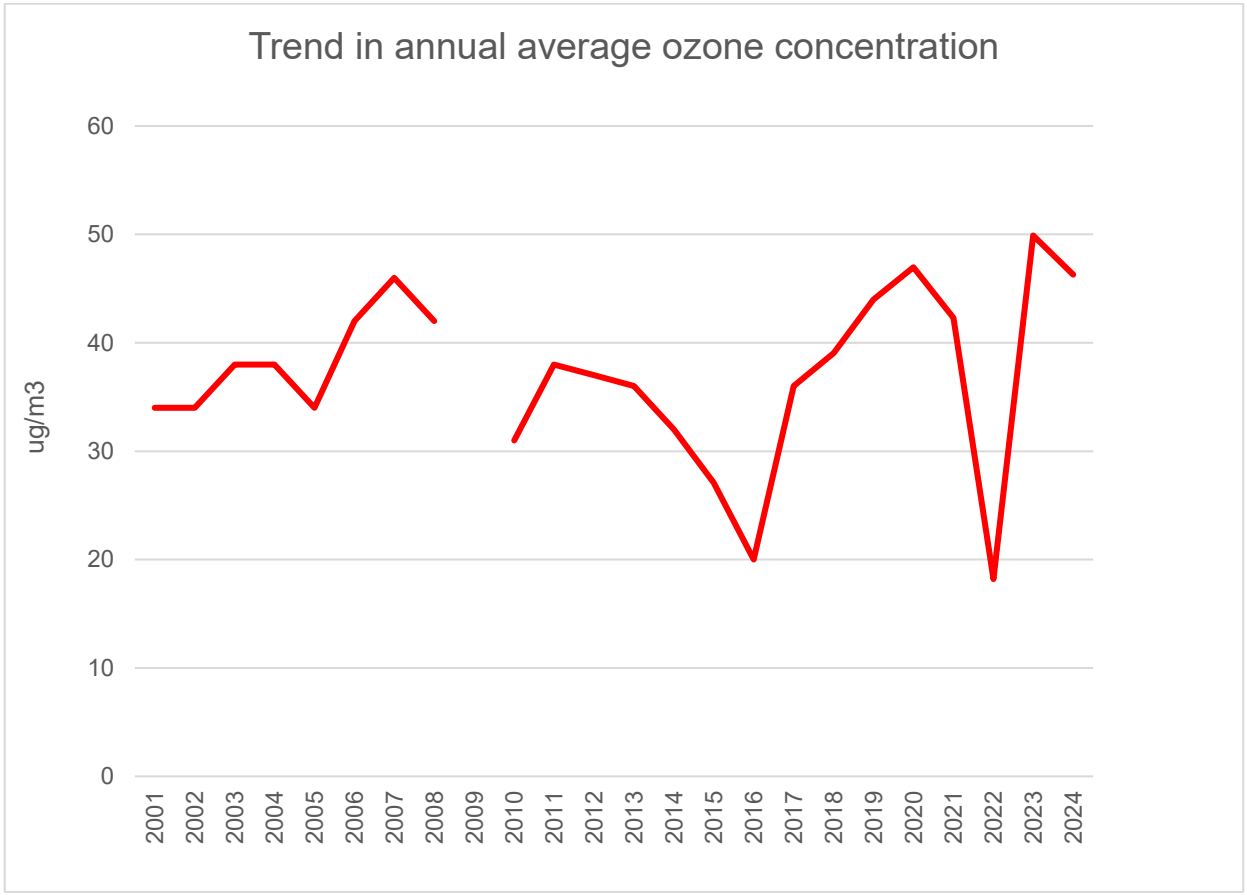
Exceedances of the 8-hour mean O_3 objective (100µg/m^3 not to be exceeded more than 10 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the relevant percentiles are 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%).

Figure A.4 – Trends in Annual Mean O_3 Concentrations



This figure presents O_3 annual mean concentrations between years 2001 and 2024. (Note that there is no local air quality objective for annual mean O_3 concentrations so this data is presented for information only). There is no clear trend over the entire period.

Appendix B: Full Monthly Diffusion Tube Results for 2024

Table B. 1 - NO_2 2024 Diffusion Tube Results ($\mu g/m^3$)

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 (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
DT1	292199	92814	26.5	24.2	23.1	19.5	20.5	17.8	18.6	17.6	21.5	24.2	24.6	21.1	21.6	18.1	-	
DT2	292315	93016	25.9	28.9	22.1	19.9	21.3	17.6	19.7	17.3	19.7	25.2	28.2	24.0	22.5	18.9	-	
DT3	292185	93049	26.2	26.8	26.6	21.9	20.2	19.2	19.3	22.1	17.9	22.6	25.8	22.6	22.6	19.0	-	
DT4	291779	93011	24.9	23.1	20.4	17.2	17.5	13.8		13.9	16.8	23.7	21.0	18.3	19.2	16.1	-	
DT5	291944	92826	27.9	23.9	19.6	19.7	19.7	17.1	15.3		24.0	24.5	27.0	23.6	-	-	-	Duplicate Site with DT5 and DT6 - Annual data provided for DT6 only
DT6	291944	92826	26.8	23.6	20.2	18.8	19.7	17.6	15.5	14.0	24.9	25.2	27.7	21.8	21.3	17.9	-	Duplicate Site with DT5 and DT6 - Annual data provided for DT6 only
DT7	291984	92626	28.5	26.7	26.8	23.1	20.9	17.8	21.1	19.3	20.4	29.6	24.0	21.6	23.3	19.6	-	
DT8	291895	92569	36.0	38.3	35.1	35.6		33.1	31.5	31.2	33.4	37.0		32.1	34.3	28.8	-	
DT9	291943	92511	27.4	28.0	23.0	23.0	21.2	20.5	22.0	20.2	27.7		29.5	26.0	24.4	20.5	-	
DT10	291833	92433	27.9	27.4	25.8	20.2	19.3	16.3	19.7	17.5	22.8	31.1	30.0	23.8	23.5	19.7	-	
DT11	292291	92292	30.3	29.7	25.1	20.9	21.9	17.4	20.8	19.7	27.4	28.9	32.0	26.2	25.0	21.0	-	
DT12	292422	92320	33.6	31.1	9.8	20.4	13.6	19.0	16.0	18.4	27.1	26.1	26.0	24.5	22.1	18.6	-	
DT13	292590	92743	24.0	21.8	17.1	14.6	13.6	10.2	11.4	11.6		21.6	23.4	17.7	17.0	14.3	-	
DT14	292832	92731	24.4	19.8	16.9	15.0	14.2	11.4	12.6	11.3	15.8	19.9	22.4	16.7	16.7	14.0	-	
DT15	292703	92807	34.3	31.7	26.7	27.9	30.1	23.6	22.3	21.6	30.9	32.7	32.3	26.7	28.4	23.8	-	
DT16	292378	92039	31.1	27.7	24.7	22.6	26.5	23.3	23.5	20.5	32.2	33.2	40.8	29.7	28.0	23.5	-	
DT17	291699	92091	25.5	23.9	16.0	16.2	15.6	16.0	15.7		19.1	20.9	23.1	18.9	19.2	16.1	-	

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 (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
DT18	291657	91973	26.6	26.7	18.8	19.7	19.0	17.0	17.4		19.6	21.5	22.5	20.3	20.8	17.5	-	
DT19	291669	91812	47.0	38.7	39.5	38.5	38.2	32.1	32.8	29.8		41.7	39.3	34.4	37.5	31.5	-	
DT20	291532	91349	34.2	31.2	26.5	27.9	25.1	25.0	24.5	24.1	31.4	28.0	31.8	26.7	28.0	23.6	-	
DT21	291460	91390	18.4	12.2	9.9	9.0	8.4	6.2	7.6		10.9	14.8	17.4	12.0	11.5	9.7	-	
DT22	291509	91151	28.9	24.0	25.0	20.2	23.3	17.1	19.3	16.7	15.7	9.5	24.0	21.4	20.4	17.2	-	
DT23	291518	90813	26.9	22.3	25.0	19.8	16.7	12.2	14.9	14.5	15.7	25.5	25.6	16.6	19.6	16.5	-	
DT24	291691	90425	28.3	23.3	21.2	16.8	18.4	18.8	18.3	14.8	18.8	24.6	21.4	20.9	20.5	17.2	-	
DT25	291767	90160	29.6	30.2	26.9	22.4	21.9	19.0	22.7		20.7	19.7	25.1	24.4	23.9	20.1	-	
DT26	291520	90531	32.0	31.8	28.7	25.5	23.5	24.0	26.4		26.4	26.4	28.7	26.7	27.3	22.9	-	
DT27	290864	91725	39.1	38.4	44.8	36.7	36.1	29.7	32.7	31.1	31.6	39.3	36.5	31.2	35.6	29.9	-	
DT28	291249	91874	28.3	23.3	19.1	18.4	17.7	15.5	16.2	15.5	21.7	25.5	25.2	18.6	20.4	17.1	-	
DT29	291376	91944	38.5	35.8	38.4	34.2	32.9	27.5	30.7	29.4	32.7	41.5	32.7	27.8	33.5	28.1	-	
DT30	291500	92055	36.9	33.3	30.2	29.3			30.0	28.1	35.3	30.9	31.5	29.9	31.5	26.5	-	
DT31	291351	92169	24.7	26.5	23.2	19.5	22.3	18.7	20.1	18.7	25.9	25.1	25.2	16.3	22.2	18.6	-	
DT32	290826	93598	28.5	25.7	23.8	19.9	23.8	18.6	20.3	19.2	21.7	27.8	28.5	22.1	23.3	19.6	-	
DT33	291253	93299	34.3	31.1	23.7	24.2	23.5	23.0	23.0		30.3	28.5	31.1	26.4	27.2	22.8	-	
DT34	291242	93483	39.7	33.1	25.3	24.1	32.1	29.7	31.9	31.8	35.6	34.6	35.1	34.0	32.2	27.1	-	
DT35	291272	93468	32.9	31.5	34.3	23.3	24.0	23.9	21.8	24.4	25.6	29.1	31.6	26.9	27.4	23.1	-	
DT36	291054	94399	35.8	32.0	32.1	28.3	29.1	22.6	24.5	22.3	29.1	32.4	30.7	27.1	28.8	24.2	-	
DT37	292391	93291	29.6	28.0	27.5	20.8	24.0	18.0	21.2	17.7	25.3	31.3	26.7	22.4	24.4	20.5	-	
DT38	292469	93245	30.6	26.3	25.2	21.1	21.1	16.2	17.7	16.2	21.9	26.2	28.2	21.1	22.7	19.0	-	

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 (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
DT39	292579	93146	37.1	33.3	32.7	29.7	28.4	23.2	24.3	21.5	31.0	34.5	35.5	28.5	30.0	25.2	-	
DT40	293047	93877	26.5	25.7	23.8	17.3	20.3	14.5	17.9	14.1	17.8	29.0	24.9	20.5	21.0	17.7	-	
DT41	293405	93395	28.8	31.9	32.7	21.8	24.6	19.3	24.5	22.2	22.8	32.8	31.1	25.6	26.5	22.3	-	
DT42	293251	93375	36.9	37.4	37.0	33.0	34.9	26.1	31.5	28.5	28.7	43.5	38.1	32.6	34.0	28.6	-	
DT43	293227	93356	28.9	29.4	22.9	22.8	22.1	19.5		23.6	27.6	30.0	31.8	26.3	25.9	21.8	-	
DT44	295068	94487	17.7	22.3	15.6	13.4	14.1	11.4	11.4	9.0	14.5	17.6	20.2	15.2	15.2	12.8	-	
DT45	295888	94101	23.0	23.8	18.2	16.7	16.3	15.7	15.6	15.4	16.3	21.7	21.7	18.9	18.6	15.6	-	
DT46	296418	94470	28.8	30.4	22.3	20.6	18.9	20.1	18.7	19.6	22.2	23.8	25.0	23.0	22.8	19.1	-	
DT47	296984	94327		16.6	14.5	11.8	12.0	9.3	12.1	10.2	12.3		17.0	13.0	12.9	10.8	-	
DT49	295413	93689	25.5	18.7	14.3	13.3	13.1	10.9	12.1	11.3	16.2	19.5	22.7	19.7	16.4	13.8	-	
DT50	293091	92825	17.7	15.7	11.9	9.3	9.0	7.0	8.3	7.2	10.1	14.7	14.8	11.9	11.5	9.6	-	
DT51	293448	92419	42.8	37.5	34.8	30.7	28.1	23.0	25.1	20.4	32.2	32.0	36.0	35.4	31.5	26.4	-	
DT52	293418	92497	47.0	44.7	44.8	36.3	33.4	32.0	33.5	33.3	37.7	35.9	38.8	39.0	38.0	32.0	-	
DT53	293533	92473	40.4	36.6	35.7	31.4	28.7	26.1	26.9	24.5	32.7	36.2	35.1	33.0	32.3	27.1	-	
DT54	293738	92396	41.0	44.6	45.0	37.6	35.7	32.3	35.1	33.9	32.8	35.5	39.6	35.7	37.4	31.4	-	
DT55	293781	92409	30.6	28.4	24.6	23.2	19.7	17.6	19.5	16.5	23.0	26.8	28.8	25.2	23.7	19.9	-	
DT56	294043	92359	37.1	43.3	41.5	30.5	31.2	26.4	33.9	31.4	27.6	35.8	36.4	32.5	34.0	28.5	-	
DT57	294410	92310	48.5	55.2	46.3	41.5	46.6	40.3	46.6	41.9	40.8	48.4	45.4	42.5	45.4	38.1	-	
DT58	295203	92378	48.8	43.6	38.4	36.6	36.2	33.6	34.3	33.7	39.0	38.5	43.4	34.5	38.4	32.2	-	
DT59	295191	92395	22.5	21.5	16.8	14.3	14.7	11.0	11.5	11.5	15.6	18.9	22.3	15.2	16.3	13.7	-	
DT60	295466	92365	37.8	31.4	25.0	24.0	26.0	19.5		20.1	29.5	30.5	36.1	29.2	28.1	23.6	-	

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 (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
DT61	295636	92232	24.7	23.2	18.3	15.7	17.9	14.7	16.6	15.5	18.0	24.0	22.2	26.6	19.8	16.6	-	
DT62	295710	90571	23.8	17.6	12.4	11.6	12.6	10.1	11.9	10.9	15.6	16.3	21.3	15.3	15.0	12.6	-	
DT63	294694	90001	26.0	25.5	18.5	17.4	20.0	17.6	19.9	19.9	21.7	21.1	25.4	20.6	21.1	17.7	-	
DT64	294652	89974		19.9	14.5	14.6	14.8	12.7	13.6	13.3	19.8	18.6	21.7	17.2	16.4	13.8	-	
DT65	296415	88477	27.9	22.2	19.9	19.5	21.2	16.4	18.1	16.0	22.2	23.1	27.4	18.4	21.0	17.7	-	
DT66	294227	90435	38.1	37.8	35.8	31.6	31.9	25.6	30.7	29.5	31.5	35.2	35.0	30.5	32.8	27.5	-	
DT67	293213	91245	27.9	23.2	24.3	17.9	20.7	13.7	17.6	14.3	17.2	25.5	23.2	19.7	20.4	17.2	-	
DT68	292291	91678	18.2	14.7	10.7	9.5	8.8	6.9	8.2		9.9	17.5	14.9	13.2	12.1	10.1	-	
DT69	291016	91304	15.7	10.7	8.3	6.7	6.4	5.0	6.2		9.0			9.6	8.6	7.2	-	
DT70	291298	92593	25.4	19.8	15.7	15.7	15.9	12.4	13.9		18.4	22.8	22.6	14.7	17.9	15.1	-	
DT71	294387	92611	13.5	11.5	8.9	6.5	6.0	4.5	5.9	5.1	6.7	10.8	13.0	10.2	8.6	7.2	-	
DT72	293617	93090	17.7	14.9	11.4	9.0	8.0	6.8	8.1	7.0	10.9	14.5	17.5	12.8	11.5	9.7	-	
DT73	293052	94185	13.2	10.6	9.4	6.3	6.3	4.5	5.8		5.8	11.2	12.5	9.1	8.6	7.2	-	
DT75	291721	89727	21.5	15.8	13.9	11.4	11.0	7.9	10.9		13.9	16.9	20.8	13.8	14.4	12.1	-	
DT76	291555	90449	20.1	15.0	11.6	10.5	10.5	8.5	9.2		12.4	14.9	17.5	14.4	13.1	11.0	-	
DT77	292553	93082	33.2	29.4	28.3	25.8	24.8	22.4	23.2	21.8		28.3	30.3	27.1	26.8	22.5	-	
DT78	296415	94165	19.1	18.3	14.4	11.7	12.8	10.3	12.5	10.8	13.4	17.5	18.1	14.3	14.4	12.1	-	
DT79	296827	93886	26.1	20.5	17.1	14.3	14.6	10.9	14.3	13.2	20.0	22.7	24.4	18.5	18.0	15.2	-	
DT80	295967	88876	26.2	21.4	16.5	16.2	16.2	13.7	15.3	12.7	17.5	19.3	23.7	18.9	18.1	15.2	-	
DT81	292637	91991	20.5	16.2	11.5	10.6	10.2	7.1	10.0	8.9	12.6	16.7	19.5	14.5	13.2	11.1	-	
DT82	292847	92911	19.5	19.2	14.5	11.7	10.8	8.1	10.2	8.5	10.9	14.8	17.5	15.9	13.5	11.3	-	

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 (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
DT83	291655	92258	32.6	31.4	25.1	24.1	22.6	24.4	22.7	22.4		28.1	29.4	23.3	26.0	21.8	-	
DT84	291897	92217	29.4	24.2	15.6	18.2	16.5	15.3	16.0	15.1	24.5	22.1	24.1	21.4	20.2	17.0	-	
DT85	291375	92935	40.3	37.8	26.8	28.5	31.3	27.4	27.2	26.0	32.7	35.0	33.4	33.7	31.7	26.6	-	
DT86	292281	92246	38.0	36.9	32.9	32.3	31.1	27.2	30.1	28.2	35.2	37.7	35.7	33.9	33.3	28.0	-	
DT87	292206	92190	32.5	34.1	29.6	27.0	17.0	21.9	23.5	21.9	26.3	30.2	31.2	24.2	26.6	22.4	-	

☒ **All erroneous data has been removed from the NO_2 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.**

☒ **National bias adjustment factor used.**

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

☒ **Exeter City Council confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

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

New or Changed Sources Identified Within Exeter During 2024

The Council has not identified any new sources relating to air quality within the reporting year of 2024.

Additional Air Quality Works Undertaken by Exeter City Council During 2024

Potential effects of the Heavitree and Whipton Active Streets trial during 2024 on the local nitrogen dioxide concentrations and traffic flows have been assessed, using the same approach as in Annual Status Report 2024. See Appendices G, H and I for further information.

Exeter City Council in partnership with Emerald Green Power (EGP) have been working on a DEFRA-funded virtual sensor project. The project has been progressing according to the approved plan. Key milestones achieved include the installation of all required IoT air quality sensors, the development of advanced virtual sensing algorithms using historic and AURN data as training data and the creation of an offline rapid prototype model. For more information about the project, please visit this link.

QA/QC of Diffusion Tube Monitoring

Exeter City Council uses Gradko diffusion tubes (20% TEA in water). Gradko laboratories (GRADKO International Ltd., St. Martins House, 77 Wales Street, Winchester, Hants. SO23 0RH) hold UKAS accreditation, follow the procedures set out in the Harmonisation Practical Guidance and their performance was satisfactory in the centralised AIR NO_2 PT scheme for quality assurance and quality control.

The tube exposure period used generally follows the Diffusion Tube Monitoring Calendar provided by the Air Quality Support Helpdesk, i.e. an exposure time of 4 or 5 weeks, with

an allowed variation in exposure time of ± 2 days. During 2024, the monitoring was completed in adherence with the 2024 Diffusion Tube Monitoring Calendar.

The tubes are stored in a fridge before they are exposed. Location sites and fixings follow the recommendations in the DEFRA practical guidance on the use of diffusion tubes for NO_2 monitoring, published in 2008. Two tubes are collocated with the continuous analyser at the Royal Albert Memorial Museum (RAMM), Queen Street (Exeter Roadside).

Data from the tubes are ratified and suspect data rejected by Exeter City Council, following the procedure in the DEFRA practical guidance. Random checks of the data in the reporting spreadsheet are also undertaken to ensure that no mistakes were made when inputting the data. Analysis of the data from the two tubes that are co-located with the continuous analyser shows that these have overall good precision.

Diffusion Tube Annualisation

All diffusion tube monitoring locations within Exeter recorded data capture of 75% therefore it was not required to annualise any monitoring data. In addition, any sites with a data capture below 25% do not require annualisation.

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within this Annual Status Report 2025 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 regarding the application of a bias adjustment factor to correct diffusion tube monitoring. 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.

Exeter City Council have applied a national bias adjustment factor of 0.84 to the 2024 monitoring data, from the National Diffusion Tube Bias Adjustment Factor Spreadsheet version number 04/25, based on 27 studies. A summary of bias adjustment factors used by Exeter City Council over the past five years is presented in Table C.1.

Table C. 1 - Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.84
2023	National	03/24	0.81
2022	Local	-	0.77
2021	National	03/22	0.84
2020	Local	-	0.74

QA/QC of Automatic Monitoring

Neither of the two PM analysers are part of the national network, however recommended QA/QC procedures from the AURN Local Site Operator's manual are followed. ET also service each analyser every six months. Faults with the equipment mean that data from CM1 (RAMM) is not available for this reporting period.

Live PM_{10} and $PM_{2.5}$ data are available at this page.

The PM data is collected, validated and ratified by Exeter City Council. Validation involves checking the data daily for instrumentation errors etc. and then visually screening the data on a weekly basis to mark any obviously spurious or unusual measurements. The Council also undertakes data ratification on an approximately three-monthly basis as well as following site services. This involves:

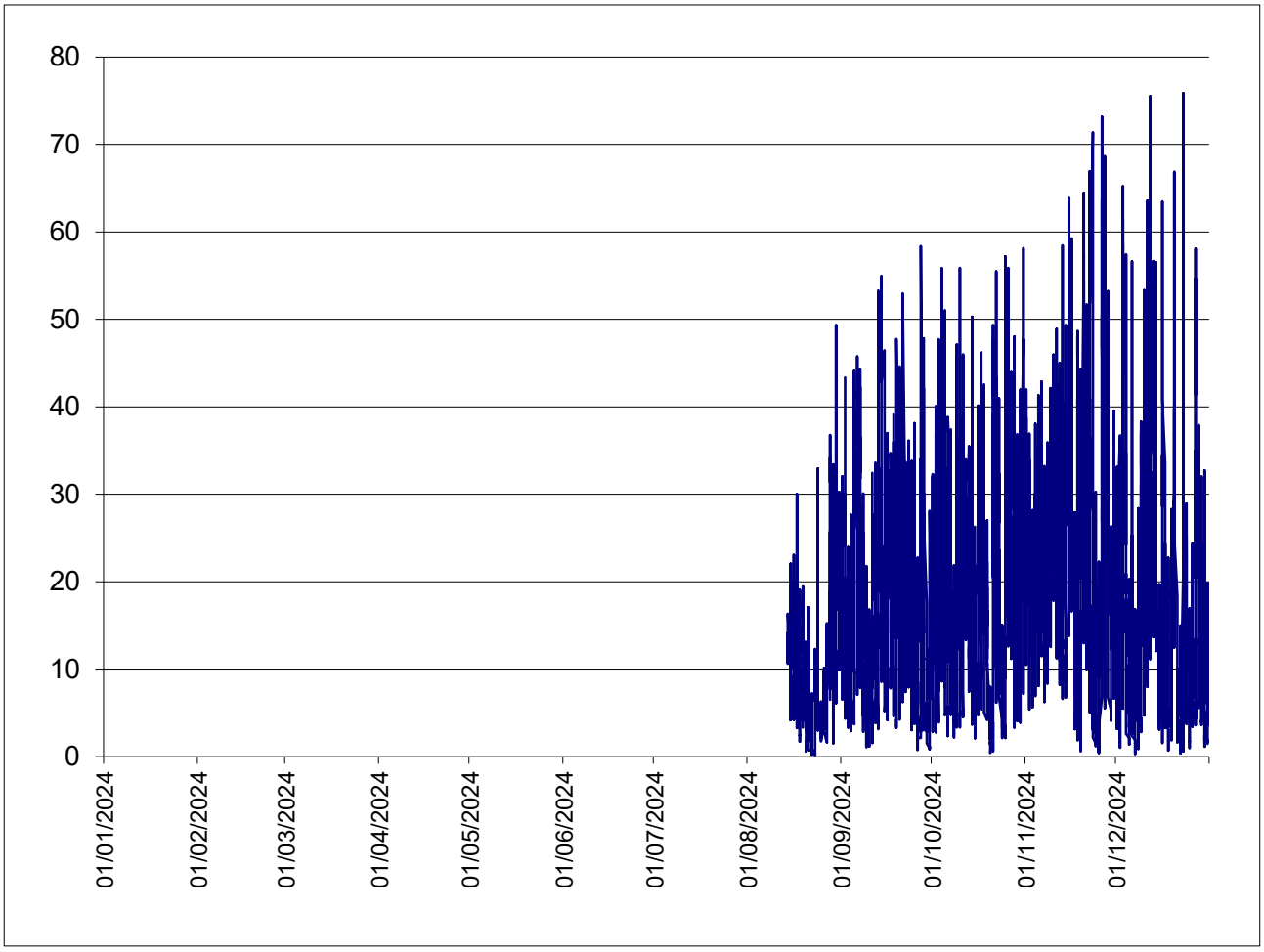
- Comparison of data with other pollutants and other appropriate AURN network sites (roadside sites and other sites in the south west),
- Final checking and deletion of data marked as possibly erroneous,
- Removal of data from unrepresentative periods of operation (e.g. road works in immediate vicinity of site etc. where data is shown or believed to have been affected),
- Adjustment for issues identified during services etc.

The NO_2 data from Exeter Roadside is collected and ratified by the AURN. Network data from the site can be found at this link. It is ratified every 3 months by NETCEN, and is reported in the QA / QC Data Ratification Report for the Automatic Urban Network. Data

capture from the NO_2 analyser was 38% in 2024 because of essential repairs to the roof of the building housing the equipment (the RAMM museum).

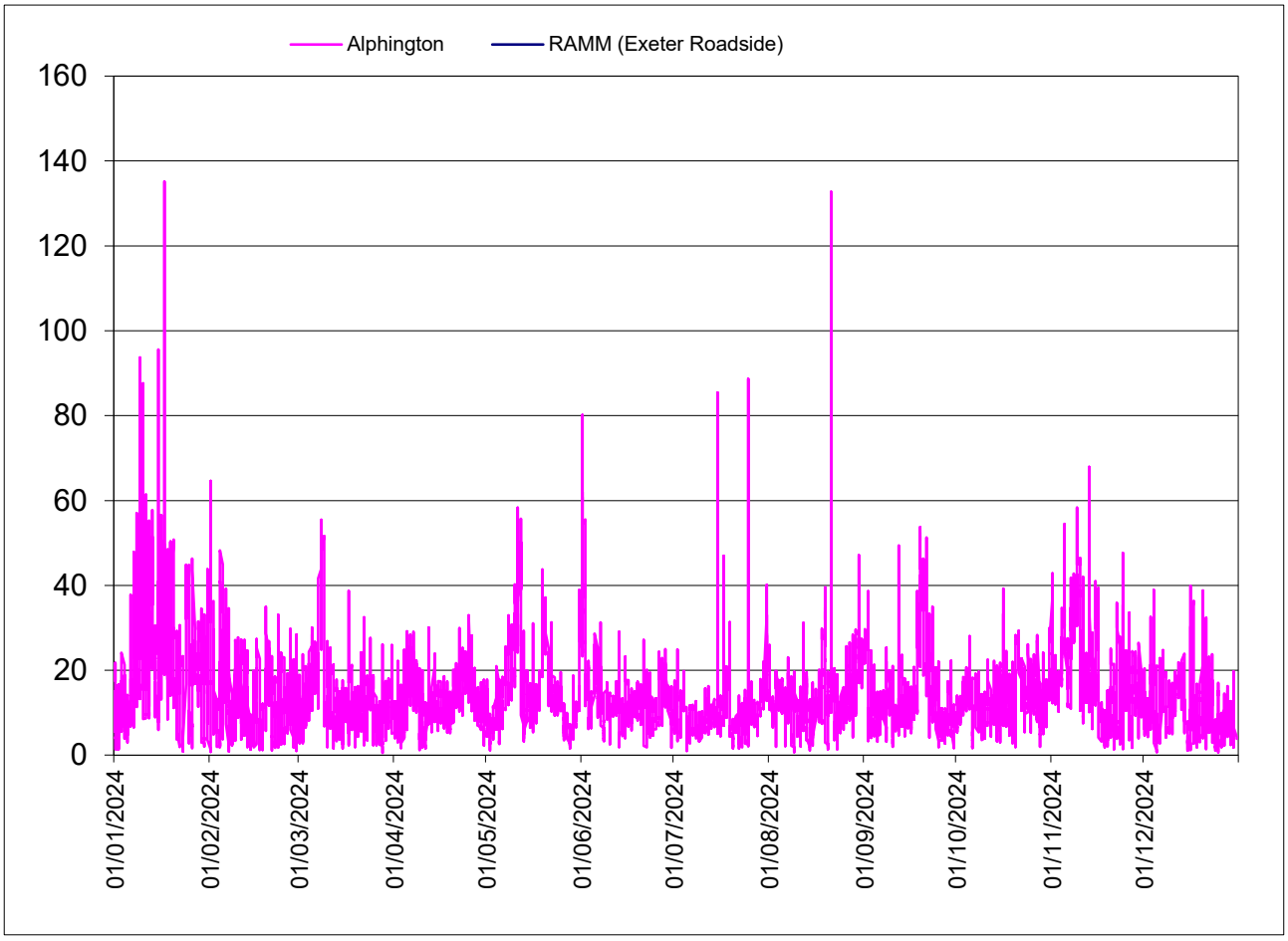
Plots of hourly average values for nitrogen dioxide, PM_{10} and $PM_{2.5}$ are shown below in Figures C.1, C.2 and C.3.

Figure C. 1 - Hourly NO_2 data from Exeter Roadside CM1 (RAMM) ($\mu g/m^3$)



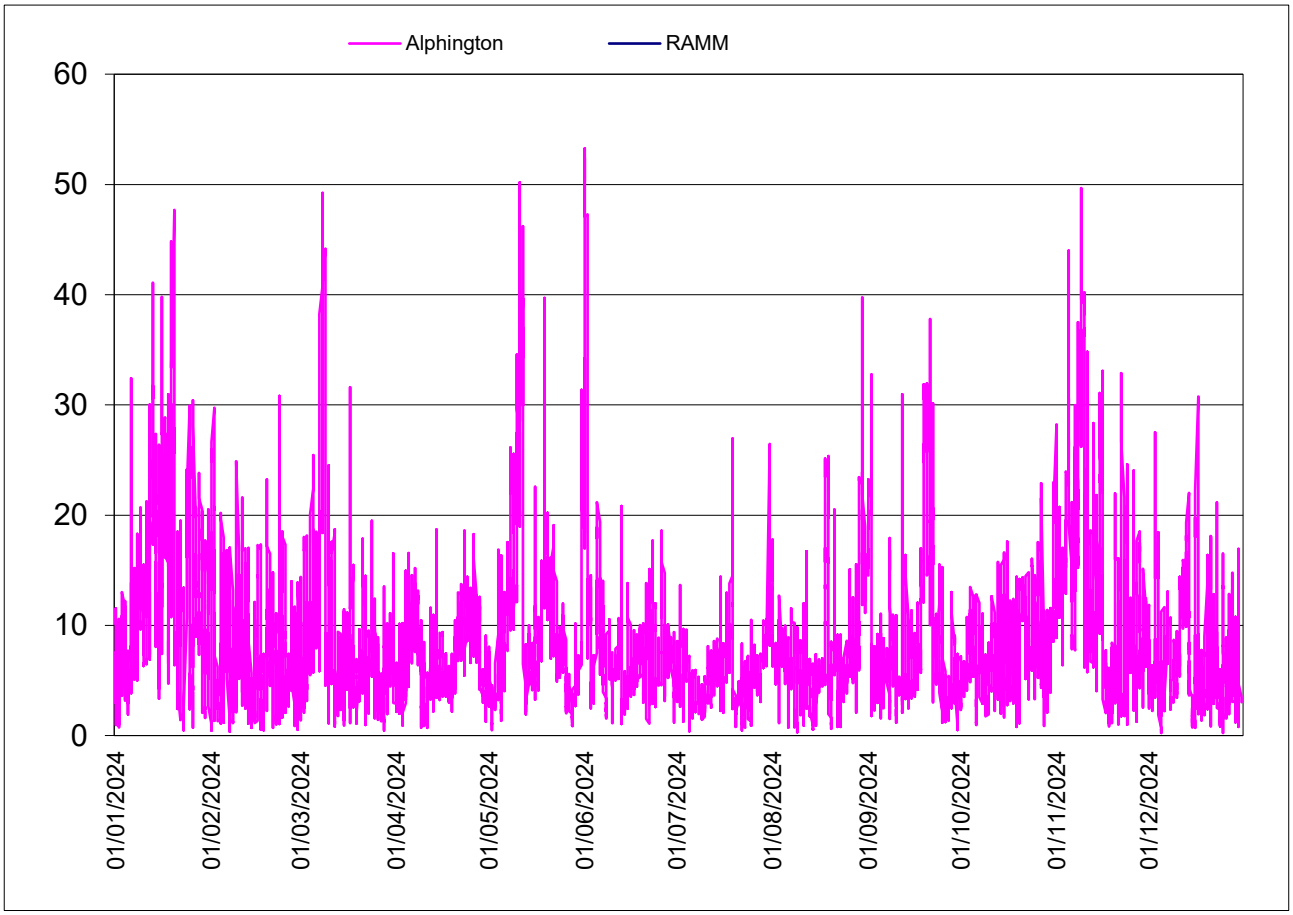
This graph shows the hourly NO_2 data from the analyser at RAMM

Figure C. 2 - Hourly PM_{10} data from Alphington Street (CM2) ($\mu g/m^3$)



This graph shows the hourly PM_{10} data from the analyser at the Alphington Street.

Figure C. 3 - Hourly $PM_{2.5}$ data from Alphington Street (CM2) ($\mu g/m^3$)



This graph shows the hourly $PM_{2.5}$ data from the analyser at the Alphington Street.

PM_{10} and $PM_{2.5}$ Monitoring Adjustment

The type of PM_{10}/$PM_{2.5}$ monitors utilised within Exeter City Council do not require the application of a correction factor.

Automatic Monitoring Annualisation

Data capture from the NO_2, and O_3 continuous analysers at RAMM (Exeter Roadside CM1) were below 75%.

This data has been annualised using the method described in the Technical Guidance. Annualisation factors were gained using data from nearby (<50 miles) AURN urban or rural background sites which have data capture of over 75%. The annualisation factors for each pollutant are similar for all the sites used. Details of the calculated period means,

annual to period mean ratios and the annualised annual means are summarised in Tables C.2 and C.3.

Table C. 2 - Automatic NO_2 Annualisation Summary (concentrations in µg/m^3)

Background Site	Annual Data Capture (%)	Annual Mean (A_m)	CM1	
			Period Mean (P_m)	Ratio (A_m / P_m)
Charlton Mackerell	97.8	3.7	4.4	0.850
Plymouth Centre	99.4	13.7	15.2	0.902
Yarner Wood	95.0	2.4	2.6	0.897
Average (R_a)			0.883	
Raw Data Annual Mean (M)			19.4	
Annualised Annual Mean (M x R_a)			17.1	

Table C. 3 - Automatic O_3 Annualisation Summary (concentrations in µg/m^3)

Background Site	Annual Data Capture (%)	Annual Mean (A_m)	CM1	
			Period Mean (P_m)	Ratio (A_m / P_m)
Charlton Mackerell	98.6	58.8	51.0	1.153
Honiton	89.5	58.4	51.4	1.135
Plymouth Centre	96.8	51.7	45.4	1.139
Yarner Wood	99.0	64.0	55.2	1.159
Average (R_a)			1.146	
Raw Data Annual Mean (M)			40.4	
Annualised Annual Mean (M x R_a)			46.3	

NO_2 Fall-off with Distance from the Road

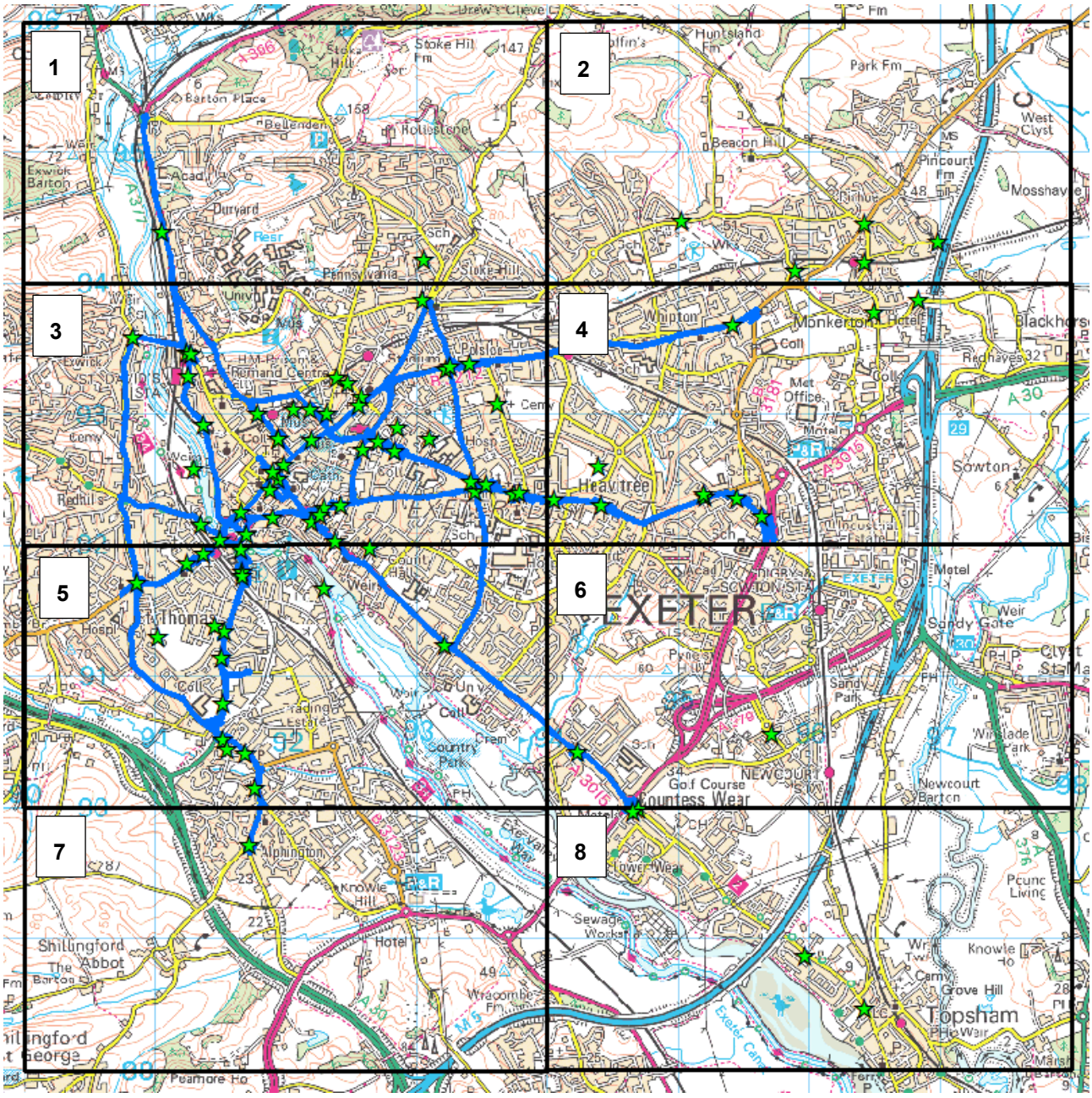
No automatic NO_2 monitoring locations within Exeter City Council required distance correction during 2024.

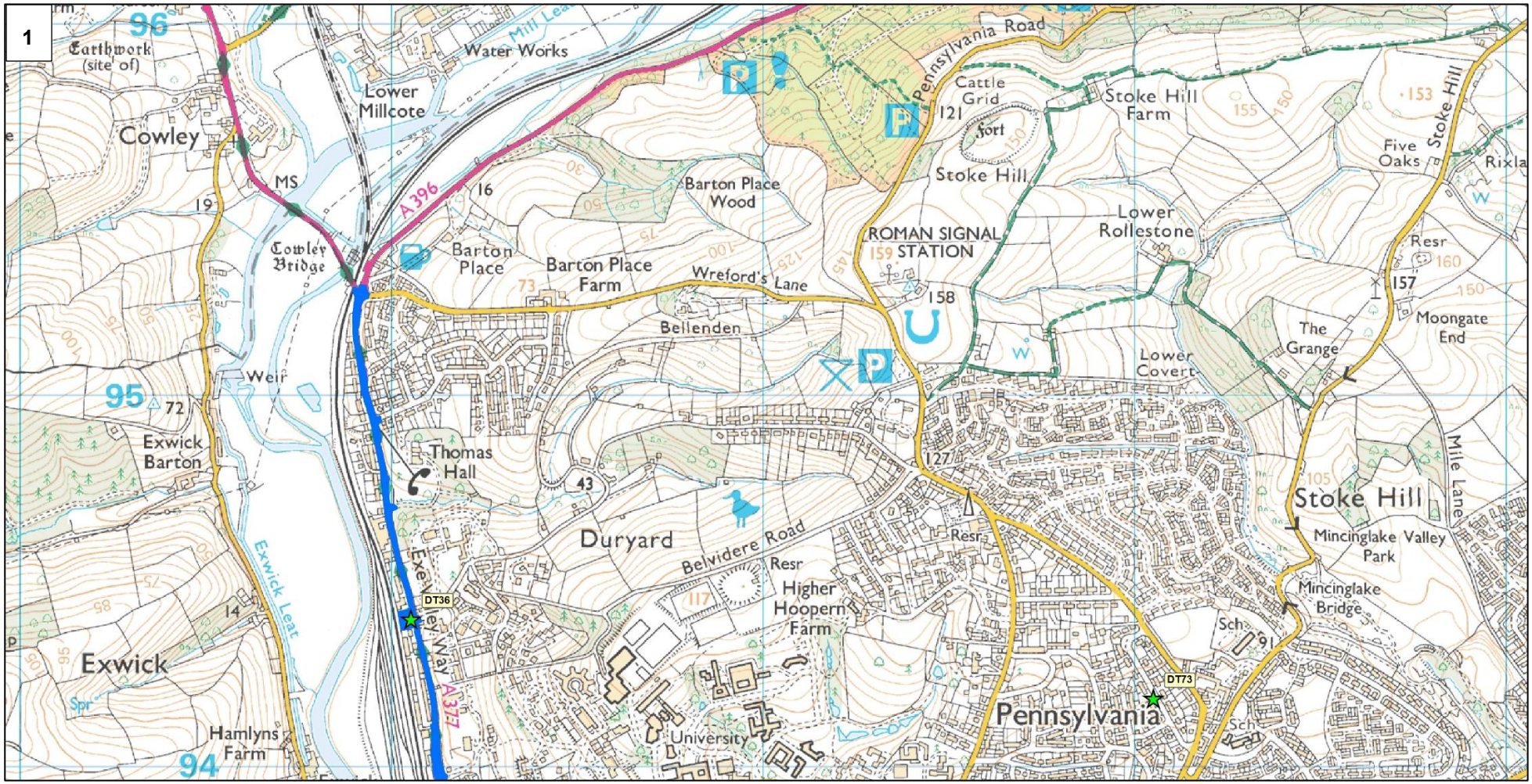
Appendix D: Map(s) of Monitoring Locations and AQMAs

Figure D. 1 - Map of Non-Automatic Monitoring Sites

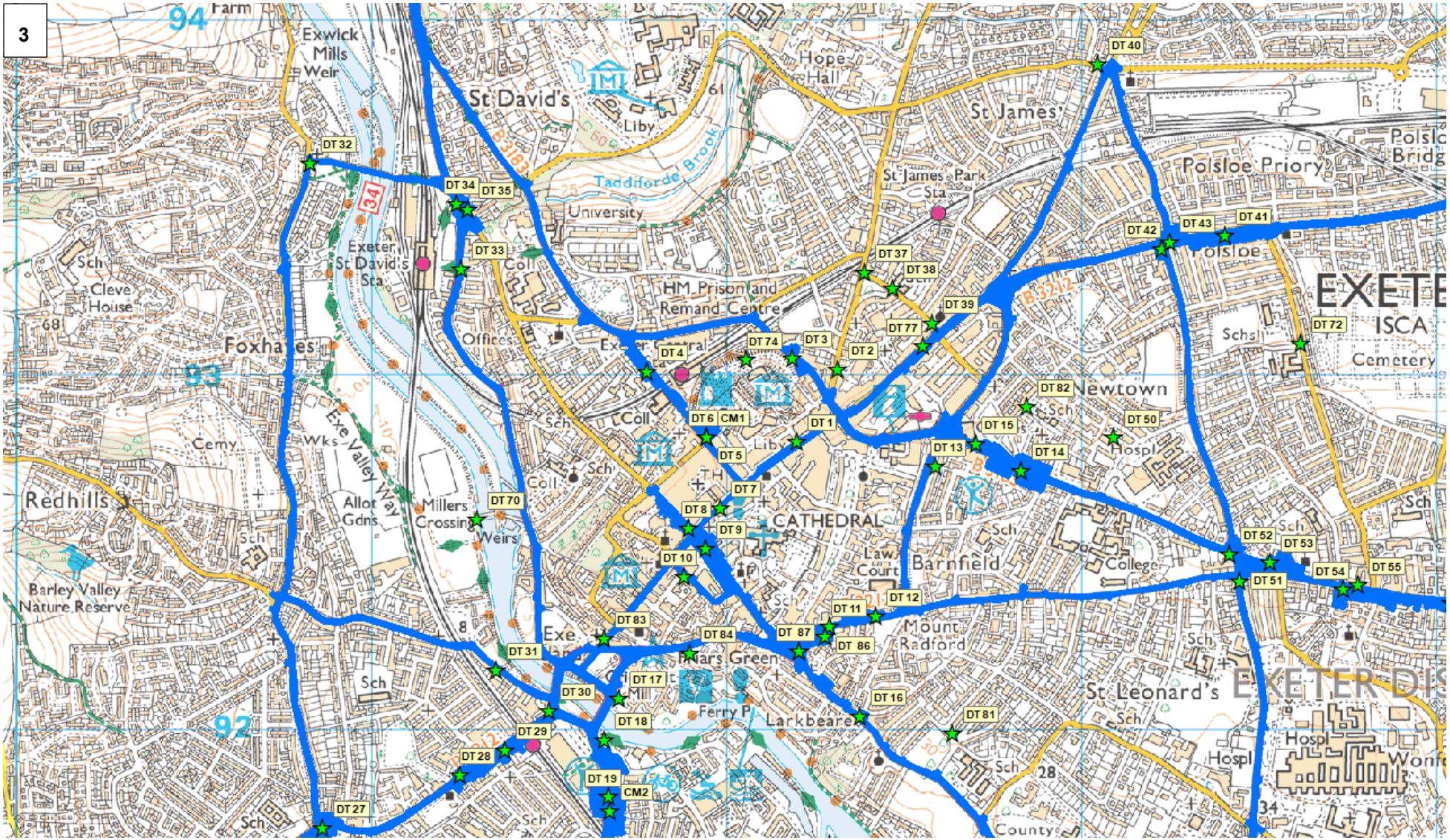
The monitoring locations and 2023 data can also be viewed using an online map here.

Monitoring location = ★
AQMA = ▬

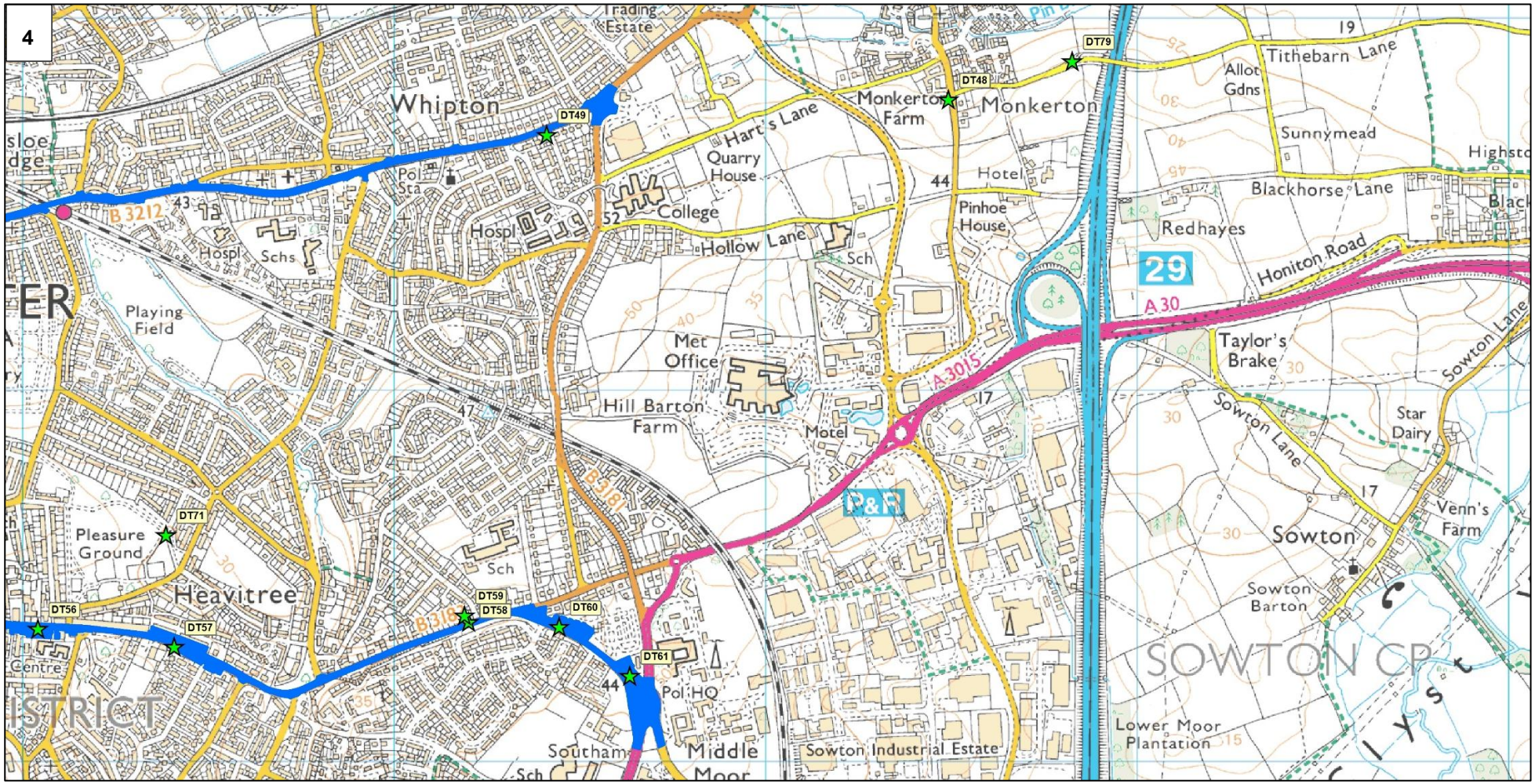


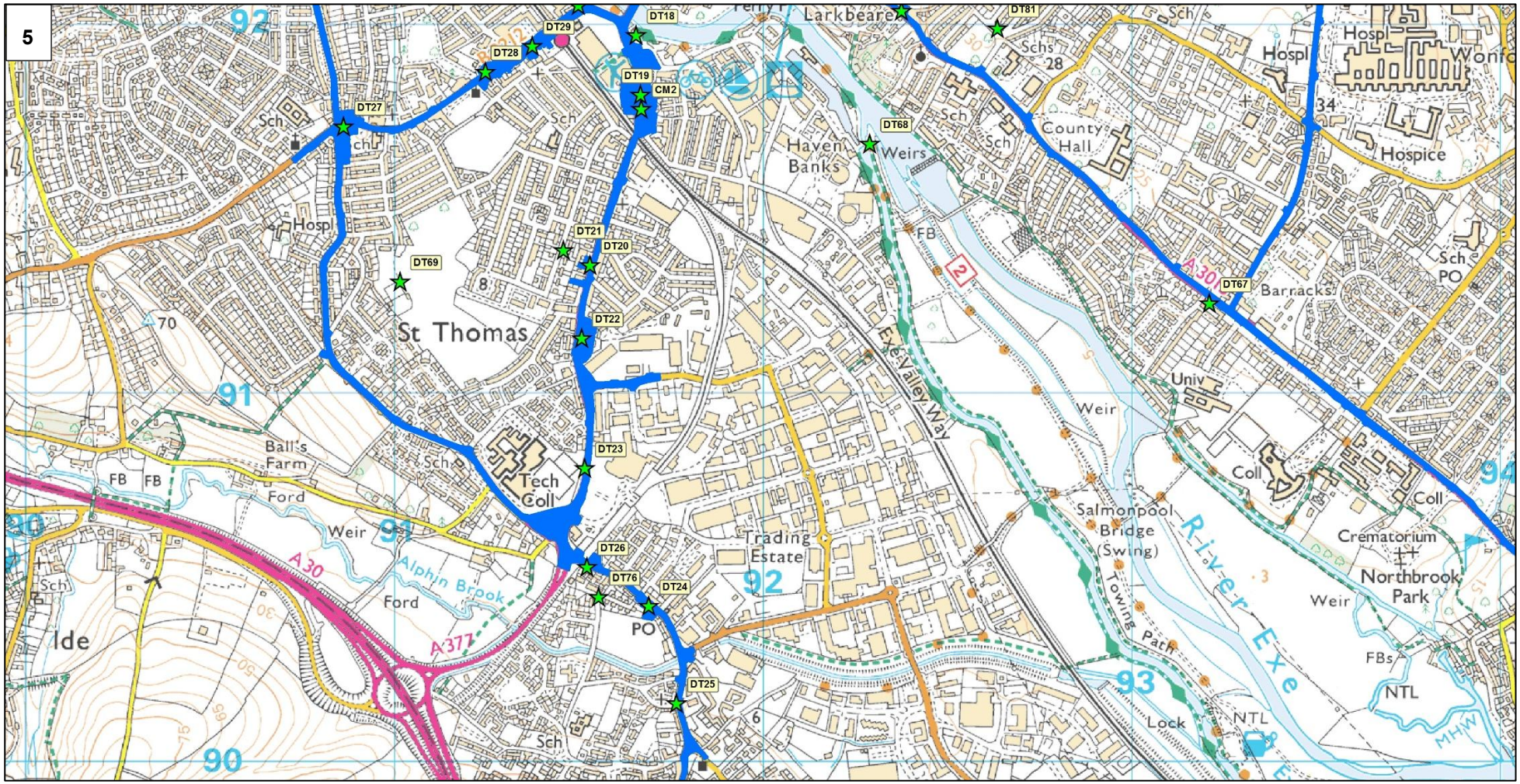


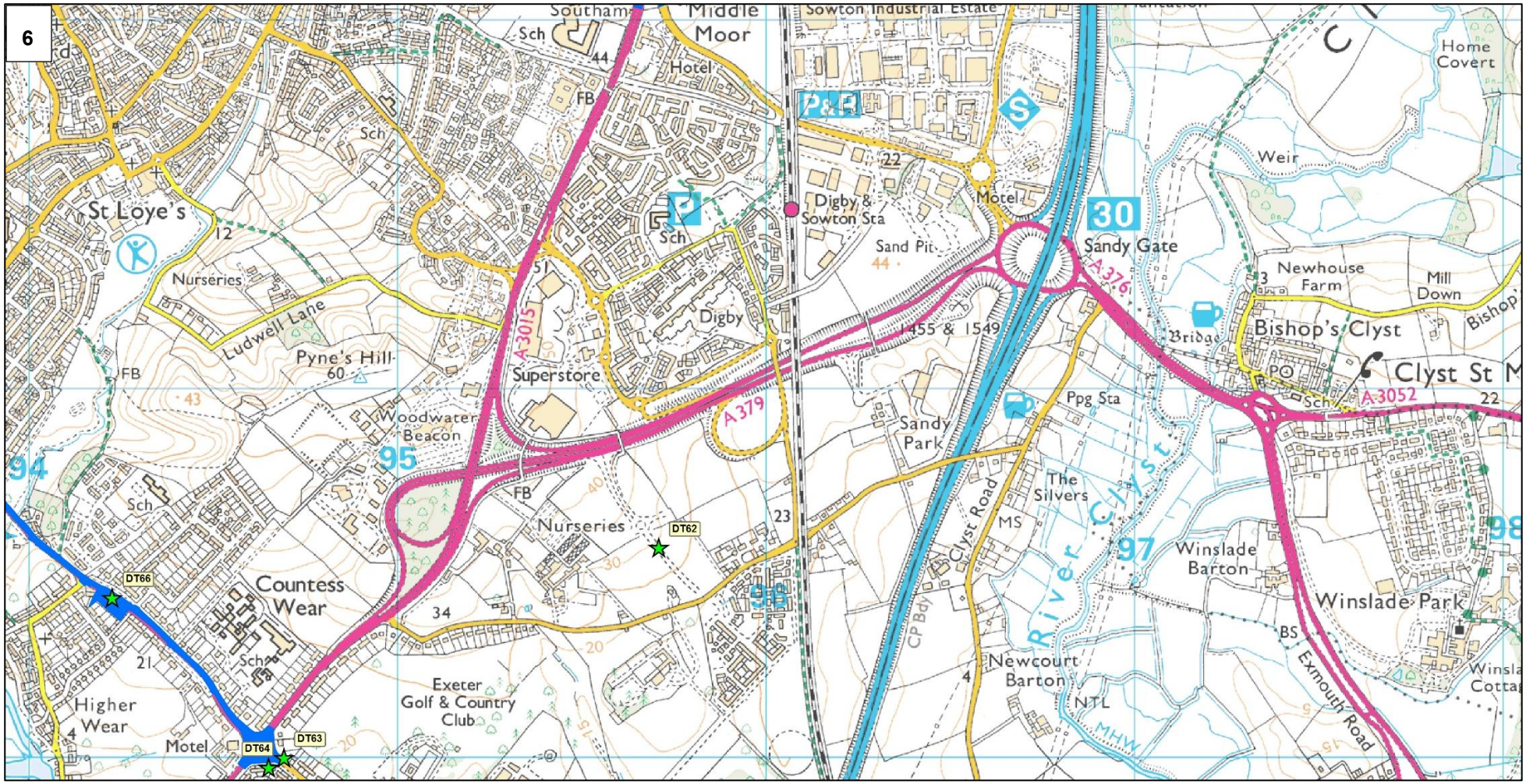
This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of His Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Exeter City Council 10025345, 2024

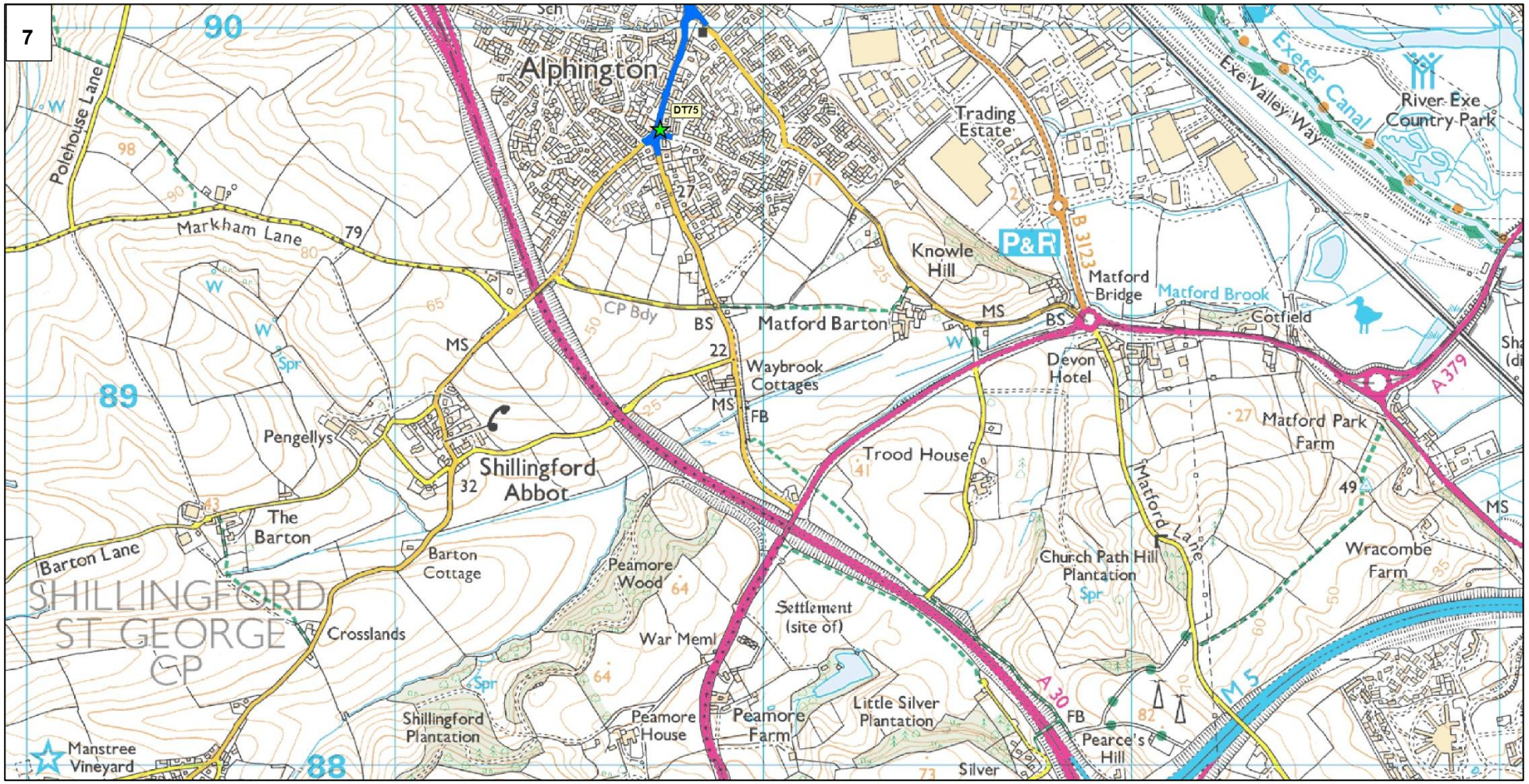


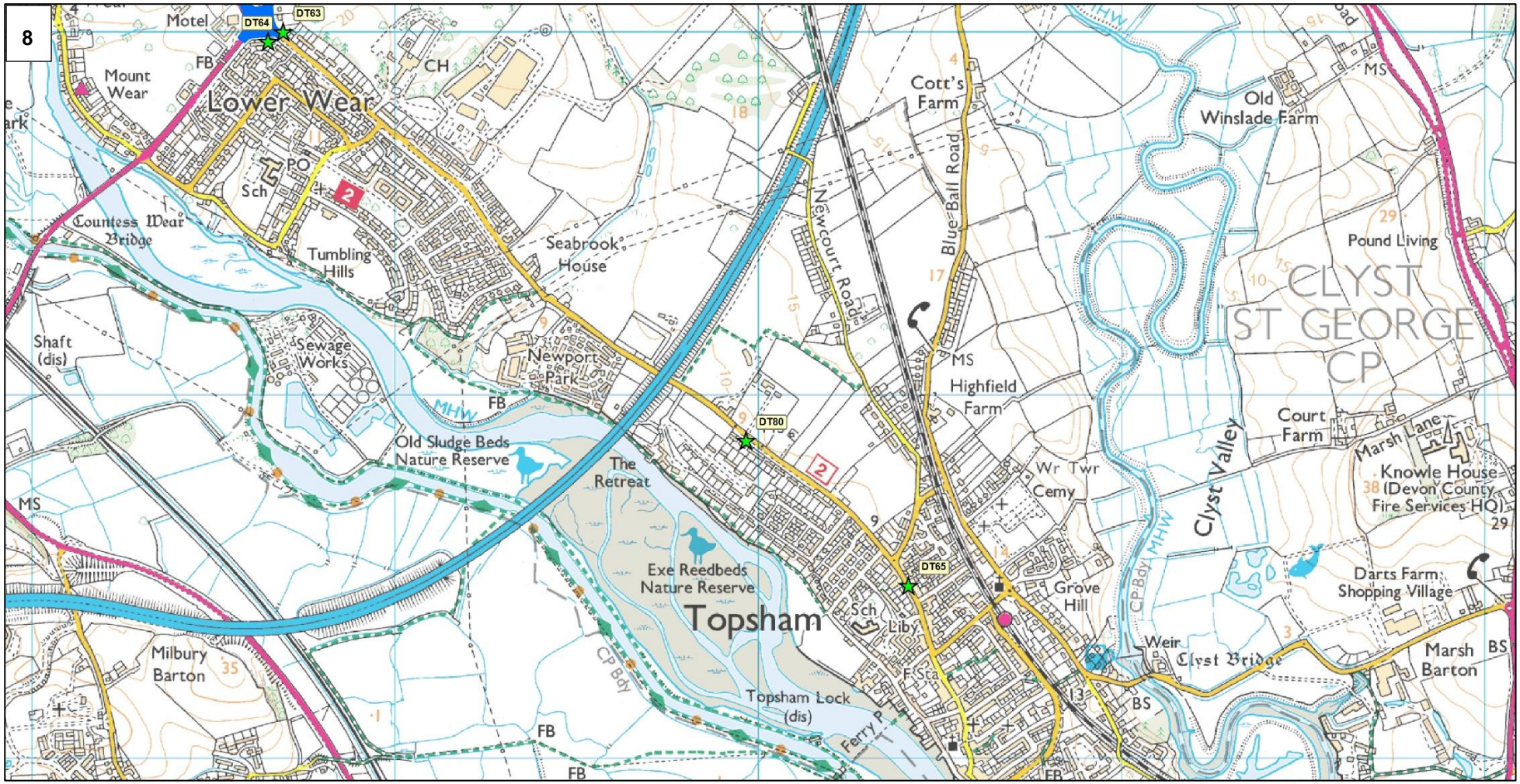
This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of His Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Exeter City Council 10025345, 2024











This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of His Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Exeter City Council 10025345, 2024

Appendix E: Summary of Air Quality Objectives in England

Table E. 1 - Air Quality Objectives in England

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

Appendix F: AQMA Boundary Review

There are two steps involved in the process. Firstly, the Council needs to have confidence that it has identified all locations for which the air quality objectives are exceeded. Secondly, it then needs to identify an AQMA boundary which includes these locations. The AQMA boundary can be larger than the area of exceedance although the current intent is for a smaller, more specific 'hot spot' AQMA which provides a clearer focus for AQAP measures.

The policy and technical guidance do not specify how councils should identify the limits to the areas of exceedance, only saying that the authority should have broad confidence in the monitoring data and/or modelling, be aware of the uncertainties and show in their annual report what steps they have taken to minimise these. However, the guidance goes on to warn local authorities against expending significant resources narrowing down the parameters of an AQMA to the detriment of identifying measures and taking action. DEFRA suggest that where normal annual monitoring and local intelligence shows a persistent exceedance (or risk of exceedance) the local authority consider moving immediately to declaring and establishing (or extending) an AQMA and hence to the development of AQAP measures to remediate the problem. Only local authorities who, until now, have had few air quality problems, or have sufficient doubts, should consider the necessity of obtaining further supporting information.

This paragraph above suggests that provided the uncertainties can be minimised there is no absolute requirement for modelling of the extent of an exceedance. The question is therefore whether the monitoring that is currently undertaken by the Council is sufficient to allow us to determine the extent of the exceedance.

The 2024 data presented in this report shows that only the East Wonford Hill diffusion tube (DT57) has had exceedances during the last 3 years. Furthermore, it is possible to say the following:

- The monitoring meets the DEFRA guidance for QA/QC, so uncertainties are reasonably well understood and controlled.
- The western (inner) extent of the exceedance is likely to be at or before the junction with Butts Road, because the diffusion tube beyond this junction (Fore Street inbound, DT56) is below the objective. This location is shown as the western red line on the map in Figure F.10 below.

- The eastern (outer) extent of the exceedance is likely to be at or before the junction with Rifford Road, because the diffusion tubes beyond this location (Honiton Road, DT58 and Honiton Road façade, DT59) are both below the objective. This location is shown as the eastern red line on the map in Figure F.10 below.
- The area of exceedance will be no larger than the existing AQMA, given that concentrations at all monitoring sites have reduced since that AQMA was declared.

The other question to be considered is whether both sides of this section of road are affected, or only the southern side (where the houses are closer to the roadside and where the diffusion tube is located). Currently the AQMA boundary includes the houses on both sides of the road, based on dispersion modelling undertaken prior to declaration, as shown in the map below. There is no suggestion that the extent of the exceedance will be greater than it was at that stage, given that monitored concentrations have fallen. There are two possible approaches:

1) Use the attenuation with distance calculator to predict the likely concentration at the façade of the houses on the north side. Using the 2023 data (which is higher and therefore more conservative than the 2024 data), this shows a level of 35.2 mg/m^3 at the closest house to the road. This suggests that only the south side is exceeding the limit. The background concentration for this calculation has been taken from the Heavitree Pleasure Ground diffusion tube (DT71), which is shown on the map in Figure F.2 below.

Figure F. 1 - Attenuation with Distance Calculation

BUREAU VERITAS

Enter data into the pink cells

Step 1	How far from the KERB was your measurement made (in metres)?	2	metres
Step 2	How far from the KERB is your receptor (in metres)?	4	metres
Step 3	What is the local annual mean background NO_2 concentration (in µg/m^3)?	7.8	µg/m^3
Step 4	What is your measured annual mean NO_2 concentration (in µg/m^3)?	40.5	µg/m^3
Result	The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor	35.2	µg/m^3

2) Include both sides of the road even though there is no evidence that both are affected. This takes into account the uncertainty in the process described above, is

precautionary and also avoids making just a very small number of properties the subject of the AQAP. Including both sides of the road in this way would not 'dilute' the impact of the AQAP because it would still only include just a short stretch of one road.

It is proposed to adopt option 2 and the draft AQMA order, including the new boundary, is shown below. The new area includes 225m of road and 47 residential addresses.

This approach was sent to the LAQM helpdesk in May 2024 and the following response was received: We have reviewed the below and agree with your approach. Adopting option 2 seems to be this most robust approach and your reasoning is welcomed.

The Council will undertake an 10-week consultation on the proposed new boundary. The following consultees will be asked for their views:

- Residents within the new AQMA boundary (by means of a letter)
- The public, by means of information on the City Council website.
- Councillors on the Executive committee, by means of the annual report
- Neighbouring District Councils and the County Council, by letter
- Director of Public Health, by letter
- Highways England, by letter
- Environment Agency, by letter
- Natural England, by letter

The draft consultation plan is included below.

1. Title of consultation	
Consultation on the revision of the Air Quality Management Area boundary.	
2. Responsible officers	
Director	Adrian Pengelly
Head of Service	Simon Lane
Consultation lead officer	Simon Lane
3. Purpose of the consultation	
Explain why the council is consulting on this issue. Where the council has a preferred option, state this and explain how and why that preference was chosen. Where specific	

options have been rejected, explain why we do not consider them practical. Where options are offered, they should be realistic and deliverable.

It is necessary to amend the boundary of the current Air Quality Management Area to reflect the significantly improved levels of nitrogen dioxide in the city. There is a legal requirement to reduce the size of the current Area to reflect this change.

Exeter City Council's proposed new boundary, and the justification for this, are described in the Air Quality Annual Status Report for 2025.

4. Timing, duration and key milestones

Set out when will the consultation take place and for how long (6-8 weeks minimum)

The consultation will commence when the Annual Status Report is presented to Executive committee on the 4 November 2025. It will end on 16 January 2026. The consultation period is 10 weeks.

Set out other key milestones e.g. date of report to committee, data analysis schedule and date of publication of results and feedback

Once the consultation period has ended, the responses will be evaluated and the final order then submitted to DEFRA in February 2026 for their approval. The new order will be adopted and signed by the end of April 2026.

5. Equality Impact Assessment

Confirm that a EQIA has been completed and date

The EQIA is included within the Annual Status Report.

6. Consultees and how they will be consulted (survey, public meeting, exhibition, focus group)

Consultee	Method
Those most affected by the proposal (Those living in the revised Area)	Direct letter to households
Exeter residents	Consultation advertised on City Council website
General public	Consultation advertised on City Council website
Members (ECC and DCC)	Consultation starts after report is taken to Executive Committee
Partners and other statutory stakeholders	Statutory consultees will be written to directly (see list in Annual Status report)

Other stakeholders	

7. Public Sector Equality Duty

Set out any special provisions that are required to ensure that people with protected characteristics are able to partake in the consultation.

Characteristic	Special provision
Age	Consultees will have the opportunity to respond by electronic communication, telephone or a personal visit (in the case of residents within the Area only)
Disability(includes mobility, sensory, learning and mental health)	Consultees will have the opportunity to respond by electronic communication, telephone or a personal visit (in the case of residents within the Area)
Race/ethnicity(includes Gypsies and Travellers),	No special provisions required
Sex and gender	No special provisions required
Gender identity	No special provisions required
Religion and belief	No special provisions required
Sexual orientation	No special provisions required
Pregnant women, new and breastfeeding mothers,	No special provisions required
Marriage and civil partnership	No special provisions required

8. Supporting information

What background information will be provided for consultees and in what format?

The Annual Status Report, and a summary of it, will be available on the Council's website. A copy of the summary will be included with the letters to the households within the area.

9. Publicity

How will consultees be made aware of the consultation and the results?

Please see section 6. The final report will be to Full Council with the decision being published on the Council's website (with minutes of the meetings).

10. Accessibility

How will you ensure that consultation material meets accessibility and readability standards? (See intranet)

The accessibility and readability standards will be adhered to.

11. Demographics

What demographic data, if any, will be collected on consultees?

None

12. GDPR

If personal data is being collected, confirm that this has been agreed with the Data Protection Officer and that an appropriate privacy statement is included in any surveys.

None

13. Resource implications

Set out which internal resources will support this consultation or provide details of external resource requirements and means of funding.

The consultation will be undertaken within existing resources.

14. Carbon Footprint (Environmental) Implications:

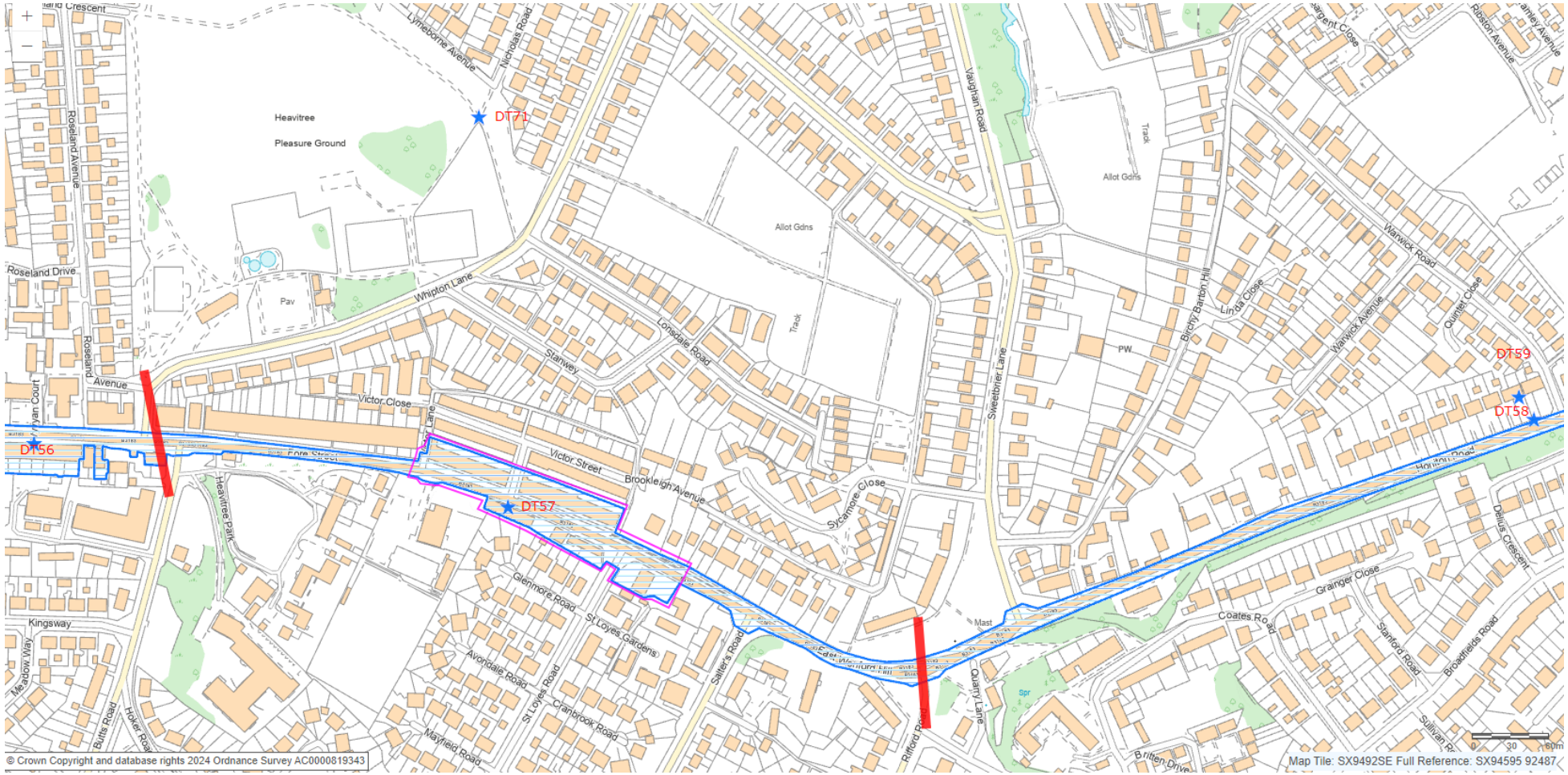
How are carbon/environmental impacts arising from the consultation being addressed?

The subject of the consultation has been brought about as a result of improving levels of traffic pollution.

15. Approval

Head of Service		***Director***	
Name		Name	
Signature		Signature	
Date		Date	

Figure F. 2 - Map Showing Relevant Diffusion Tube Locations



The existing AQMA boundary is shown in blue, with the proposed new boundary drafted in pink.

Proposed New AQMA Order

Environment Act 1995 Part IV Section 83(1)

The Exeter Air Quality Management Area Order 2026

Exeter City Council, in exercise of the powers conferred upon it by Section 83(1) of the Environment Act 1995, hereby makes the following Order:

1. This Order may be cited/referred to as the Exeter Air Quality Management Area Order 2026 and shall come into effect on [date TBC].
2. The area shown on the attached map in red is to be designated as an air quality management area (the designated area), incorporating a section of East Wonford Hill. The map may be viewed at the Council Offices. This Area is designated in relation to a likely breach of the nitrogen dioxide annual mean objective as specified in the Air Quality Regulations 2000.
3. This Order shall remain in force until it is varied or revoked by a subsequent order.
4. The Exeter Air Quality Management Area 2010 shall be varied accordingly.

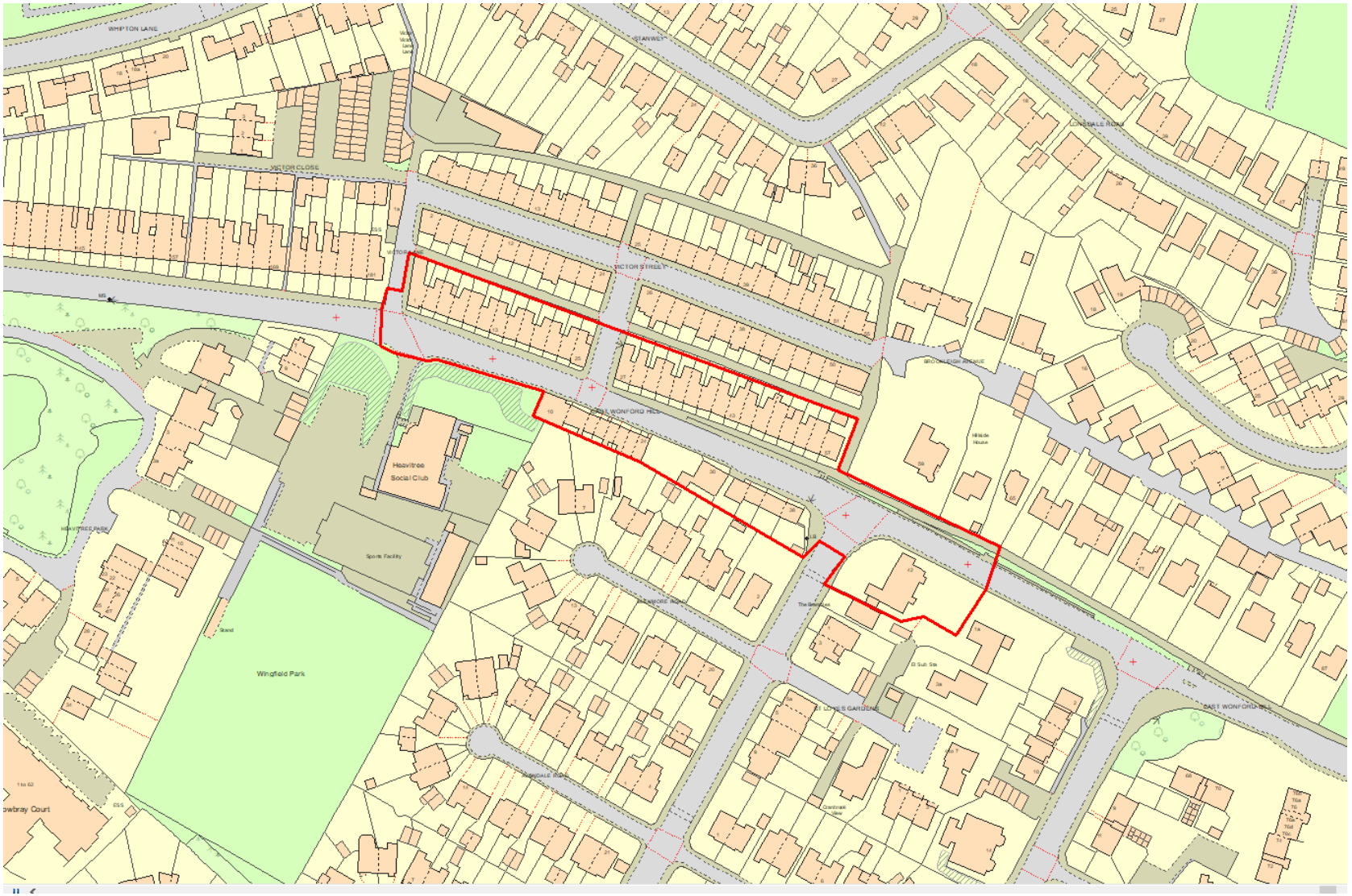
Dated the [date]

The Common Seal of Exeter City Council was hereunto affixed in the presence of:

A duly authorised signatory

Seal no.

The Exeter Air Quality Management Area



The Annual Status Report 2024 already assessed any likely equalities impact for amending the AQMA. The assessment identified either no impact or positive impact and concluded no required actions for promoting inclusion. More detail of the assessment has been reproduced below for reference.

Protected characteristic/ area of interest	Positive or Negative Impact	High, Medium or Low Impact	Reason
Race and ethnicity (including Gypsies and Travellers; migrant workers; asylum seekers).	Positive / No Impact		This change can occur because of a reduction in nitrogen dioxide concentrations such that a far smaller area of the city is above the health-based objectives for this type of pollution. This means that the health effects of nitrogen dioxide will be reduced. It also means that a more focussed new Air Quality Action Plan (AQAP) can subsequently be produced. This will bring about further improvements in air quality and subsequently health. Any necessary restrictions or changes in the new plan can be limited to the region of the much smaller new AQMA if appropriate. (The new Action Plan will be subject to a further EQIA during its development).
Disability: as defined by the Equality Act – a person has a disability if they have a physical or mental impairment that has a substantial and long-term adverse impact on their ability to carry out normal day-to-day activities.	Positive		Poor air quality has a greater effect on vulnerable persons, such as the very young, the very old and those with pre-existing health conditions.
Sex/Gender	Positive / No Impact		As above
Gender reassignment	Positive / No Impact		As above

Protected characteristic/ area of interest	Positive or Negative Impact	High, Medium or Low Impact	Reason
Religion and belief (includes no belief, some philosophical beliefs such as Buddhism and sects within religions).	Positive / No Impact		As above
Sexual orientation (including heterosexual, lesbian, gay, bisexual).	Positive / No Impact		As above
Age (children and young people aged 0-24; adults aged 25-50; younger older people aged 51-75/80; older people 81+; frail older people; people living with age related conditions. The age categories are for illustration only as overriding consideration should be given to needs).	Positive		Poor air quality has a greater effect on vulnerable persons, such as the very young, the very old and those with pre-existing health conditions.
Pregnancy and maternity including new and breast feeding mothers	Positive		Poor air quality has a greater effect on vulnerable persons, such as the very young, the very old and those with pre-existing health conditions.
Marriage and civil partnership status	Positive / No Impact		As above

Actions identified that will mitigate any negative impacts and/or promote inclusion

- None required

Officer: Simon Lane

Date: June 2025

Appendix G: NO_2 Trends at East Wonford Hill (DT57)

Prior to 2024, the only year when concentrations at East Wonford Hill (DT57) were below the objective was 2020 during the COVID pandemic. In 2024 levels were similar to those in 2020, i.e. 1.8 µg/m^3 below the objective. The exceedances in both 2022 and 2023 were small at just 0.4 µg/m^3 and 0.5 µg/m^3, respectively.

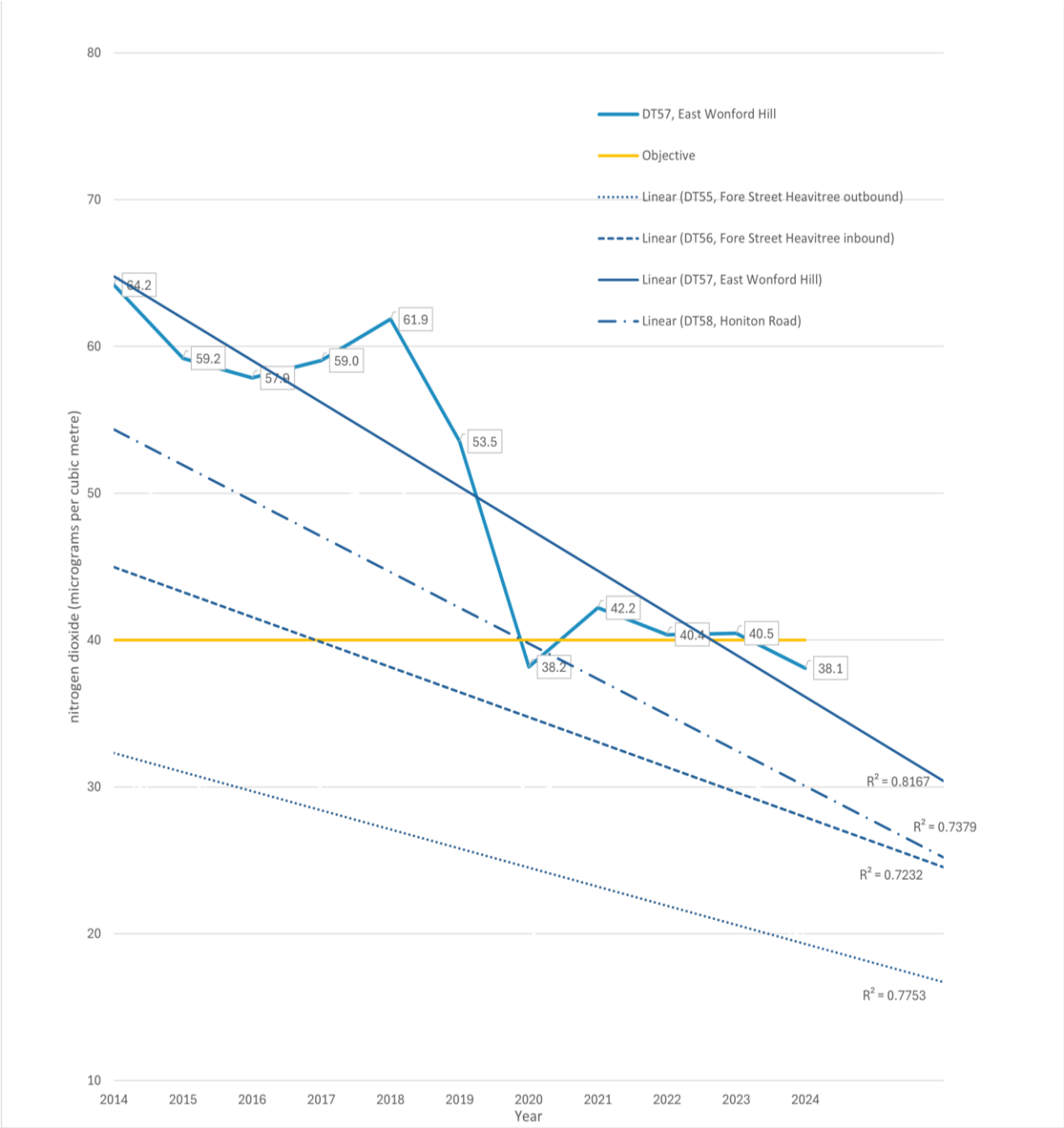
Further assessment of the trends in concentrations in this area are shown in Figure G1 below, including regression lines. This suggests that the fall from 2023 to 2024 is within the expected trend of reducing pollution levels and not likely to be caused by any exceptional circumstances.

The reductions seen over this period are considered to be the cumulative effect of on-going factors, including the measures in the Air Quality Action Plan, new travel & working behaviours (fewer vehicles on roads, more home and remote working), and improvements in vehicle emission technologies.

The final of these factors is likely to have been of increasing signifcance over the period due to accelerated phasing out of older vehicles by electric and hybrid vehicles, particularly for cars. (Cars contributed to about 83% of the total traffic on roads along Heavitree Corridor in 2024, followed by light goods vehicles at about 12% (see Appendix I)). The growth was exponential for electric cars in Exeter, during the period from 2023 Q1 to 2024 Q1, as shown in Figure G2 (data are based on quarterly statistics presented in Appendix I).

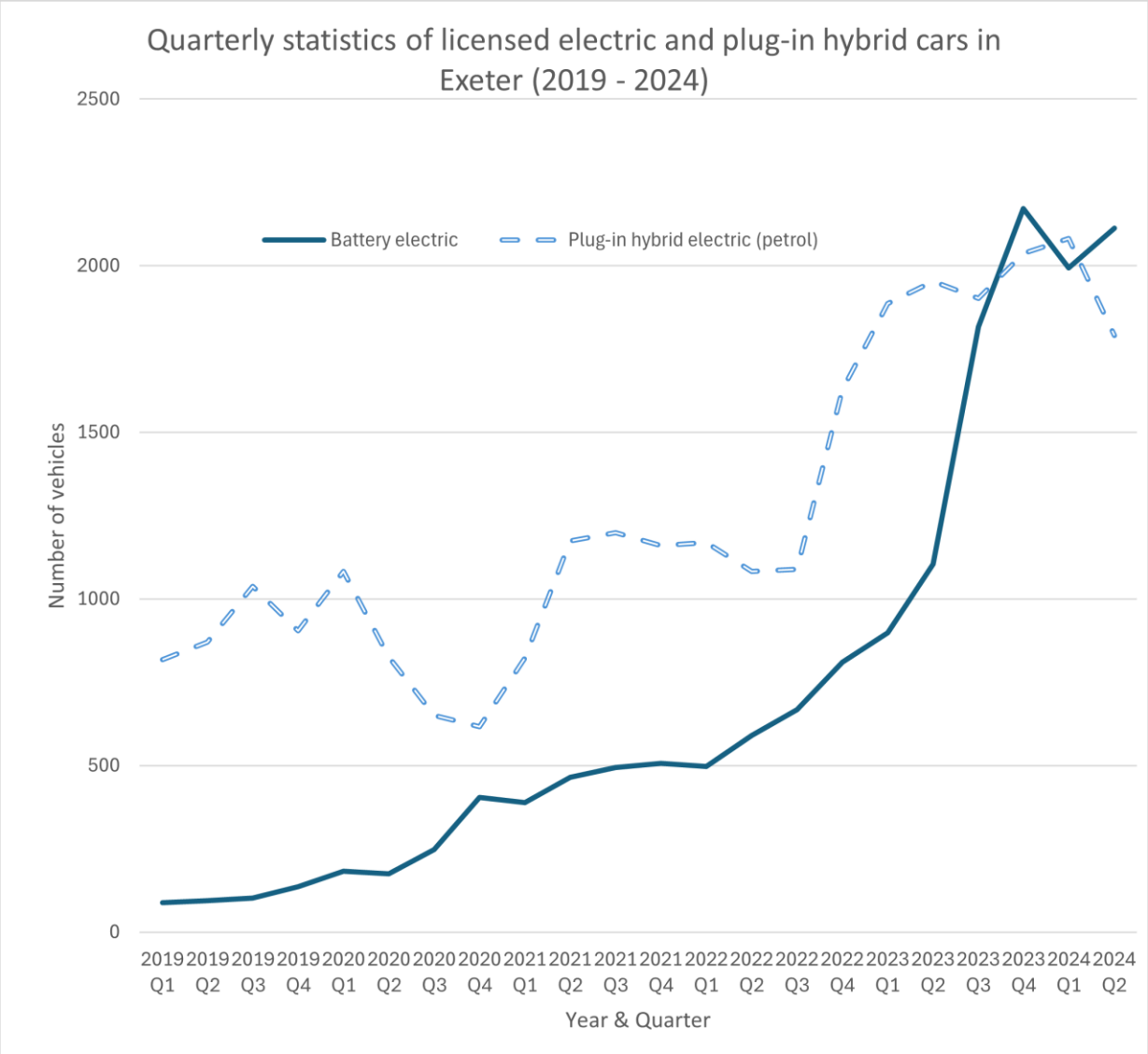
Meanwhile, the number of petrol and diesel cars licensed in Exeter decreased in 2024. The reduction from 2024 Q1 to Q2 actually outpaced the increase of licensed hybrid cars, i.e. 2462 and 829, respectively (see Appendix I). Since 2019 Q1, the number of diesel cars has been reducing year-on-year, with no exception from 2023 to 2024, except a small rise in 2020 Q4. (see Figure G3).

Figure G. 1 - Trends of Nitrogen Dioxide at Selected Locations within Heavitree Area



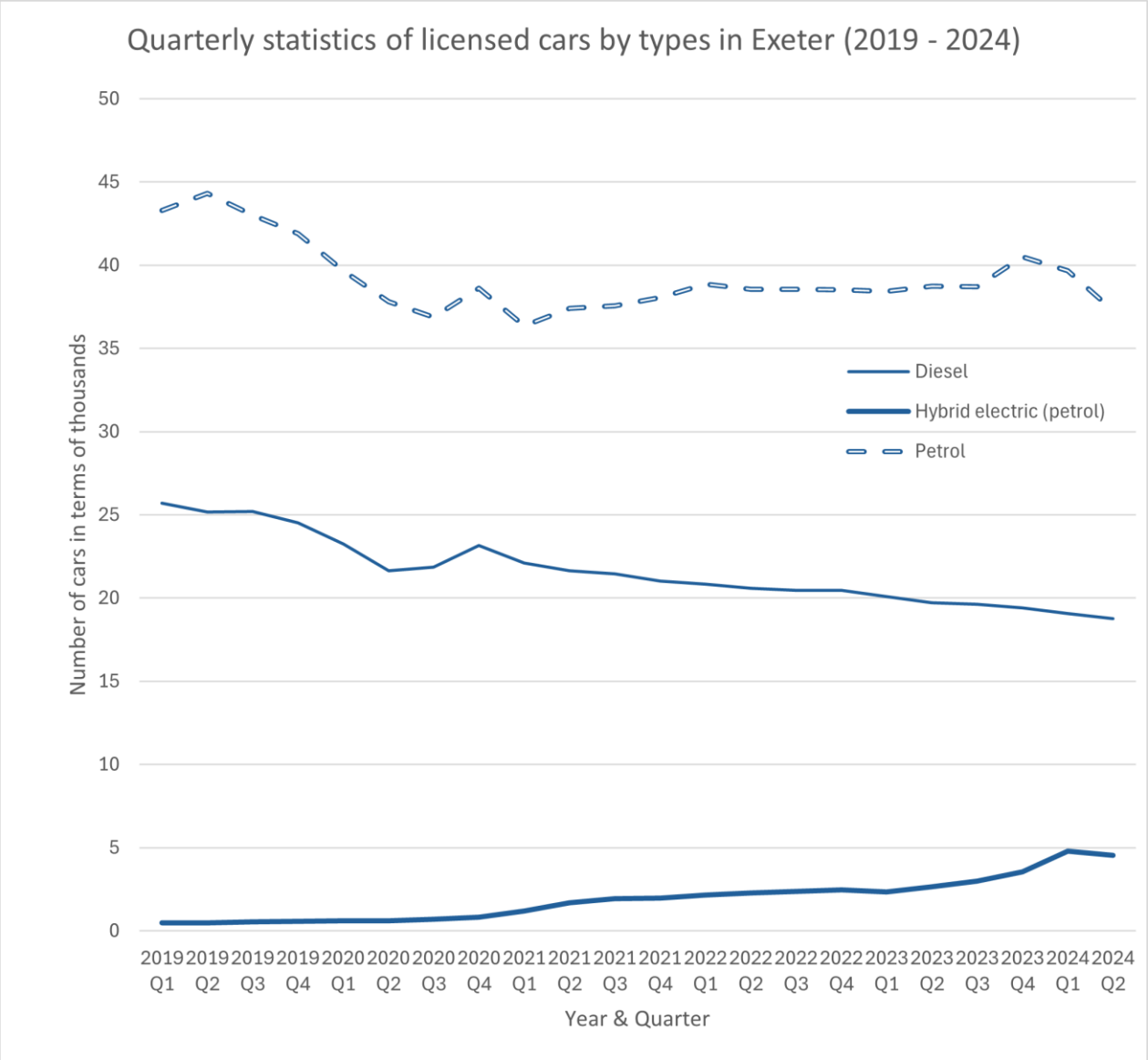
This figure presents long-term downward trends of NO_2 annual mean concentrations at East Wonford Hill site (DT57) and other nearby sites along Heavitree corridor. The trends suggest compliance at East Wonford Hill site is expected in 2024.

Figure G. 2 - Licensed electric and plug-in hybrid cars in Exeter



This figure shows that the growth was exponential for electric cars in Exeter, during the period from 2023 Q1 to 2024 Q1.

Figure G. 3 - Licensed non-plug-in cars in Exeter

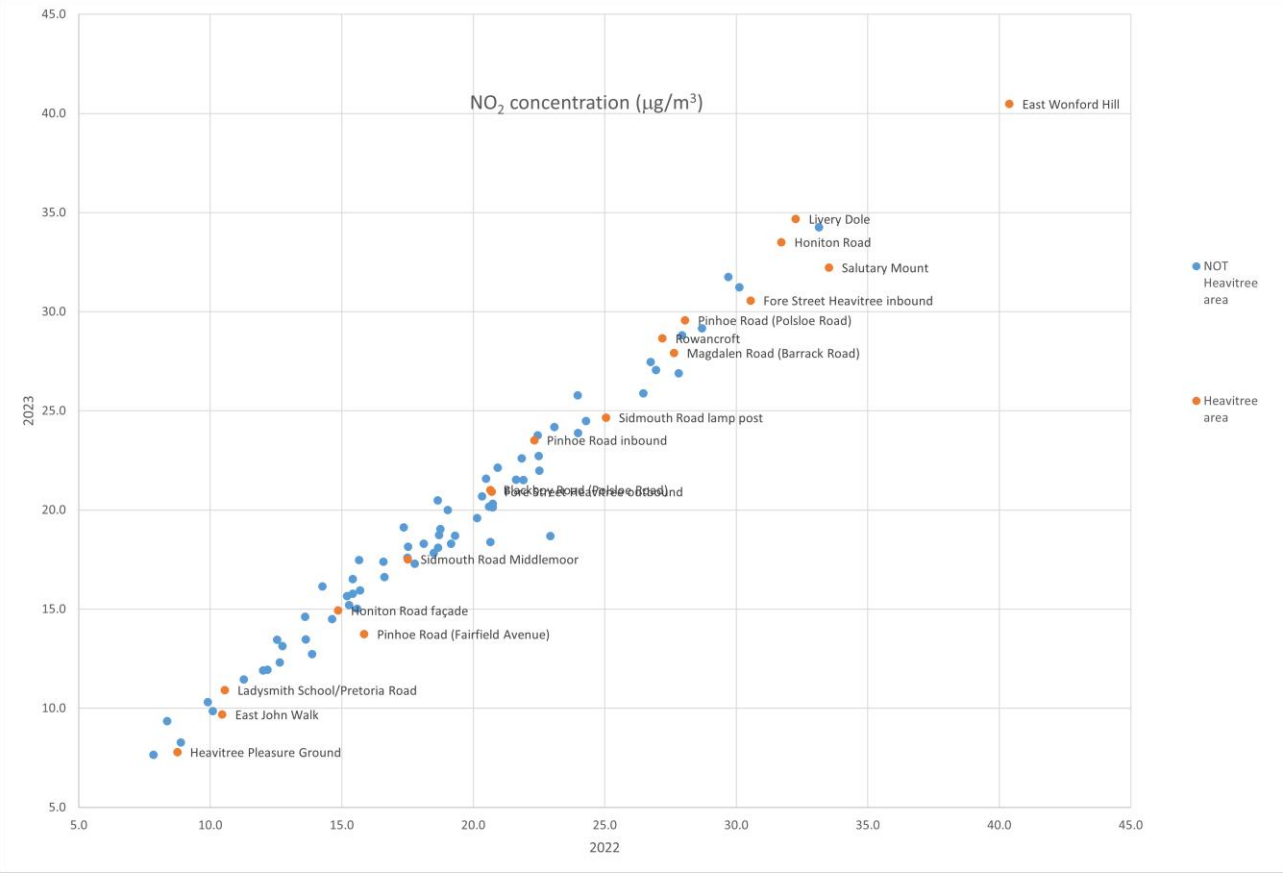


The figure presents the number of diesel cars has been reducing year-on-year since 2019 Q1, with no exception from 2023 to 2024, except a small rise in 2020 Q4.

Appendix H: Active Streets Trial – 2024 Assessment

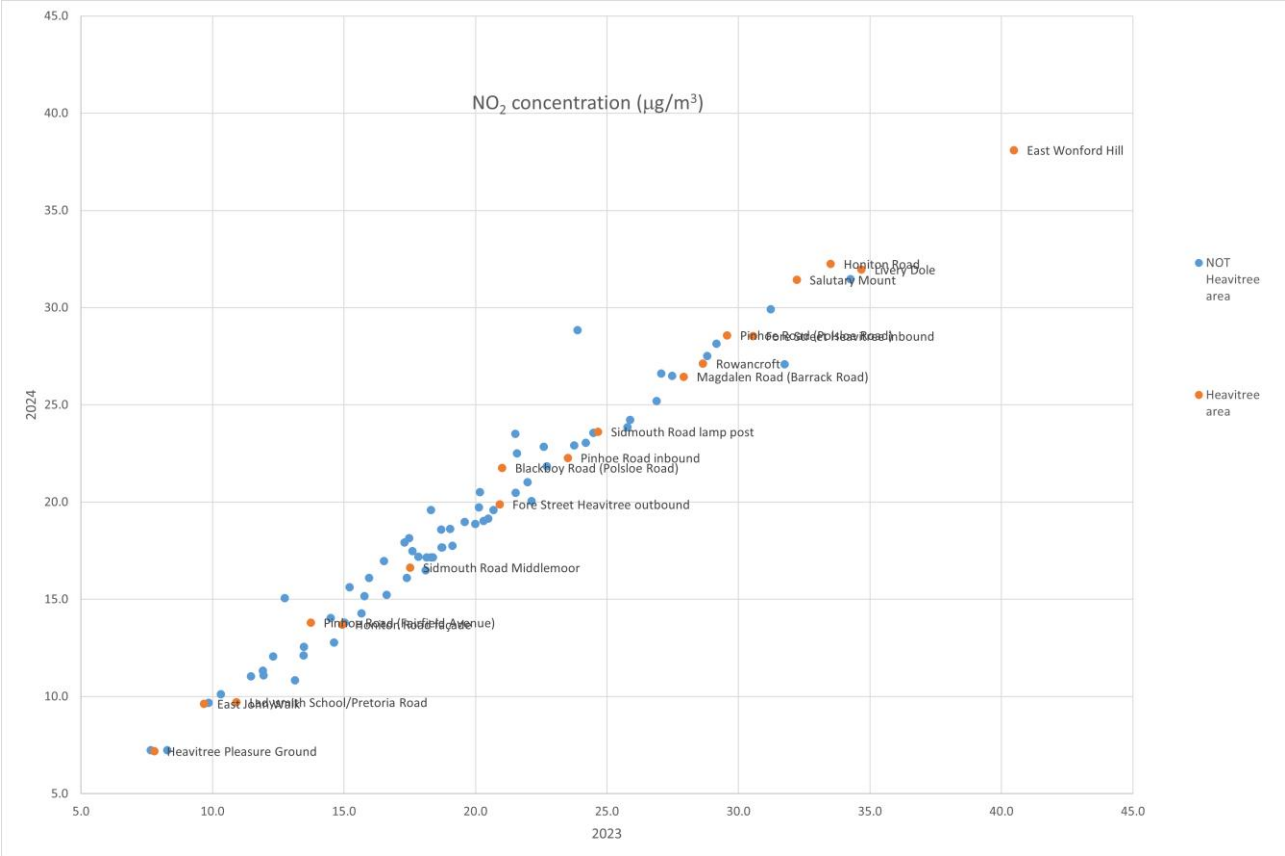
The trial of preventing through traffic in the Heavitree residential area (the scheme) commenced in September 2023 and came to an end in July 2024. The impact of these changes was discussed in the 2024 Annual Status Report. The graph from that report has been reproduced in Figure H.1 below. Figure H.2 shows the same assessment for a comparison of 2023 and 2024 data. The monitoring locations that are close to the Heavitree area are labelled and coloured orange. Those distant from the Heavitree area are coloured blue. All sites in the city have a similar relationship between the 'with scheme' and the 'without scheme' data periods. There is no suggestion that the areas expected to have been affected by the traffic scheme differ from the remainder of sites.

Figure H. 1 - Comparison of 2022 and 2023 Data



This figure presents the assessment of the trial during 2023.

Figure H. 2 - Comparison of 2023 and 2024 Data



This figure presents the assessment of the trial during 2024.

However it is recognised that a number of factors affect pollution levels on a year-to-year basis, so identifying the impact of the highway changes will never be straightforward. Further assesment was therefore conducted, considering traffic flows as well as air quality data.

The assessment focused on East Wonford Hill (DT57), with three other nearest sites within the Heavitree area for comparison..

Table H.1 presents the year-on-year traffic flows from 2020 to 2024. There was no significant change of the year-on-year work-day traffic flows from 2022 to 2023. However, there were reductions of workday traffic flows on both Heavitree Road and Pinhoe Road (Whipton) in 2024, instead of the expected increases.

Table H. 1 - Year-on-Year Changes of Traffic Flow Data (24-hr average)

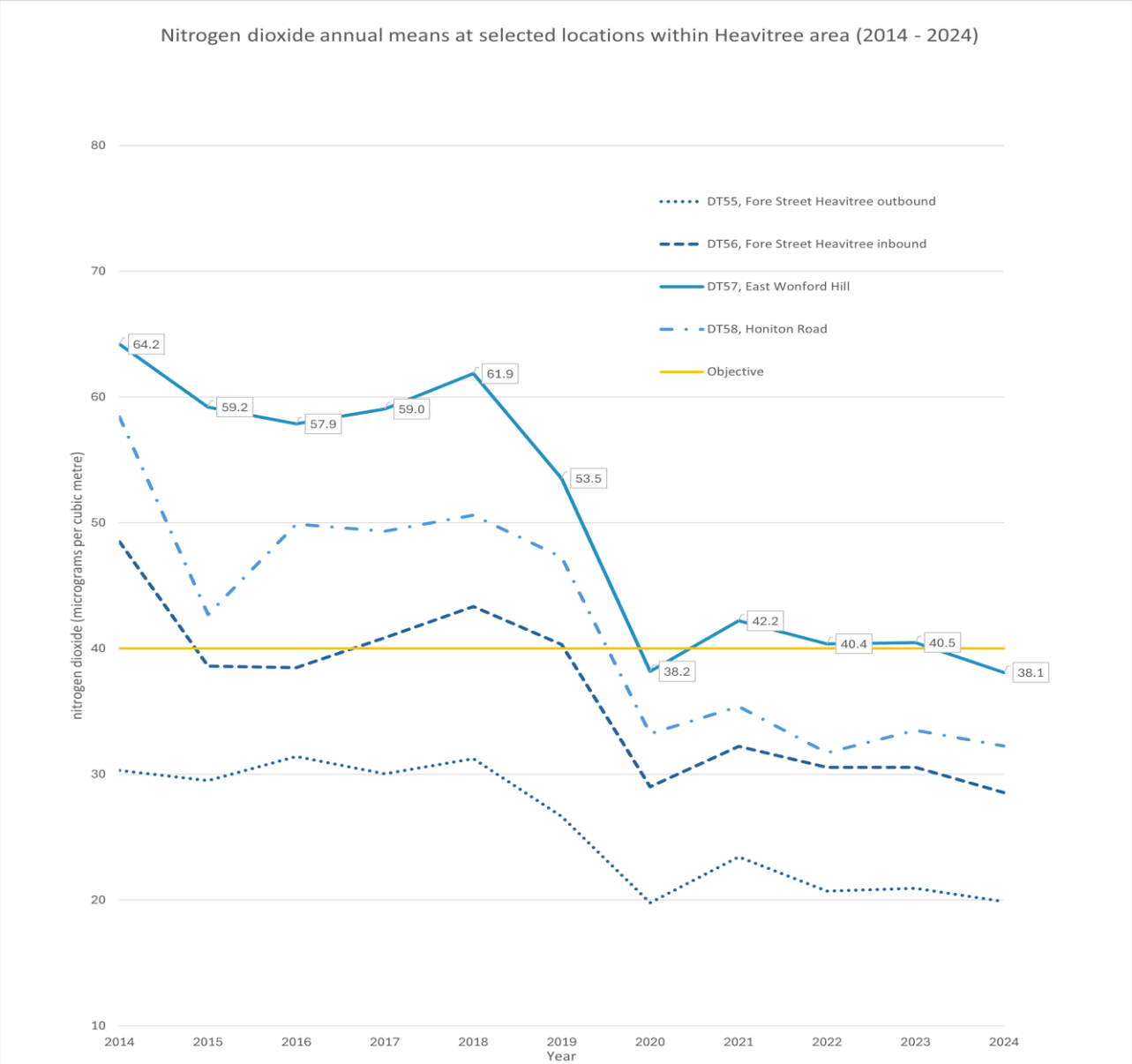
Site Name	% change from 2020 to 2021	% change from 2021 to 2022	% change from 2022 to 2023	% change from 2023 to 2024
Pinhoe Road (Whipton)	10%	12%	-5%	-3%
Heavitree Road	12%	9%	5%	-4%
Honiton Road	5%	7%	3%	1%
Topsham Road (King George)	14%	3%	1%	0%
Alphington St	6%	9%	-4%	4%
Cowick St	9%	5%	-3%	-2%
Total	**9%**	**7%**	**0%**	**0%**

Table notes:

All traffic flow data only represent average WORK-DAY flows, weekend flows have been excluded. Therefore, they should not be compared with other published 7-day traffic flows. Similarly, this report is only assessing flows and changes at these six selected locations, if different sites were chosen, different trends could appear.

Figure H.3 presents the nitrogen dioxide annual means at the East Wondford Hill site (DT57) and other three sites along the same traffic corridor, covering a 10-year period, up to 2024. There is no obvious impact of the Heavitree scheme in this data. The long-term continuous downward trends of the annual means should be noted.

Figure H. 3 - Trends at Selected Sites along Heavitree Corridor



This figure presents the nitrogen dioxide annual means at the East Wondford Hill site (DT57) and other three sites along the same traffic corridor, covering a 10-year period, up to 2024.

The potential beneficial effect of the trial on air quality within the residential Heavitree area has been considered, by reviewing the diffusion tube data from DT71 (Heavitree Pleasure Ground). The nitrogen dioxide annual means at this site have been consistently around 8 µg/m^3 during all of the past five years, i.e. 32 µg/m^3 below the 40 µg/m^3 objective.

It is not therefore possible to identify an significant impact of the scheme on local air quality data, either positive or negative. These reductions seen over the period since COVID are considered to be the cumulative effect of on-going influencing factors, these include effects of the measures in the Air Quality Action Plan, new travel & working

behaviours (fewer vehicles on roads, more home and remote working), and ongoing improvements in vehicle emission technologies.

Appendix I: Licensed Vehicles Statistics and Traffic Mix

Year	Diesel	Hybrid electric (petrol)	Other fuels	Petrol	Total
2017 Q1	28.539	0.288	0.385	36.443	65.655
2017 Q2	28.902	0.322	0.391	35.35	64.965
2017 Q3	30.716	0.352	0.482	35.271	66.821
2017 Q4	30.162	0.371	0.684	35.87	67.087
2018 Q1	28.35	0.445	0.629	40.427	69.851
2018 Q2	29.273	0.452	0.685	41.577	71.987
2018 Q3	27.579	0.441	0.56	39.189	67.769
2018 Q4	25.997	0.441	1.018	39.492	66.948
2019 Q1	25.696	0.477	0.98	43.302	70.455
2019 Q2	25.167	0.495	1.045	44.308	71.015
2019 Q3	25.2	0.537	1.218	43.019	69.974
2019 Q4	24.516	0.568	1.126	41.913	68.123
2020 Q1	23.242	0.606	1.364	39.682	64.894
2020 Q2	21.647	0.622	1.087	37.816	61.172
2020 Q3	21.858	0.702	1.197	36.887	60.644
2020 Q4	23.149	0.827	1.456	38.611	64.043
2021 Q1	22.101	1.186	1.942	36.368	61.597
2021 Q2	21.638	1.703	2.411	37.404	63.156
2021 Q3	21.442	1.948	2.574	37.551	63.515
2021 Q4	21.008	1.977	2.552	38.057	63.594
2022 Q1	20.836	2.151	2.615	38.852	64.454
2022 Q2	20.586	2.288	2.504	38.541	63.919
2022 Q3	20.466	2.38	2.627	38.561	64.034
2022 Q4	20.462	2.469	3.344	38.53	64.805
2023 Q1	20.076	2.352	3.667	38.429	64.524
2023 Q2	19.731	2.656	4.006	38.75	65.143
2023 Q3	19.615	2.98	4.619	38.71	65.924
2023 Q4	19.424	3.535	5.253	40.501	68.713
2024 Q1	19.076	4.783	5.05	39.677	68.586

2024 Q2	18.749	4.556	4.496	37.294	65.095

Data are sourced from Table VEH0105 of Vehicle licensing statistics data tables - GOV.UK. The units of number of vehicles are in thousands. Licensed vehicles at the end of the quarter by body type, fuel type.

"The column headings in this table refer to:

Q1, meaning end of March

Q2, meaning end of June

Q3, meaning end of September

Q4, meaning end of December"

Fuel types are grouped into 4 categories: petrol, diesel, hybrid electric (petrol), and other fuels. Similar data about electric technologies are provided in table VEH0142.

Year	Battery electric cars	Plug-in hybrid electric (petrol) cars
2017 Q1	48	250
2017 Q2	50	247
2017 Q3	53	341
2017 Q4	55	548
2018 Q1	63	492
2018 Q2	70	531
2018 Q3	76	403
2018 Q4	77	867
2019 Q1	88	817
2019 Q2	95	870
2019 Q3	102	1038
2019 Q4	136	904
2020 Q1	182	1082
2020 Q2	175	825
2020 Q3	248	651
2020 Q4	404	617
2021 Q1	389	822
2021 Q2	465	1174
2021 Q3	494	1198
2021 Q4	507	1160
2022 Q1	497	1170
2022 Q2	590	1082
2022 Q3	668	1089
2022 Q4	810	1628
2023 Q1	899	1886
2023 Q2	1104	1953
2023 Q3	1816	1902
2023 Q4	2171	2036
2024 Q1	1994	2082
2024 Q2	2113	1790

Data are sourced from Table VEH0142 of Vehicle licensing statistics data tables - GOV.UK.

Plug-in vehicles (PiVs) are road using vehicles that use a plug-in technology to connect to a source of electricity. Road using vehicles would reasonably be expected to make significant use of the public highway and to be used as a mode of transport. The introduction of these new PiV figures allows for a more direct comparison with electric chargepoint infrastructure and general electricity usage. Some powerful electric bikes have to be registered as mopeds and will be included in the total vehicle numbers.

The column headings in this table refer to:
Q1, meaning end of March
Q2, meaning end of June
Q3, meaning end of September
Q4, meaning end of December

Honiton Road, between Rifford Road and Sweetbrier Lane junctions					
Vehicle type	03/11/2015	08/11/2018	03/11/2020	07/11/2023	05/11/2024
Motorcycle	1%	1%	1%	1%	1%
Car	84%	84%	84%	85%	85%
LGV	12%	12%	12%	11%	11%
OGV1	1%	1%	1%	1%	1%
OGV2	0%	0%	0%	0%	0%
PSV	2%	2%	2%	2%	2%
Total	21,066	22,268	20,965	20,152	20,387

Fore Street, east of Whipton Lane junction			
Vehicle type	27/09/2018	28/09/2023	12/09/2024
Motorcycle	1%	1%	1%
Car	83%	84%	83%
LGV	11%	10%	12%
OGV1	2%	1%	1%
OGV2	0%	1%	0%
PSV	3%	3%	2%
Total	17,208	17,128	17,347

Heavitree Road, west of Polsloe Road junction			
Vehicle type	27/09/2018	28/09/2023	12/09/2024
Motorcycle	1%	2%	1%
Car	81%	84%	82%
LGV	10%	9%	11%
OGV1	2%	1%	1%
OGV2	0%	1%	0%
PSV	6%	4%	4%
Total	13,408	14,808	14,467

All data is from Manual Classified Counts, manually enumerated using video footage.

All data is for the 12-hour period 07:00-19:00 on the survey dates.

All data excludes pedestrians and pedal cycles.

LGV = Light Goods Vehicles. Includes all goods vehicles up to 3.5 tonnes gross vehicle weight, including those towing a trailer or caravan.

OGV1 = Other Goods Vehicles 1. Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles.

OGV2 = Other Goods Vehicles 2. Includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer.

PSV = Public Service Vehicles (buses and coaches). Includes all public service vehicles and works buses with a gross vehicle weight of 3.5 tonnes or more.

All data is subject to minor discrepancies. Devon County Council has taken reasonable steps to ensure the accuracy of data provided, but cannot guarantee the data is free from errors.

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
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide

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.
- Exeter City Council 2019. Exeter Air Quality Action Plan 2019-2023.
- Exeter City Council 2024. Exeter Air Quality Annual Status Report.
- Diffusion Tubes for Ambient NO_2 Monitoring: Practical Guidance for Laboratories and Users 2008.
- National bias adjustment factor spreadsheet.
- National Bus Strategy Bus Services Improvement Plan, Devon County Council, version 3.0. June 2024.
- Liveable Water Lane Supplementary Planning Document Development Framework and Design Code July 2024.
- DVLA Vehicle Licensing Statistics Data Tables. Last updated on 24 September 2024