Tonbridge & Malling Borough Council - Air Quality Report

Local Plan 2042

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Quality information

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1. Executive Summary

1.1 Tonbridge and Malling Borough Council (TMBC) has commissioned AECOM Limited (AECOM) to prepare an air quality assessment to inform the preparation and evidence base for their Local Plan 2042.

1.2 As part of this work AECOM has prepared this report which includes the following:

- Review of air quality in TMBC and in the vicinity of the Air Quality Management Areas (AQMAs);
- Review of relevant legislation and air quality planning policy;
- Review of emissions from 2022 baseline traffic data, 2042 traffic data with cumulative schemes (without the local plan in place) and 2042 traffic data with cumulative schemes and implementation of the local plan to visualise where emissions are highest within TMBC;
- Review of sensitive locations in areas of interest following an initial screening assessment. These areas were: Tonbridge Town Centre, Wateringbury, Medway Gap, Borough Green and Wrotham, Aylesford, Bluebell Hill, Snodland, Trench Wood, East Peckham, Hildenborough and Kings Hill; and
- Modelling assessment of nitrogen dioxide (NO_2) and particulate matter (PM_{10} and $PM_{2.5}$) concentrations within the selected areas of interest with comparison against UK Air Quality Strategy (AQS) objectives to determine the magnitude of change in annual mean pollutant concentrations attributable to planned development within the Local Plan Review for existing receptors.

1.3 The results of the 2022 baseline assessment support the understanding that baseline air quality is good within TMBC and pollutant concentrations are mostly below AQS objectives. However, within the Wateringbury AQMA, three exceedance of the NO_2 AQS objective were observed for 2022.

1.4 By 2042, pollutant concentrations will decrease across the borough, resulting from continued improvements in the vehicle fleet and reductions in background concentrations, and there are no predicted exceedances of the AQS objectives with or without the Local Plan in the modelled areas. The impacts due to the implementation of the Local Plan were found to be negligible at all modelled representative receptors relevant for human health. The only exceptions are receptors R34_MG in Medway Gap and R2_SL in Snodland where slight adverse impacts are observed for PM_{10} and $PM_{2.5}$. These effects can be deemed to be insignificant in line with IAQM guidance.

1.5 Overall, the traffic changes resulting from the Local Plan in 2042 are predicted to have small impacts on air quality, with no significant adverse effects on sensitive human health receptors.

2. Introduction

2.1 Tonbridge and Malling Borough Council (TMBC) has commissioned AECOM Limited (AECOM) to prepare an air quality assessment to inform the preparation and evidence base for their Local Plan 2042. The new Local Plan (LP) accounts for approximately 19,746 new dwellings and considers over 500 sites. It also takes into account the Lower Thames Crossing which is expected to be built within the plan period.

2.2 This report has been prepared to provide an overview of current air quality in Tonbridge and Malling, drawing on recent trends in monitoring data and an overview of current legislation and relevant policy.

2.3 The report also provides an assessment of impacts of the Local Plan on air quality in 2042, presenting emissions across the borough and modelled concentrations of Nitrogen Dioxide, Particulate Matter with a diameter of less than 10 micrometres and Particulate Matter with a diameter of less than 2.5 micrometres (NO_2, PM_{10}, $PM_{2.5}$) in 11 discrete areas following a process of traffic and emissions screening. These areas were identified as they had increases in emissions due to the LP and sensitive human health receptors and included areas within and close to Air Quality Management Areas (AQMAs).

2.4 The report provides the methodology and results showing the emissions across the borough as well as the results of the modelled pollutant concentrations at selected sensitive human health receptors in the 11 modelled areas.

2.5 There are two Special Areas of Conservation (SAC) that sit at least partially within the borough. The assessment of ecological habitats and selected sensitive ecological receptors has been presented separately in the Habitats Regulations Assessment (HRA) and associated appendices.

Tonbridge and Malling Borough

2.6 Tonbridge and Malling Borough covers an area of 93 square miles of Western Kent. It is one of thirteen Kent districts and lies within the Southeast Region of England.

2.7 The population of around 132,200 (Office for National Statistics, 2021) is split between several towns including Tonbridge, the Medway Gap and Snodland, as well as numerous villages. Overall, there are 27 parishes and the borough has an estimated 55,184 dwellings (TMBC, 2022).

2.8 The borough is predominantly rural and agricultural which continues to be the most widespread land use in the area. The M20 and M26 run through the middle of the borough and to the Northeast, the M2 also runs through part of the borough. Other major roads include the A26 to the South, the A228 which runs through the middle of the borough and the A20.

Air Quality Management Areas

2.9 The requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act 1995 (HM Government, 1995) places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether the air quality strategy (AQS) objectives are likely to be achieved (see Table 3-1). Where an exceedance is considered likely through monitoring or modelling, the local authority must declare an AQMA and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

2.10 TMBC currently has five active AQMAs within the Borough. All five have been declared due to the annual objective for NO_2 not being met (Tonbridge and Malling Borough Council, 2024).

2.11 These AQMAs are as follows:

- Tonbridge High Street, AQMA 3

- Wateringbury, AQMA 4
- Aylesford, AQMA 5
- Larkfield, AQMA 6
- Borough Green, AQMA 7

2.12 Two previous AQMAs in the borough have been revoked due to improvements in air quality and consistently achieving the air quality objectives. Most recently, in 2024, the M20 AQMA was revoked.

2.13 The following AQMAs: Tonbridge (AQMA 3), Aylesford (AQMA 5), Larkfield (AQMA 6) and Borough Green (AQMA 7) are currently under review for possible revocation in one to two years' time, if current trends of falling NO_2 levels continue (Tonbridge and Malling Borough Council, 2024).

2.14 Additional measures will be required in subsequent years to achieve compliance and enable the revocation of AQMA 4 at Wateringbury (Tonbridge and Malling Borough Council, 2024).

2.15 The location of TMBC's AQMAs and NO_2 monitoring sites are shown in Figure A- 1 to Figure A-10 in Appendix A.

3. Policy Context

Air Quality Standards Regulations (2010)

3.1 In the United Kingdom (UK), the Air Quality Standards Regulations 2010 (HM Government, 2010) (as amended in 2016 (HM Government, 2016), 2019 (HM Government, 2019), and 2020 (HM Government, 2020)) are an important legislative framework governing air quality.

3.2 These regulations are derived from European Union (EU) law, specifically the Ambient Air Quality and Cleaner Air for Europe Directive 2008/50/EC (the 'Air Quality Directive') (Council of the European Union, 2008). Following the UK's exit from the European Union, these regulations are classified as 'assimilated law' pursuant to the EU (Withdrawal) Act 2018 (HM Government, 2018) (as amended in 2023 (HM Government, 2023)). This means that relevant directives previously applied directly or indirectly to the UK are still relevant to the environmental assessment within this report. However, the EU will no longer have a role in enforcement, this having passed to the UK Government and the relevant Secretary of State.

3.3 The limit values (LVs) for pollutants defined within these regulations are legally-binding on the UK Government and have been set for the protection of human health and of vegetation. They are considered to apply everywhere (with the exception of the carriageway and central reservation of roads and any locations where the public do not have access).

Environment Act 2021

3.4 The Environment Act 2021 (HM Government, 2021) amends the Environment Act 1995. On 9th November 2021, the Act received Royal Assent after being first introduced to Parliament in January 2020 to address environmental protection and the delivery of the Government's 25-year Environment Plan following Brexit. It includes provisions to establish a post-Brexit set of statutory environmental principles and ensure environmental governance through an environmental watchdog, the Office for Environmental Protection (OEP).

3.5 The Secretary of State must publish a report reviewing the Air Quality Strategy (AQS) every five years (as a minimum and with yearly updates to Parliament).

Environmental Improvement Plan 2023

3.6 The 25 Year Environment Plan, originally published in January 2018, and updated in 2019, sets out the actions the UK Government will take to help the natural world regain and retain good health (H.M. Government, 2018).

3.7 The Environment Plan was revised in February 2023 (H.M. Government , 2023) with the publication of the Environmental Improvement Plan 2023. The plan outlines several actions that are being taken to improve air quality, most notably by supporting local authorities, facilitating the rollout of Clean Air Zones, supporting the transition away from petrol and diesel cars, regulating domestic burners, and regulating agricultural emissions.

3.8 Interim targets (deadline 2028) for fine particulate matter ($PM_{2.5}$) were also announced to demonstrate the trajectory against the long-term legal targets (deadline 2040) set out in The Environmental Targets (Fine Particulate Matter) Regulations 2023 (H.M. Government , 2023).

Clean Air Strategy

3.9 In 2019, the UK government released its Clean Air Strategy 2019 (Defra, 2019) as part of its 25-year Environment Plan.

3.10 Local air quality management focus in recent years has primarily related to nitrogen dioxide (NO_2), and its principal source in the UK, road traffic. However, the 2019 Strategy broadens the focus to other areas, including domestic emissions from wood burning stoves and from agriculture. This shift in emphasis is part of a goal to reduce the levels of fine particulate matter ($PM_{2.5}$) in the air to below the World Health Organization (WHO) guideline level; lower than the current UK objective (World Health Organization, 2005).

UK Air Quality Strategy

3.11 A new AQS was published in April 2023 (Defra, 2023). It sets out the actions the government expects local authorities to take in support of achieving the new national $PM_{2.5}$ targets, by reducing emissions from sources within their control.

3.12 The Air Quality Objectives set out in the AQS (Defra, 2007) (Defra, 2023) have been outlined in legislation solely for the purposes of LAQM. The objectives for the pollutants of relevance to this assessment are displayed in Table 3-1 including the new national targets for $PM_{2.5}$ concentrations stated within the Environment Act 2021 (H.M. Government , 2021), the Environmental Improvement Plan 2023 (H.M. Government , 2023) and the Air Quality Strategy 2023 (Defra, 2023).

Table 3-1 UK AQS Objectives

Pollutant	Averaging Period	Value	Maximum Permitted Exceedances/Target
NO_2	Annual Mean	40 µg/m^3	None
	Hourly Mean	200 µg/m^3	18 times per year
NOx	Annual Mean	30 µg/m^3	None
PM_{10}	Annual Mean	40 µg/m^3	None
	24-Hour Mean	50 µg/m^3	35 times per year
$PM_{2.5}$	Annual Mean	20 µg/m^3	None
		10 µg/m^3	By 2040
		12 µg/m^3	Interim target, (by end of January 2028)
	Exposure reduction compared to 2018	35%	By 2040
		22%	Interim target, (by end of January 2028)

$PM_{2.5}$ Targets: Interim Planning Guidance

3.13 Interim Planning Guidance was published in October 2024 (Department for Environment, Food & Rural Affairs, 2024) pending publication of new guidance on the planning implications of the new $PM_{2.5}$ targets, which has not yet been published. The guidance moves away from an exceedance-based approach and towards a minimisation of pollution approach. It recommends key sources of air pollution schemes submitted for planning applications are identified, and appropriate action to minimise emissions of $PM_{2.5}$ and its precursors are implemented as far as possible.

National Planning Policy Framework

3.14 The National Planning Policy Framework (NPPF) (DLUHC, 2024) sets out the Government's environmental, economic and social policies and principles for land use planning in England and how these are expected to be applied. The revised Framework replaces the previous NPPF published in March 2012, revised in July 2018, updated in February 2019, revised in July 2021 and updated in September 2023, in December 2023, and in December 2024.

3.15 Paragraphs 110, 187, 198, 199, and 201 of the NPPF provide advice on when air quality should be a material consideration in development management decisions. The key NPPF paragraphs most relevant to an air quality assessment are provided in Table 3-2.

Table 3-2 Relevant NPPF requirements relevant to the air quality assessment

Relevant NPPF paragraph reference	Requirement of the NPPF
Paragraph 187	Planning policies and decisions should contribute to and enhance the natural and local environment by: 1. Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); 2. Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and 3. Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
Paragraph 199	Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.

Source: NPPF (DLUHC, 2024)

Planning Guidance

3.16 The National Planning Practice Guidance (NPPG) for Air Quality was published on March 2014 and updated as of November 2019 to provide more in-depth guidance to the NPPF for air quality. (DHDLUHC, 2024). The most recent update to the PPG was in February 2024 but this did not affect air quality related content (DHDLUHC, 2024).

3.17 The NPPG notes that air quality assessments should include the following information (paragraph 5):

- The existing air quality in the study area (existing baseline);
- The future air quality without the Proposed Development in place (future baseline); and
- The future air quality with the Proposed Development in place (with mitigation).

3.18 Paragraph 7 states that assessments need to be proportionate to the nature and scale of development proposed and the potential impacts (taking into account existing air quality conditions), and because of this, assessments are likely to be location specific.

Local Planning Policy

Kent County Council Local Transport Plan

3.19 Kent County Council (KCC) have developed a Local Transport Plan (LTP) (Kent County Council, 2024) which includes ambitions and objectives for towns across Kent, including Tonbridge. The plan recognises the negative impact of congestion on air quality and aims to improve air quality by encouraging modal shift and decarbonisation.

3.20 Policy Objective 7 states that the LTP aims to reduce carbon dioxide emissions from surface transport by 29% by 2037. All planning proposals must also outline their contributions to improving air quality from transport if an air quality management area (AQMA) is affected.

3.21 Policy Objective 8 aims to encourage a modal shift to more sustainable modes of transport across KCC. KCC will deliver walking and cycling improvements at targeted locations to encourage more residents to transition away from private car usage.

Tonbridge and Malling Air Quality Action Plan (2021)

3.22 TMBC currently has five AQMAs within their jurisdiction, all of which have been declared for exceedances in the annual mean NO_2 objective. These are:

- Tonbridge High Street
- A26 Red Hill/Tonbridge Road in Wateringbury
- A20 Larkfield – from London Road/New Hythe Lane to New Road
- A20 Aylesford – at the London Road/Hall Road Junction; and
- Borough Green – at Sevenoaks Road Junction

3.23 An additional AQMA was recently present along the M20, from Larkfield to Aylesford, however this AQMA was revoked in 2024 following continued compliance with the annual mean NO_2 objective.

3.24 Tonbridge and Malling's AQAP (Tonbridge and Malling Borough Council, 2021) was published in 2021 and includes actions to improve air quality across the six AQMAs that were current at that time. The plan outlines a total of 15 measures, which are based around the following priorities:

- Priority 1: Transport – aims to reduce pollutant emissions from transport, which contributes a significant portion of emissions across the District;
- Priority 2: Planning and Infrastructure – ensures that new development will not cause adverse effects on air quality;
- Priority 3: Policy Guidance – ensures that any relevant policies or strategies relating to air quality are considered;
- Priority 4: Public Health and Wellbeing – focuses on improving air quality to ensure good health across the District, and aims to ensure that health of the public is communicated effectively; and
- Priority 5: Air Quality Monitoring – ensures air quality is effectively and closely monitored across the District.

3.25 Progress on the measures outlined in the AQAP is reviewed annually within TMBC's Annual Status Reports (ASR).

Tonbridge and Malling Local Development Scheme

3.26 TMBC have developed a Local Development Scheme (LDS) (Tonbrige and Malling Borough Council, 2025) to accompany the LP. The LDS outlines the timetable and geographical scope of planning documents which the Council intends to prepare in the upcoming years.

3.27 The LDS outlines the current timetable for the Local Plan review, and states that the adoption of the updated Local Plan is expected in 2027/2028. The adoption of the updated Local Plan will replace all current plans and policies.

3.28 The updated Local Plan is expected to include several policies, including those on the natural environment. Draft policies of the updated Local Plan, provided by TMBC, which are relevant for air quality include:

"*Policy NE11: Air Quality:*

Development proposals should seek to improve air quality and reduce the effects of poor air quality by minimising exposure to air pollution and assist in facilitating compliance with relevant limit values and/or national objectives for air pollutant (…)

In relation to declared Air Quality Management Areas, and any areas in the process of becoming a declared Air Quality Management Area at the time of application, [as shown on the DEFRA UK AIR AQMAs interactive map] development will not be permitted where new receptors would be introduced into an area of poor air quality unless the proposals incorporate acceptable measures to ensure those receptors would not be subject to unacceptable risks as a result of poor air quality. (…)

Development shall safeguard ecology, local wildlife and habitats and those development proposals, [alone or in combination] that are anticipated to have an impact on an internationally designated site will be subject to a Habitats Regulations Assessment"

Tonbridge Development Plan

3.29 TMBC currently have a development plan which outlines policies and objectives for the growth of the area. The Core Strategy (Tonbridge and Malling Borough Council, 2007) was published in 2007, with a supplementary document regarding the Environment published in 2010 (Tonbridge and Malling Borough Council, 2010).

3.30 The 'Managing Development and the Environment Development Plan Document' outlines strategies to maintain and enhance the quality of the environment. Air quality is referenced in Policy SQ4, which states that:

"Development will only be permitted where all of the following criteria are met:

(a) the proposed use does not result in a significant deterioration of the air quality of the area, either individually or cumulatively with other proposals or existing uses in the vicinity;

(b) proposals would not result in the circumstances that would lead to the creation of a new Air Quality Management Area;

(c) proximity to existing potentially air polluting uses will not have a harmful effect on the proposed use; and

(d) there is no impact on the air quality of internationally, nationally and locally designated sites of nature conservation interest or appropriate mitigation is proposed to alleviate any such impact."

Other Relevant Policy, Standards and Guidance

3.31 There is currently no statutory guidance on the method by which an air quality assessment should be undertaken. Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) (Environmental Protection UK (EPUK) & IAQM, 2017) and the Department for Environment, Food and Rural Affairs (Defra) (Defra, 2022) have published their own guidance for carrying out air quality assessments for development control. These guidance documents have been followed in this air quality assessment.

4. Methodology

Summary

4.1 This section presents the steps and methodology used to model the air quality in the study area for each of the following traffic scenarios:

- 2022 baseline (see note in paragraph 4.6);
- 2042 'Do Minimum' (DM): future assessment year which includes the influence of forecast growth and strategic planned development; and
- 2042 'Do Something' (DS): future assessment year which builds on the DM scenario and includes the sites (including the TMBC Local Plan as well as other Local Plans from neighbouring areas).

4.2 The following sources of information and data have been used to form the basis of the air quality assessment:

- Defra's current 2021-based Air Quality Background Concentration Maps (Defra, 2024);
- Defra's Vehicle Emissions Factors Toolkit (EFT) v13.1 (Defra, 2025);
- Air quality monitoring data from 2019 to 2023 for TMBC (Tonbridge and Malling Borough Council, 2024); and
- Traffic flow and speed data provided by Jacobs for 2019[1] and 2042.

4.3 The modelling assessment was conducted following the methodology in Chapter 7 Section 4 "Dispersion Modelling of Emissions" within Defra's LAQM.TG(22) Technical Guidance (Defra, 2022) and Land-Use Planning and Development Control: Planning for Air Quality Technical Guidance (Environmental Protection UK (EPUK) & IAQM, 2017).

Traffic Data and Screening

Traffic Data

4.4 Traffic data were provided by TMBC's transport consultant Jacobs for an extensive road network across Tonbridge and Malling.

4.5 The traffic data provided included information on two-directional Annual Average Daily Traffic (AADT), flows percentage of heavy duty vehicles (HDVs), and average speed for the following scenarios outlined in paragraph 4.1.

4.6 Although traffic data were provided for a base year of 2019, analysis by the transport consultant showed minimal difference between 2019 and 2022 traffic flows. It was therefore decided that the 2019 base year traffic data would be used to represent a base year of 2022 for the air quality modelling assessment. This was more appropriate than modelling 2019 due to limitations related to Defra tools and associated data which are only available for 2021 onwards.

4.7 To accurately represent the impacts of congestion at sensitive receptors, congestion has been considered within the model using the guidance outlined in LAQM.TG (22). (Defra, 2022a). Queues have been added to the model based on professional judgement and have modelled speeds of 10 kph or 20 kph depending on typical traffic patterns and average queue length.

4.8 The AADT traffic flows for the entire modelled network for each scenario (Base, DM and DS) are shown in **Error! Reference source not found.** in Appendix A.

[1] Used to represent 2022 as described in paragraph 4.6

4.9 The Lower Thames Crossing is expected to be completed during the plan period and has therefore been incorporated within the future traffic scenarios.

Screening

4.10 The traffic data for 2042 with Local Plan (DS) and without the Local Plan (DM) were screened in accordance with IAQM Guidance on land-use planning and development control: Planning for air quality (IAQM, 2017) in order to inform the identification of areas to be modelled. The IAQM screening criteria states that an air quality assessment is required if a development will *"cause a significant change in Light Duty Vehicle (LDV) traffic flows on local roads with relevant receptors"* or if the development will generate *"a significant change in Heavy Duty Vehicle (HDV) flows on local roads with relevant receptors"*.

4.11 The indicative criteria to proceed with an assessment are, for LDVs:

> *"A change of LDV flows of more than 100 annual average daily traffic (AADT) within or adjacent to an Air Quality management Area (AQMA), or more than 500 AADT elsewhere."*

4.12 And for HDVs:

> *"A change in HDV flows of more than 25 AADT within or adjacent to an AQMA, or more than 100 AADT elsewhere."*

Screening – Change in Traffic Flows

4.13 The difference in two-way traffic flows along road links as a result of the implementation of the LP (DS-DM) are shown in Figure A-2 a for LDVs and in Figure A-2 b for HDVs in Appendix A.

4.14 Figure A-2 and Figure A-2 b show that a large proportion of the network will experience changes in traffic flows above the IAQM screening criteria for LDVs, while HDVs will only experience much smaller increases.

4.15 The five AQMAs: Tonbridge High Street (AQMA 3), Wateringbury, (AQMA 4), Aylesford (AQMA 5), Larkfield (AQMA 6) and Borough Green (AQMA 7) will all experience increases in traffic of 100 LDVs or more (exceeding the IAQM screening criteria). AQMAs represent areas of concern where monitored or modelled exceedances have previously been identified at sensitive receptors. Subsequently, all these areas were considered for further modelling as there is the potential for impacts with the LP in place (DS scenario).

4.16 The largest increase in LDV traffic flows occur at the following locations:

- Trench Wood: The LP proposes a large new development within the area. Trench Wood is currently a suburban area with an extensive network of minor roads and low traffic flows. The new development will create large increases in traffic on the minor roads with a maximum increase of 9,898 LDVs anticipated along Trench Road.
- Medway Gap: The LP proposes a large new development to the south of Quarry Wood. As such, this new development will create large increases in the minor roads leading into the urban area of Medway Gap with a maximum increase of 9,194 LDVs anticipated along Kiln Barn Road. The Medway Gap area includes both the Aylesford AQMA (AQMA 5) and Larkfield AQMA (AQMA 6).
- Wrotham: The LP proposes a large new development between Borough Green and Wrotham. Wrotham is currently a rural area with several quiet country roads and village areas. A maximum change of 8,857 LDVs is anticipated along the A227 between the new development and the M20.
- Bluebell Hill. The A229 through Bluebell Hill is on the edge of the borough, close to the borders with Medway and Maidstone, and is therefore anticipated to experience increases in traffic due to development in all three areas. A maximum change of 5,622 LDVs is anticipated along the A229.

4.17 Although not one of the largest changes, the M20 also experiences changes in excess of 500 LDVs along much of its length. The M20 runs across TMBC from East to West and is a major motorway with high traffic flows. Several sections of the M20 are predicted to experience increases of 3,000-4,000 AADT. A maximum change of 4,382 LDVs is anticipated along the M20. It should be noted that sensitive receptors are not present at the roadside and there are few sensitive receptors within 200m of the M20, so the potential impact is less severe compared to the other areas listed above.

4.18 Further analysis has been undertaken in the "Screening – Change in NO_x Emissions" section below to determine which areas should be moved forward for further assessment to ensure that worst-case impacts are captured in areas outside the AQMAs.

Screening – Change in NO_X Emissions

4.19 The 2042 traffic data both with (DS) and without (DM) the LP in place were processed through EFT v13.1 to review of the anticipated NO_x emissions from roads within TMBC.

4.20 A comparison has been made for the change in NO_X emission rates (DS scenario minus DM scenario) across all of the modelled road links where traffic data is available in TMBC to illustrate how NO_x emissions are anticipated to change with implementation of the local plan. The results are shown in Figure A-2 c in Appendix A. The largest changes in emissions occur at the following locations:

- Four areas associated with large developments have large emissions changes, which are Borough Green and Wrotham (maximum NO_X increase of +0.0029 g/km/s), Medway Gap (south) (maximum NO_X increase of +0.0025 g/km/s), Trench Wood and north of Tonbridge (maximum NO_X increase of +0.0019 g/km/s) and Snodland (maximum NO_X increase of +0.0015 g/km/s). These are all main growth areas highlighted in the LP where major new developments are planned.
- Bluebell Hill: Substantial changes in emissions are predicted along the A229 (maximum NO_X increase of +0.0020 g/km/s) in close proximity to sensitive receptors.
- M20: Several sections of the M20 (primarily to the west in remote areas far from sensitive receptors) are predicted to experience large increases NO_x emissions (maximum NO_X increase of +0.0016 g/km/s), however there are few sensitive receptors close by.
- NO_X emissions above +0.0007 g/km/s are also anticipated in three areas where developments are planned, which are Aylesford, East Peckham, Kings Hill, and Hildenborough.

Conclusions

4.21 Based on the findings from the changes in traffic flows and NO_x emissions screening, the following areas have been identified for further assessment using professional judgement to determine potential worst-case impacts:

1. Tonbridge Town Centre. Chosen due to the AQMA on the High Street (AQMA 3);
2. Wateringbury. Chosen due to the AQMA (AQMA 4);
3. Medway Gap. Chosen due to two AQMAs in this area – (AQMA 5 and AQMA 6) as well as the large increases in traffic/emissions along Kiln Barn Road due to a nearby proposed development site. Sensitive receptors included within both AQMAs as well as the surrounding area corresponding to the highest changes in traffic and NO_x emissions.
4. Borough Green and Wrotham. Chosen due to the AQMA in Borough Green (AQMA 7) as well as the large increases in traffic/emissions along the A227 due to a nearby proposed development site. These areas are modelled together because they are in close proximity to each other.
5. Aylesford. Chosen due to moderate increases in traffic/emissions through the village due to a nearby proposed development site. The Aylesford area is located 1.15km north of the Aylesford AQMA, AQMA 5, which is already accounted for within the Medway Gap area.

6. Bluebell Hill. Chosen due to large increases in traffic/emissions along the A229.
7. Snodland. Chosen due to large increases in traffic/emissions through the town due to a nearby proposed development site.
8. Trench Wood / north of Tonbridge. Chosen due to large increases in traffic/emissions through this suburban area due to several nearby proposed development sites.
9. East Peckham. Chosen due to moderate increases in traffic/emissions through this suburban area due to several nearby proposed development sites.
10. Hildenborough. Chosen due to moderate increases in traffic/emissions through this suburban area due to several nearby proposed development sites.
11. Kings Hill. Chosen due to moderate increases in traffic/emissions through this suburban area due to a nearby proposed development site.

4.22 The decision has been taken to exclude the M20 from further assessment due to a limited number of sensitive receptors being identified. It should be noted that these receptors are generally more than 200m away from the worst-case road links previously identified so do not represent the worst case impacts from the proposed LP.

Receptors (Human Health)

4.23 A desk-top review using aerial mapping cross-checked with OS mapping was conducted to select representative locations where people are likely to be present, such as residential properties, schools or medical centres.

4.24 The locations of the chosen sensitive receptors relevant to human health are included in Figure A- 1 to Figure A- 11 in Appendix A and Table 4-1 to Table 4-11, below. Receptors were chosen within and close to the areas identified for further assessment at the screening stage. Existing receptors are denoted by “R” followed by a number and then followed by the area (e.g. TH = Tonbridge High Street) while proposed receptors as part of Local plan developments are denoted by “P,” followed by a number and then followed by the area.

4.25 Receptors were modelled at the lowest point where there is residential exposure, at ground floor level or first floor, at a height of 1.5 metres or 4.5m respectively above ground.

Tonbridge Town Centre

Table 4-1 Human Receptor Locations in and close to Tonbridge Town Centre

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R1_TH	Tonbridge School	N	559127	147001	1.5
R2_TH	Tonbridge School	N	559112	146951	1.5
R3_TH	Tonbridge School	N	559105	146901	1.5
R4_TH	Tonbridge School	N	559127	146910	1.5
R5_TH	Residential	N	559117	146858	4.5
R6_TH	Residential	N	559072	146768	4.5
R7_TH	Residential	N	559067	146697	4.5
R8_TH	Residential	N	559083	146671	4.5
R9_TH	Residential	Y	558881	146158	4.5
R10_TH	Residential	Y	558890	146208	4.5

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R11_TH	Residential	Y	558975	146325	4.5
R12_TH	Residential	Y	558979	146364	4.5
R13_TH	Residential	N	559003	146418	4.5
R14_TH	Residential	N	558635	145936	1.5
R15_TH	Residential	N	558674	146007	1.5
R16_TH	Residential	N	558761	145949	1.5
R17_TH	Residential	N	558829	146121	1.5
R18_TH	Residential	N	559081	146433	1.5
R19_TH	Residential	N	559043	146449	1.5
R20_TH	Residential	N	559195	146516	1.5
R21_TH	Residential	N	559144	146533	1.5
R22_TH	Residential	N	559123	146522	1.5
R23_TH	Residential	N	559148	146888	1.5
R24_TH	Residential	N	559250	146798	1.5
P1_TH	Proposed Residential	N	559267	146211	1.5
P2_TH	Proposed Residential	N	559268	146228	1.5
P3_TH	Proposed Residential	N	558981	146213	1.5

Wateringbury

Table 4-2 Human Receptor Locations in Wateringbury

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R1_WB	Residential	Y	569173	153499	1.5
R2_WB	Residential	Y	569151	153515	1.5
R3_WB	Residential	N	569214	153526	1.5
R4_WB	Residential	N	569298	153569	1.5
R5_WB	Residential	Y	569196	153490	1.5
R6_WB	Cross Roads Care (Care Home)	Y	569256	153465	1.5
R7_WB	Residential	N	569175	153463	1.5
R8_WB	Residential	N	569119	153364	1.5
R9_WB	Residential	N	569022	153552	1.5
R10_WB	Residential	N	569398	153642	1.5
R11_WB	Residential	N	569088	153266	1.5
R12_WB	Residential	N	569054	152967	1.5
R13_WB	Residential	N	569052	153037	1.5

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R14_WB	Residential	N	569332	153343	1.5
R15_WB	Residential	N	568877	153602	1.5
R16_WB	Residential	N	568705	153626	1.5
R17_WB	Residential	N	568525	153608	1.5
P1_WB	Proposed Residential	N	569422	153660	1.5
P2_WB	Proposed Residential	N	569457	153739	1.5
P3_WB	Proposed Residential	N	569455	153390	1.5

Medway Gap

Table 4-3 Human Receptor Locations in Medway Gap Area (south of M20)

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R1_MG	Residential	Y- Aylesford AQMA (AQMA 5)	572469	157937	1.5
R2_MG	Residential	Y- Aylesford AQMA (AQMA 5)	572428	157932	1.5
R3_MG	Residential	Y- Aylesford AQMA (AQMA 5)	572404	157948	1.5
R4_MG	Residential	Y- Aylesford AQMA (AQMA 5)	572458	157955	1.5
R5_MG	Residential	N	572430	157979	1.5
R6_MG	Residential	N	572487	158115	1.5
R7_MG	Residential	N	572455	158150	1.5
R8_MG	Residential	N	572451	158214	1.5
R9_MG	Residential	N	572400	158208	1.5
R10_MG	Residential	N	572363	158243	1.5
R11_MG	Residential	N	572171	158317	1.5
R12_MG	Residential	N	572145	158294	1.5
R13_MG	Residential	N	572081	158309	1.5
R14_MG	Residential	N	572028	158309	1.5
R15_MG	Residential	N	571980	158228	1.5
R16_MG	Residential	N	571973	158155	1.5
R17_MG	Residential	N	572272	157985	1.5
R18_MG	Residential	N	572100	158118	1.5
R19_MG	Residential	N	571977	158094	1.5
R20_MG	Residential	N	571926	158034	1.5
R21_MG	Residential	N	571881	157926	1.5
R22_MG	Residential	N	571695	157770	1.5

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R23_MG	Residential	N	571583	157884	1.5
R24_MG	Residential	N	571556	158008	1.5
R25_MG	Residential	N	571341	158126	1.5
R26_MG	Residential	N	571721	158285	1.5
R27_MG	Residential	N	571451	158363	1.5
R28_MG	Residential	N	571295	158408	1.5
R29_MG	Residential	N	571245	158366	1.5
R30_MG	Residential	N	571224	158280	1.5
R31_MG	Residential	N	571128	158180	1.5
R32_MG	Residential	N	571065	158101	1.5
R33_MG	Residential	N	571064	158019	1.5
R34_MG	Residential	N	571077	157907	1.5
R35_MG	Residential	N	570991	158011	1.5
R36_MG	Residential	N	570844	157979	1.5
R37_MG	Residential	N	570779	158097	1.5
R38_MG	Residential	N	570745	158188	1.5
R39_MG	Residential	N	570605	158373	1.5
R40_MG	Nursery	N	570470	158363	1.5
R41_MG	Residential	N	570402	158342	1.5
R42_MG	Residential	Y- Larkfield AQMA (AQMA 6)	570230	158328	1.5
R43_MG	Residential	Y- Larkfield AQMA (AQMA 6)	570182	158328	1.5
R44_MG	Residential	Y- Larkfield AQMA (AQMA 6)	570190	158328	1.5
R45_MG	Residential	N	569997	158322	1.5
R46_MG	Residential	N	569752	158266	1.5
R47_MG	Residential	N	569772	158214	1.5
R48_MG	Residential	N	570342	158448	1.5
R49_MG	Residential	N	570332	158496	1.5
R50_MG	Residential	N	570354	158614	1.5
R51_MG	Residential	N	571279	157677	1.5
R52_MG	Residential	N	571292	157545	1.5
R53_MG	Residential	N	571531	156955	1.5
R54_MG	Residential	N	571372	156567	1.5
R55_MG	Residential	N	570990	156138	1.5
R56_MG	Ditton Church of England Junior School	N	571094	158075	1.5
R57_MG	Aylesford School (Secondary)	N	571968	158400	1.5

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R58_MG	Aylesford Primary School	N	571919	158305	1.5
R59_MG	Residential	Y- Larkfield AQMA (AQMA 6)	570283	158312	1.5
P1_MG	Proposed Residential	N	571499	157145	1.5
P2_MG	Proposed Residential	N	571502	156826	1.5

Borough Green and Wrotham

Table 4-4 Human Receptor Locations in Borough Green and Wrotham

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R1_BG	Residential	N	561129	159123	1.5
R2_BG	Residential	N	561127	159113	1.5
R3_BG	Residential	N	561101	159118	1.5
R4_BG	Residential	N	561082	159118	1.5
R5_BG	Residential	N	561049	159106	1.5
R6_BG	Residential	N	561040	159113	1.5
R7_BG	Residential	N	561103	159094	1.5
R8_BG	Residential	N	561102	159044	1.5
R9_BG	Residential	N	561121	159028	1.5
R10_BG	Residential	N	561121	159004	1.5
R11_BG	Residential	N	561149	158915	1.5
R12_BG	Residential	N	561082	158735	1.5
R13_BG	Residential	N	561065	158721	1.5
R14_BG	Residential	N	561038	158780	1.5
R15_BG	Grange Park School	N	561097	158366	1.5
R16_BG	Wrotham School	N	561088	158262	1.5
R17_BG	Bed and breakfast (Residential)	N	561571	158953	1.5
R18_BG	Residential	N	561122	157872	1.5
R19_BG	Residential	N	561138	157840	1.5
R20_BG	Residential	N	561073	157768	1.5
R21_BG	Residential	N	561051	157729	1.5
R22_BG	Residential	N	561012	157612	1.5
R23_BG	Residential	N	561010	157570	1.5
R24_BG	Residential	N	560996	157511	1.5
R25_BG	Residential	N	560944	157370	1.5

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R26_BG	Residential	N	560929	157381	1.5
R27_BG	Residential	N	560921	157337	1.5
R28_BG	Residential	N	560903	157370	1.5
R29_BG	Residential	N	560671	157342	1.5
R30_BG	Residential	Y	560600	157358	1.5
R31_BG	Residential	Y	560565	157328	1.5
R32_BG	Residential	Y	560536	157328	1.5
R33_BG	Residential	Y	560538	157351	1.5
R34_BG	Residential	N	560390	157349	1.5
R35_BG	Residential	N	560022	157285	1.5
R36_BG	Residential	N	560790	157252	1.5
R37_BG	Residential	N	560812	157225	1.5
R38_BG	Residential	N	560647	157302	1.5
R39_BG	Residential	N	560710	157257	1.5
R40_BG	Residential	N	560953	157212	1.5
R41_BG	Residential	N	561196	157145	1.5
R42_BG	Residential	N	561485	157243	1.5
R43_BG	Residential	N	561643	157264	1.5
R44_BG	Residential	N	562071	157323	1.5
R45_BG	Residential	N	562262	157446	1.5
R46_BG	Residential	N	563054	157957	1.5
R47_BG	Residential	Y	560600	157318	1.5
R48_BG	Borough Green Primary School	N	561027	157387	1.5
P1_BG	Proposed Residential	N	560455	157327	1.5
P2_BG	Proposed Residential	N	561806	157194	1.5
P3_BG	Proposed Residential	N	562174	157389	1.5
P4_BG	Proposed Residential	N	562699	157826	1.5
P5_BG	Proposed Residential	N	561145	158010	1.5
P6_BG	Proposed Residential	N	560998	158949	1.5
P7_BG	Proposed Residential	N	561116	158070	1.5

Aylesford

Table 4-5 Human Receptor Locations in Aylesford

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R1_AY	Residential	N	573038	158993	1.5
R2_AY	Residential	N	573232	159094	1.5
P1_AY	Proposed Residential	N	572606	159747	1.5
P2_AY	Proposed Residential	N	572648	159854	1.5
P3_AY	Proposed Residential	N	572744	159010	1.5
P4_AY	Proposed Residential	N	572614	159020	1.5
P5_AY	Proposed Residential	N	572527	159242	1.5

Bluebell Hill

Table 4-6 Human Receptor Locations in Bluebell Hill

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R3_BB	Residential	N	575399	158800	1.5
R4_BB	Residential	N	575333	159023	1.5
R5_BB	Residential	N	575230	159439	1.5
R6_BB	Residential	N	575232	159596	1.5
R7_BB	Residential	N	574838	160742	1.5
R8_BB	Residential	N	574934	160870	1.5
R9_BB	Residential	N	574708	161225	1.5
R10_BB	Residential	N	574976	161356	1.5
R11_BB	Residential	N	574726	161637	1.5
R12_BB	Residential	N	574814	161714	1.5
R13_BB	Residential	N	574500	161892	1.5
R14_BB	Residential	N	574657	161990	1.5
R15_BB	Residential	N	574501	162175	1.5
R16_BB	Residential	N	574487	162357	1.5
R17_BB	Residential	N	574549	162514	1.5
R18_BB	Residential	N	574765	163278	1.5
R19_BB	Residential	N	574929	162951	1.5
R20_BB	Residential	N	575070	162855	1.5
R21_BB	Residential	N	575200	162726	1.5
R22_BB	Residential	N	575404	162560	1.5
R23_BB	Tunbury Primary School	N	575714	162479	1.5

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R25_BB	Residential	N	574715	163236	1.5

Snodland

Table 4-7 Human Receptor Locations in and close to Snodland

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R2_SL	Residential	N	569408	162063	1.5
R3_SL	Residential	N	569556	162017	1.5
R4_SL	Residential	N	569846	161952	1.5
R5_SL	Residential	N	569109	162120	1.5
R6_SL	Residential	N	570382	162232	1.5
R7_SL	Snodland CofE Primary School	N	569745	161883	1.5
R9_SL	Residential	N	570043	161914	1.5
P1_SL	Proposed Residential	N	568979	162125	1.5
R8_SL	Proposed Residential	N	570484	162339	1.5

Trench Wood

Table 4-8 Human Receptor Locations in and close to Trench Wood

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R1_TW	Residential	N	559310	148095	1.5
R2_TW	Residential	N	559298	148071	1.5
R3_TW	Residential	N	560254	150286	1.5
R4_TW	Residential	N	559645	149123	1.5
R5_TW	Residential	N	559534	148973	1.5
R6_TW	Residential	N	559539	148843	1.5
R7_TW	Residential	N	559316	148835	1.5
R8_TW	Residential	N	559240	148817	1.5
R9_TW	Residential	N	559031	148872	1.5
R10_TW	Residential	N	558981	148848	1.5
R11_TW	Residential	N	558879	148799	1.5
R12_TW	Residential	N	560782	148608	1.5
R13_TW	Residential	N	558920	148785	1.5
R14_TW	Residential	N	558933	148718	1.5
R15_TW	Residential	N	559001	148590	1.5
R16_TW	Residential	N	559061	148755	1.5

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R17_TW	Residential	N	559217	148620	1.5
R18_TW	Residential	N	559207	148582	1.5
R19_TW	Residential	N	559278	148527	1.5
R20_TW	Residential	N	558967	148526	1.5
R21_TW	Residential	N	558906	148193	1.5
R22_TW	Residential	N	558981	148153	1.5
R23_TW	Residential	N	560715	148496	1.5
R24_TW	Residential	N	559270	148111	1.5
R25_TW	Health Centre	N	559323	148478	1.5
R26_TW	Residential	N	558919	147963	1.5
R27_TW	Residential	N	558928	147813	1.5
R28_TW	Residential	N	558985	147754	1.5
R29_TW	Residential	N	559250	147893	1.5
R30_TW	Residential	N	559202	147820	1.5
R31_TW	Residential	N	559213	147687	1.5
R32_TW	Residential	N	559188	147650	1.5
R33_TW	Residential	N	559178	147536	1.5
R34_TW	Residential	N	560447	148359	1.5
R35_TW	Residential	N	559185	147495	1.5
R36_TW	Residential	N	559185	147473	1.5
R37_TW	Little Crickets Pre School	N	559151	147620	1.5
R38_TW	Residential	N	560427	148314	1.5
R39_TW	Delarue Nursery School	N	560014	149785	1.5
R40_TW	Residential	N	559838	149384	1.5
R41_TW	Residential	N	559788	149249	1.5
P1_TW	Proposed Residential	N	560654	149595	1.5
P2_TW	Proposed Residential	N	558860	147923	1.5
P3_TW	Proposed Residential	N	560902	149156	1.5
P4_TW	Proposed Residential	N	561305	149064	1.5
P5_TW	Proposed Residential	N	560957	149045	1.5
P6_TW	Proposed Residential	N	560815	148809	1.5
P7_TW	Proposed Residential	N	560780	148759	1.5
P8_TW	Proposed Residential	N	560776	148674	1.5

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
P9_TW	Proposed Residential	N	558800	148754	1.5
P10_TW	Proposed Residential	N	558868	148128	1.5

East Peckham

Table 4-9 Human Receptor Locations in and close to East Peckham

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R1_EP	Residential	N	567302	149415	1.5
R2_EP	Residential	N	567179	149256	1.5
R3_EP	Residential	N	567296	148945	1.5
R4_EP	Residential	N	567225	148655	1.5
R5_EP	Residential	N	566827	148552	1.5
P1_EP	Proposed Residential	N	567285	149682	1.5
P2_EP	Proposed Residential	N	567285	149514	1.5
P3_EP	Proposed Residential	N	567207	149236	1.5
P4_EP	Proposed Residential	N	567284	148998	1.5
P5_EP	Proposed Residential	N	566714	148554	1.5
P6_EP	Proposed Residential	N	566904	149228	1.5

Hildenborough

Table 4-10 Human Receptor Locations in and close to Hildenborough

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
R1_HB	Residential	N	556620	148754	1.5
R2_HB	Residential	N	557275	148379	1.5
R3_HB	Sackville School	N	556463	148726	1.5
P1_HB	Proposed Residential	N	556662	148712	1.5
P2_HB	Proposed Residential	N	557489	148220	1.5

Kings Hill

Table 4-11 Human Receptor Locations in Kings Hill

Receptor ID	Receptor Type	Within AQMA	X co-ordinate (m)	Y co-ordinate (m)	Height (m)
P1_KH	Proposed Residential/Proxy	N	568839	156798	1.5
P2_KH	Proposed Residential	N	568970	157151	1.5
P3_KH	Proposed Residential	N	568830	156424	1.5

P1_KH is considered as a proxy for existing receptors within the area and is considered to be in a suitably worst-case location to represent worst case impacts.

Model Setup

Summary

4.26 Road traffic emissions of nitrogen oxides (NOx) were derived using the latest version of Defra's EFT (v13.1) (Defra, 2025) at the time of assessment and the associated guidance and tools[2].

4.27 The EFT provides fleet projections and emission rates for 2021 through to 2050 for England (not London), London, Northern Ireland, Scotland and Wales. Specifically, the EFT has been used to provide emission rates as g/km/s from the total traffic for NO_X, PM_{10}, $PM_{2.5}$. In the case of PM_{10} and $PM_{2.5}$ the emission rates include tyre and brake wear, and road abrasion emission sources as well as the tailpipe emissions.

4.28 Detailed dispersion modelling was undertaken using the current version of ADMS-Roads (v5.0.1.3) to model concentrations of NOx and particulates (PM_{10} and $PM_{2.5}$) using the parameters in Table 4-12. For the 2022 baseline scenario, 2019 traffic data (representative of 2022 as described in paragraph 4.6), 2022 emission factors and 2022 background concentrations were used for consistency. For the 2042 scenarios, 2042 traffic data, 2042 emission factors were used, however due to limitations of the tools, 2040 background concentrations were applied as this is the furthest projection year.

4.29 Some roads have been modelled as street canyons due to being surrounded by buildings and flora, this has been applied to the sections of the Tonbridge Centre area and Aylesford area.

Table 4-12 General ADMS-Roads Model Conditions

Variables	ADMS-Roads Model Input
Surface roughness at source	0.5m
Surface roughness at Meteorological Site	0.2m
Minimum Monin-Obukhov length for stable conditions	10m
Terrain types, Canyon	Flat, with street canyon for sections of Tonbridge centre area and Aylesford area
Receptor location	x, y coordinates determined by GIS, z = 1.5m or 4.5m for human receptors.
Emissions	NO_x, PM_{10} and $PM_{2.5}$ – Defra's EFT v13.1
Meteorological data	1 year (2022) hourly sequential data from Gatwick Airport meteorological station.
Receptors	Selected receptors in 11 modelled areas
Model output	Long-term (annual) mean NO_x, PM_{10} and $PM_{2.5}$ concentrations.

[2] https://laqm.defra.gov.uk/

Meteorological Data

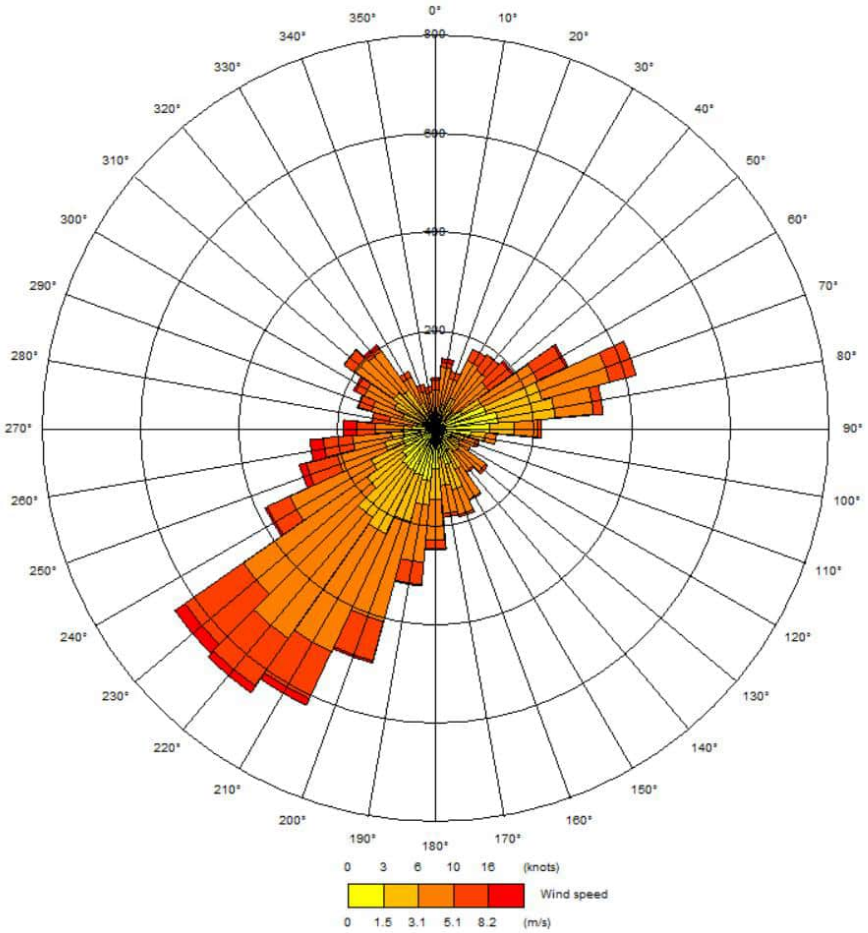
4.30 One year (2022) of hourly sequential observation data from Gatwick Airport meteorological station was used in this assessment to correspond with the baseline traffic data and monitoring data used for model verification. The station is the nearest suitable station to the study areas and is located approximately;

- 29.9km West of Tonbridge Centre;
- 41.2km South-West of Wateringbury;
- 46.9km South-West of Medway Gap);
- 34.7km South-West of Borough Green and Wrotham;
- 46.8km South-West of Aylesford;
- 49.9km South-West of Bluebell Hill;
- 45.9km South-West of Snodland;
- 31.0km West of Trench Wood and north of Tonbridge;
- 38.1km West of East Peckham;
- 27.9km South-West of Hildenborough; and
- 40.9km South-West of Kings Hill.

4.31 Gatwick Airport experiences meteorological conditions that are representative of those experienced within the air quality study area.

4.32 Figure 4-1 shows that the dominant direction of wind was from the south-west, as is typical for the UK.

Figure 4-1 Wind Rose, Gatwick Airport Meteorological Data, 2022



Background Data

4.33 Background concentrations of nitrogen oxides (NO_x), PM_{10} and $PM_{2.5}$ for 2022 and 2040 were sourced from Defra's 2021-based 1x1km background maps (Defra, 2024).

4.34 Contributions from explicitly modelled source sectors were removed from the background concentrations reported in Table 4-13, in accordance with Defra guidance (Defra, 2022). This is to avoid the double counting of modelled process contributions as outlined in point 7.538 of LAQM.TG22.

4.35 Predicted background concentrations for all pollutants are well below the relevant air quality objectives in both 2022 and 2040. Concentrations are predicted to decline year on year between 2022 and 2040 due to anticipated improvements in vehicle fleet technology and reductions in emissions from other sources.

Table 4-13 Defra Mapped Background Pollutant Concentrations, TMBC

Statistic	2022 Annual Mean Concentrations (µg/m³)			2040 Annual Mean Concentrations (µg/m³)		
	NO_x	PM_{10}	$PM_{2.5}$	NO_x	PM_{10}	$PM_{2.5}$
Minimum	8.7	8.0	5.2	5.5	7.0	4.3
Maximum	20.4	17.4	8.5	15.0	16.9	7.4
Mean	10.1	9.6	5.9	6.3	8.6	4.9

Verification

4.36 Model verification is the process by which the performance of the model is assessed to identify any discrepancies between modelled and measured concentrations at air quality monitoring sites within the study area. It is necessary to perform a comparison of the modelled results versus monitoring results at relevant locations as model validation studies undertaken by developers are unlikely to have been undertaken in the study area being considered.

4.37 As noted in LAQM.TG(22), *"the predicted results from a dispersion model may differ from measured concentrations for a large number of reasons:*

- *Estimates of background concentrations;*
- *Meteorological data uncertainties;*
- *Uncertainties in source activity data such as traffic flows and emissions factors;*
- *Model input parameters such as roughness length, minimum Monin-Obukhov; and overall model limitations; and*
- *Uncertainties associated with monitoring data, including locations.*

Model verification is the process by which these and other uncertainties are investigated and, where possible, minimised."

4.38 Modelled predictions were made for annual mean NO_2 concentrations at local authority monitoring sites for modelling areas where suitable monitoring was undertaken, in order to compare monitored and modelled NO_2 concentrations. The comparison of model outputs was made to 2022 monitoring data to correspond with the baseline year of assessment, traffic data and meteorological data.

4.39 From these sites, only those representative of modelled sensitive receptor locations and with sufficient data capture for 2022 were considered suitable for the purposes of model verification.

4.40 In 2022, monitoring was undertaken in the following areas: Tonbridge Centre, Wateringbury, Medway Gap, Borough Green and Wrotham, Aylesford, Bluebell Hill and Snodland.

Subsequently, an area specific model verification factor was used to adjust the results in each of these areas.

4.41 For Trench Wood, East Peckham, Hildenborough and Kings Hill no relevant monitoring was undertaken in 2022. Therefore, suitable representative verification factors were applied to the modelled data considering their urban or rural classification (Office for National Statistics, 2025).

4.42 The first approach was to calculate a combined urban factor suitable for Trench Wood, Hildenborough and Kings Hill, which are classified as urban areas. A combined verification factor was calculated from the urban areas with relevant monitoring listed in paragraph 4.40. These areas were Aylesford, Medway Gap and Tonbridge High Street. Snodland and Bluebell Hill can also be classified as urban areas but were excluded from this combined factor on the basis that their applicable monitoring sites are located on high-speed dual carriageways and hence are not truly representative of the urban environment.

4.43 The second approach was to calculate a combined rural factor for East Peckham, which is classified as a rural area. A combined verification factor was calculated from the rural areas with relevant monitoring listed in paragraph 4.40. The only applicable area was Borough Green and hence the same verification factor was used for East Peckham. Wateringbury can also be classified as a rural area but was excluded from this combined factor on the basis that the monitoring sites in this area are highly dependent on localised congestion effects at a major junction which encompasses the area of their AQMA. These congestion effects have resulted in elevated concentrations and exceedances of the NO_2 annual mean within the Wateringbury AQMA (discussed further within the Baseline Section) and would not be representative of East Peckham.

4.44 Table 4-14 highlights the verification factors and Root Mean Square Error (RMSE) for each modelled area. LAQM.TG(22) indicates that an RMSE within 10% of the AQO (4 µg/m^3) is ideal. Further detail on model verification is presented within Appendix B.

Table 4-14 model verification Factors

Modelled Area	Type	Adjustment Factor	RMSE (µg/m^3)	Extra Information
Tonbridge Centre	Urban	3.34	2.2	
Wateringbury	Rural	3.28	5.0	Only 2 applicable monitoring sites used to provide a worst-case verification factor.
Aylesford	Urban	2.62	1.4	
Bluebell Hill	Urban	1.59	N/A	Only 1 applicable monitoring site used – RMSE cannot be calculated.
Borough Green and Wrotham	Rural	1.74	4.0	
Medway Gap	Urban	2.98	3.0	
Snodland	Urban	4.43	N/A	Only 1 applicable monitoring site used – RMSE cannot be calculated.
Trench Wood and north of Tonbridge	Urban	3.06	2.8	No monitoring in this area. Combined urban verification factor used.
East Peckham	Rural	1.74	4.0	No monitoring in this area. Combined rural verification factor used.
Hildenborough	Urban	3.06	2.8	No monitoring in this area. Combined urban verification factor used.

Kings Hill	Urban	3.06	2.8	No monitoring in this area. Combined urban verification factor used.

4.45 The application of adjustment factors to model outputs minimises the inherent uncertainties associated with dispersion modelling as discussed in paragraph 4.37.

5. Baseline

5.1 Under the requirements of Part IV of the Environment Act (HM Government, 1995), TMBC has carried out a review and assessment of local air quality.

5.2 TMBC undertakes automatic monitoring at two locations, ZT8 and ZT9, both of which measure NO_2 but only ZT8 measures PM_{10} and $PM_{2.5}$. Non-automatic monitoring of NO_2 occurs at 54 diffusion tube sites across the borough. TMBC's monitoring locations around the modelled areas are shown in Table 5-1 below, and in Figure A- 1 to Figure A- 11. Measured concentrations ranged between 8.7 µg/m^3 and 38.3 µg/m^3 in 2023 with no exceedances of the AQS objective of 40 µg/m^3.

5.3 NO_2 concentrations have generally declined since 2019. In 2020, there was a larger decrease compared to concentrations measured in 2019. This is largely as a result of impacts from COVID-19 and the associated restrictions on activity during lockdown which led to lower traffic flows across the country. A small increase was observed at some sites in 2021 compared to 2020. Conversely, a small decrease was observed at most sites in 2023 compared to 2022.

Table 5-1: TMBC Monitoring Data

				Annual Mean NO_2 Concentration				
Site ID	Monitoring Type	In AQMA?	Site Type	2019	2020	2021	2022	2023
ZT8	Automatic	AQMA 7	Roadside	-	-	22.9	24.2	21.8
ZT9	Automatic	AQMA 3	Urban centre	-	-	-	22.5	24.8
TN18	Diffusion Tube	No	Suburban	13.2	11.1	10.3	10.4	8.7
TN33	Diffusion Tube	AQMA 4	Roadside	**46.4**	**42.1**	39.5	36.8	33.8
TN35	Diffusion Tube	AQMA 3	Roadside	35.6	28.3	29.3	25.4	25.2
TN43	Diffusion Tube	AQMA 4	Roadside	33.8	27.4	27.7	28.2	23.4
TN44	Diffusion Tube	AQMA 3	Roadside	32.3	26.8	27.1	22.1	25.9
TN47	Diffusion Tube	No	Urban Background	17.9	14.7	14.4	14.1	12.6
TN57	Diffusion Tube	No	Roadside	30.7	24.9	24.3	22.0	21.3
TN60, TN62, TN63	Diffusion Tube	AQMA 5	Roadside	**42.1**	32.1	31.0	30.4	28.1
TN70, TN72, TN73	Diffusion Tube	AQMA 7	Roadside	38.1	29.8	30.6	30.4	27.2
TN45, TN74, TN75	Diffusion Tube	AQMA 3	Roadside	36.6	28.8	29.7	28.4	24.8
TN42, TN76, TN77	Diffusion Tube	AQMA 4	Roadside	**54.6**	**44.8**	**46.5**	**44.8**	38.3
TN86	Diffusion Tube	No	Roadside	20.6	16.6	17.4	17.0	13.9

Site ID	Monitoring Type	In AQMA?	Site Type	Annual Mean NO_2 Concentration				
				2019	2020	2021	2022	2023
TN93	Diffusion Tube	No	Roadside	31.7	24.9	22.6	19.6	21.8
TN96	Diffusion Tube	No	Roadside	28.9	20.6	23.6	23.1	20.1
TN106, TN150, TN151	Diffusion Tube	AQMA 6	Roadside	**41.5**	31.0	34.7	33.3	26.5
TN109	Diffusion Tube	No	Roadside	35.1	26.2	26.5	23.9	22.4
TN110	Diffusion Tube	No	Roadside	27.6	22.8	24.6	21.7	20.8
TN118	Diffusion Tube	No	Roadside	31.3	25.7	21.0	24.7	21.7
TN119	Diffusion Tube	No	Kerbside	27.8	21.9	23.6	20.9	19.3
TN122	Diffusion Tube	AQMA 4	Roadside	35.8	27.0	28.2	24.9	22.9
TN123	Diffusion Tube	No	Roadside	-	23.4	23.2	23.8	21.0
TN130	Diffusion Tube	No	Roadside	-	16.8	19.1	18.0	15.4
TN135	Diffusion Tube	No	Roadside	-	21.5	20.9	22.0	18.5
TN136	Diffusion Tube	No	Roadside	-	-	33.1	23.5	19.6
TN137	Diffusion Tube	No	Roadside	-	-	31.7	30.2	28.7
TN138	Diffusion Tube	No	Roadside	-	-	17.8	19.8	16.8
TN139	Diffusion Tube	No	Roadside	-	-	20.4	18.6	16.8
TN140	Diffusion Tube	No	Roadside	-	-	18.2	16.1	17.7
TN141	Diffusion Tube	AQMA 7	Roadside	-	-	21.5	23.4	20.1
TN142	Diffusion Tube	No	Roadside	-	-	-	13.6	11.6
TN143	Diffusion Tube	No	Roadside	-	-	-	13.8	12.6
TN144, TN159, TN160	Diffusion Tube	No	Roadside	-	-	-	29.3	25.2
TN145	Diffusion Tube	No	Roadside	-	-	-	24.9	22.0
TN146	Diffusion Tube	No	Roadside	-	-	-	17.9	15.3
TN152	Diffusion Tube	No	Roadside	-	-	-	16.1	19.4

Site ID	Monitoring Type	In AQMA?	Site Type	Annual Mean NO_2 Concentration				
				2019	2020	2021	2022	2023
TN155	Diffusion Tube	No	Roadside	-	-	-	-	18.4

Exceedances of the annual mean NO_2 AQS Objective are shown in **bold**

6. Results

Modelled Concentrations

2022 Baseline (Human Health)

6.1 Modelled results at sensitive receptors within each modelled area are presented in Table A-17 to Table A-27 in Appendix C.

6.2 These receptors have been chosen as they are representative of selected locations within each modelled area and provide the worst case annual mean concentration at relevant exposure. In total, 270 receptors were selected across the 11 modelled areas.

6.3 There were no exceedances of the annual mean NO_2 AQS objective of 40 µg/m^3 in Tonbridge Town Centre, Medway Gap, Borough Green and Wrotham, Aylesford, Bluebell Hill, Snodland, Trench Wood, East Peckham, Hildenborough and Kings Hill in the 2022 baseline.

6.4 There were three sites that exceeded the annual mean NO_2 AQS objective in Wateringbury in the 2022 Baseline. Receptors R1_WB, R5_WB and R6_WB which had predicted concentrations of 43.7 µg/m^3, 53.4 µg/m^3 and 51.8 µg/m^3 respectively. All three receptors are located along Tonbridge Road within the AQMA (AQMA 4). Monitoring sites TN33 and TN42/76/73 are also located along this section of Tonbridge Road and measured concentrations close to or exceeding the objective in 2022.

6.5 Since 2022, measured concentrations have declined as evident from TMBC's monitoring data.

6.6 Modelled PM_{10} and $PM_{2.5}$ concentrations are both well below their respective AQS objectives in 2022. Furthermore, modelled $PM_{2.5}$ concentrations at all locations are below the AQS 2028 interim target of 12 µg/m^3 at all receptors with a maximum of 11.9 µg/m^3 at R5_WB in Wateringbury.

2042 Local Plan Impacts

6.7 Predicted concentrations at all modelled human health receptors are presented in Table A-28 to Table A-38 in Appendix C and the significance of the impacts from the local plan are summarised in Table A-39 to Table A-49 in Appendix C. These receptors have been chosen as they provide the worst case annual mean concentration at relevant exposure.

6.8 All 270 selected human health receptors in the study areas were estimated to have annual mean NO_2 concentrations well below the air quality objective of 40 µg/m³ in both future scenarios - DM and DS (with and without the Local Plan). There are therefore unlikely to be any exceedances of the annual mean objective in 2042.

Tonbridge Town Centre

6.9 In the 2042 scenario, none of the receptors in Tonbridge Town Centre are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R19_TH, located near a busy junction along Tonbridge High Street (outside the AQMA), shows the highest concentrations in both scenarios, with 10.1 µg/m³ without the Local Plan and 10.3 µg/m³ with the Local Plan, and showing the largest increase of 0.2 µg/m³. The smallest increases are observed at R9_TH, R10_TH, R11_TH, R12_TH, R14_TH, R17_TH with an increase of <0.1 µg/m³.

6.10 The receptors with the greatest increase in NO_2 concentrations are R1_TH, R4_TH and R19_TH, with changes of 0.2 µg/m³ increase due to the Local Plan. The overall changes are small and do not suggest any significant air quality impacts in Tonbridge High Street.

6.11 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. For example, at R19_TH, PM_{10} rises

slightly from 14.6 µg/m³ without the Local Plan to 15.1 µg/m³ with the Local Plan, while $PM_{2.5}$ highest increase is 0.3 µg/m³ (i.e., R4_TH and R19_TH).

Wateringbury

6.12 In the 2042 scenario, none of the receptors in Wateringbury are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R6_WB, located along Tonbridge Road, within the AQMA, shows the highest concentrations in both scenarios, with 19.4 µg/m³ without the Local Plan and 19.7 µg/m³ with the Local Plan, reflecting showing the largest increase of 0.3 µg/m³. The smallest increases are observed at R3_WB, R4_WB, R7_WB and R10_WB with an increase of <0.1 µg/m³.

6.13 The receptor with the greatest increase in NO_2 concentrations is R6_WB, with changes of 0.3 µg/m³ as traffic flows increase due to the Local Plan. The overall changes are small and do not suggest any significant air quality impacts in the Wateringbury AQMA.

6.14 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. For example, at R19_TH, PM_{10} rises slightly from 16.0 µg/m³ without the Local Plan to 16.4 µg/m³ with the Local Plan, while $PM_{2.5}$ highest increase is 0.3 µg/m³ (i.e., R5_WB).

Medway Gap

6.15 In the 2042 scenario, none of the receptors in Medway Gap are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R2_MG, located on London Road, within AQMA 5, shows the highest concentrations in both scenarios, with 11.0 µg/m³ without the Local Plan and 11.1 µg/m³ with the Local Plan, reflecting a minimal increase of 0.1 µg/m³. R40_MG shows a decrease of 0.1 µg/m³ with the Local Plan in place.

6.16 The receptor with the greatest increase in NO_2 concentrations is R51_MG, with changes of 0.6 µg/m³ as traffic flows increase due to the Local Plan. The overall changes are small and do not suggest any significant air quality impacts in Medway Gap.

6.17 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. There is a slight adverse impact observed at R34_MG for both PM_{10} and $PM_{2.5}$. The concentrations observed with the local plan are 15.5 µg/m³ for PM_{10} and 8.6 µg/m³ $PM_{2.5}$ respectively. These values are well below the applicable AQOs, including the new interim $PM_{2.5}$ target from 2028. Furthermore, 2040 background concentrations were applied. Hence, the modelled results reflect a conservative overestimate as background pollutant concentrations are predicted to decline further in future years. Subsequently, these slight adverse effects can be determined to be insignificant in line with IAQM guidance.

Borough Green and Wrotham

6.18 In the 2042 scenario, none of the receptors in Borough Green and Wrotham are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R31_BG located close to a roundabout along Sevenoaks Road, within the AQMA, shows the highest concentrations in both scenarios, with 10.8 µg/m³ without the Local Plan and 10.6 µg/m³ with the Local Plan, reflecting a decrease of 0.2 µg/m³. The smallest increases are observed at R30_BG, R33_BG, R35_BG, R39_BG and R47_BG with an increase of <0.1 µg/m³.

6.19 The receptors with the greatest increase in NO_2 concentrations are R19_BG, R22_BG, R23_BG and R43_BG with changes of 0.3 µg/m³ as traffic flows increase due to the Local Plan. The overall changes are small and do not suggest any significant air quality impacts in Borough Green and Wrotham.

6.20 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. For example, at R43_BG, PM_{10} rises

slightly from 12.5 µg/m³ without the Local Plan to 13.2 µg/m³ with the Local Plan, while $PM_{2.5}$ highest increase is 0.6 µg/m³ (i.e., R23_BG).

Aylesford

6.21 In the 2042 scenario, none of the receptors in Aylesford are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R1_AY located close to High Street (Aylesford), shows the highest concentrations in both scenarios, with 9.0 µg/m³ without the Local Plan and 9.1 µg/m³ with the Local Plan, reflecting an increase of 0.1 µg/m³.

6.22 The receptor with the greatest increase in NO_2 concentrations are R1-AY with changes of 0.1 µg/m³ as traffic flows increase due to the Local Plan. The overall changes are small and do not suggest any significant air quality impacts in Aylesford.

6.23 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. For example, at R1_AY, PM_{10} rises slightly from 15.6 µg/m³ without the Local Plan to 16.0 µg/m³ with the Local Plan, while $PM_{2.5}$ highest increase is 0.2 µg/m³ (i.e., R1_AY).

Bluebell Hill

6.24 In the 2042 scenario, none of the receptors in Bluebell Hill are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R6_BB, located along the A229, shows the highest concentrations in both scenarios, with 10.8 µg/m³ without the Local Plan and 10.9 µg/m³ with the Local Plan, reflecting a minimal increase of 0.1 µg/m³. The smallest increases are observed at R3_BB, R8_BB, R10_BB, R11_BB, R12_BB, R13_BB, R14_BB, R15_BB, R19_BB, R20_BB, R21_BB, R22_BB, R23_BB and R25_BB with an increase of <0.1 µg/m³.

6.25 The receptors with the greatest increase in NO_2 concentrations are R4_BB, R5_BB, R6_BB, R7_BB, R9_BB, R16_BB and R17_BB, with changes of 0.1 µg/m³ as traffic flows increase due to the Local Plan. The overall changes are small and do not suggest any significant air quality impacts in Bluebell Hill.

6.26 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. For example, at R6_BB, PM_{10} rises slightly from 14.6 µg/m³ without the Local Plan to 14.8 µg/m³ with the Local Plan, while $PM_{2.5}$ highest increase is 0.1 µg/m³ (i.e., R3_BB, R8_BB, R10_BB, R11_BB, R12_BB, R13_BB, R14_BB, R15_BB, R19_BB, R20_BB, R21_BB, R22_BB, R23_BB and R25_BB).

Snodland

6.27 In the 2042 scenario, none of the receptors in Snodland are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R8_SL, located along the A228, shows the highest concentrations in both scenarios, with 12.0 µg/m³ without the Local Plan and 12.2 µg/m³ with the Local Plan, reflecting a minimal increase of 0.2 µg/m³. R7_SL shows the smallest increase of 0.1 µg/m³ with the Local Plan in place.

6.28 The receptor with the greatest increase in NO_2 concentrations is R2_SL, with changes of 0.8 µg/m³ as traffic flows increase due to the Local Plan. The overall changes are small and do not suggest any significant air quality impacts in Snodland.

6.29 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. There is a slight adverse impact observed at R2_SL for both PM_{10} and $PM_{2.5}$. The concentrations observed with the local plan are 13.2 µg/m³ for PM_{10} and 7.0 µg/m³ $PM_{2.5}$ respectively. These values are well below the applicable AQOs, including the new interim $PM_{2.5}$ target from 2028. Furthermore, 2040 background concentrations were applied as this is the furthest projection year available at the time of writing. Hence, the modelled results reflect a conservative overestimate as background

pollutant concentrations are predicted to decline further in future years. Subsequently, these slight adverse effects can be determined to be insignificant in line with IAQM guidance.

Trench Wood

6.30 In the 2042 scenario, none of the receptors in Trench Wood are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R36_TW, located close to a busy roundabout, shows the highest concentrations in both scenarios, with 7.9 µg/m³ without the Local Plan and 8.0 µg/m³ with the Local Plan, reflecting a minimal increase of 0.1 µg/m³. The smallest increase is observed at R27_TW with an increase of <0.1 µg/m³.

6.31 The receptor with the greatest increase in NO_2 concentrations is R5_TW, with a change of 0.5 µg/m³ as traffic flows increase due to the Local Plan. The overall changes are small and do not suggest any significant air quality impacts in Trench Wood.

6.32 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. For example, at R17_TW, PM_{10} rises slightly from 9.6 µg/m³ without the Local Plan to 10.4 µg/m³ with the Local Plan, while $PM_{2.5}$ highest increase is 0.8 µg/m³ (i.e., R19_TW).

East Peckham

6.33 In the 2042 scenario, none of the receptors in East Peckham are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R4_EP, located along Old Road, shows the highest concentrations in both scenarios, with 6.1 µg/m³ both with and without the Local Plan, reflecting a minimal increase of <0.1 µg/m³. An increase of 0.1 µg/m³ is observed at all receptors.

6.34 The overall changes are small and do not suggest any significant air quality impacts in East Peckham.

6.35 Similar trends are observed for PM_{10} and $PM_{2.5}$ although there is a greater range. The concentrations of both pollutants remain below their respective objectives in both scenarios. For example, at R2_EP, PM_{10} rises slightly from 9.6 µg/m³ without the Local Plan to 10.0 µg/m³ with the Local Plan, while $PM_{2.5}$ highest increase is 0.2 µg/m³ (i.e., R2_EP).

Hildenborough

6.36 In the 2042 scenario, none of the receptors in Hildenborough are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor R2_HB located along Tonbridge Road, shows the highest concentrations in both scenarios, with 6.3 µg/m³ without the Local Plan and 6.5 µg/m³ with the Local Plan, reflecting an increase of 0.2 µg/m³.

6.37 The receptors with the greatest increases in NO_2 concentrations are R1-HB and R2-HB with changes of 0.2 µg/m³ as traffic flows increase due to the Local Plan. The overall changes are small and do not suggest any significant air quality impacts in Hildenborough.

6.38 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. For example, at R1_HB, PM_{10} rises slightly from 11.2 µg/m³ without the Local Plan to 11.9 µg/m³ with the Local Plan, while $PM_{2.5}$ highest increase is 0.3 µg/m³ (i.e., R1_HB and R2_HB).

Kings Hill

6.39 In the 2042 scenario, none of the receptors in Kings Hill are expected to exceed the annual mean NO_2 air quality objective of 40 µg/m³, both with (DS) and without (DM) the Local Plan. Receptor P1_KH located along Broadwater Road, is used as a proxy for existing receptors as it is located in a worst case position in relation to changes in traffic and shows the highest concentrations in both scenarios, with 6.1 µg/m³ without the Local Plan and 6.4 µg/m³ with the Local Plan, reflecting an increase of 0.2 µg/m³.

6.40 The overall changes are small and do not suggest any significant air quality impacts in Kings Hill.

6.41 Similar trends are observed for PM_{10} and $PM_{2.5}$. The concentrations of both pollutants remain below their respective objectives in both scenarios. For example, at P1_KH, PM_{10} rises slightly from 9.9 µg/m³ without the Local Plan to 10.6 µg/m³ with the Local Plan, while $PM_{2.5}$ highest increase is 0.4 µg/m³ (i.e., P1_KH).

Summary

6.42 With reference to the IAQM/EPUK guidance (Environmental Protection UK (EPUK) & IAQM, 2017), the predicted changes in NO_2, PM_{10} and $PM_{2.5}$ concentrations due to the Local Plan are considered to be negligible at all receptors. The only exceptions are receptors R34_MG in Medway Gap and R2_SL in Snodland where slight adverse impacts are observed for PM_{10} and $PM_{2.5}$. As discussed above, these effects can be deemed to be insignificant.

6.43 All modelled receptors show $PM_{2.5}$ concentrations below the 10 µg/m³ interim target for $PM_{2.5}$ in 2042. A maximum $PM_{2.5}$ concentration of 9.8 µg/m³ is predicted at R5_WB located within the Wateringbury AQMA.

Proposed Receptors

6.44 Proposed receptors are new receptors, which will be created as part of LP developments and are denoted by “P” in modelled results and significance tables in Appendix C. These receptors only have a modelled result reported for the DS (with Local Plan) scenario, as they do not exist in the DM (without Local Plan) or baseline scenarios. Concentrations in the DS (with local plan) scenario are well below the relevant AQOs for NO_2, PM_{10} and $PM_{2.5}$ including the interim 2028 $PM_{2.5}$ objective. Subsequently, the allocated sites in the LP can be considered suitable for all purposes.

7. Conclusions

2022 Baseline

7.1 This report presents the baseline results of the air quality assessment for TMBC's AQMAs and screened in areas of interest for a baseline year of 2022, as well as the impacts of implementation of the Local Plan in 2042 at key sensitive residential receptors.

7.2 Based on the modelling presented herein, there were no exceedances of the annual mean NO_2 AQS objective of 40 µg/m^3 in Tonbridge Town Centre, Medway Gap, Borough Green and Wrotham, Aylesford, Bluebell Hill, Snodland, Trench Wood, East Peckham, Hildenborough and Kings Hill in the 2022 baseline year at any sensitive receptor. This is in line with relevant TMBC monitoring data.

7.3 There were three sites that exceeded the annual mean NO_2 AQS objective in Wateringbury in the 2022 Baseline. Receptors R1_WB, R5_WB and R6_WB with predicted concentrations of 43.7 µg/m^3, 53.4 µg/m^3 and 51.4 µg/m^3 respectively. All three receptors are located along Tonbridge Road within the AQMA (AQMA 4). Monitoring sites TN33 and TN42/76/73 are also located along this section of Tonbridge Road and also measured concentrations exceeding the objective in 2022.

7.4 Modelled $PM_{2.5}$ concentrations at all locations were below the AQS 2028 interim target of 12 µg/m^3 with a maximum of 11.9 µg/m^3 at R5_WB in Wateringbury.

2042 Local Plan

7.5 The air quality assessment for 2042 indicates that NO_2 concentrations across all 270 selected receptors in Tonbridge Town Centre, Wateringbury, Medway Gap, Borough Green and Wrotham, Aylesford, Bluebell Hill, Snodland, Trench Wood, East Peckham, Hildenborough and Kings Hill remain well below the annual mean air quality objective of 40 µg/m³, both with and without the Local Plan in place. The highest concentrations are observed at R6_WB in the Wateringbury AQMA, but is significantly below the objective, even with the minor increases due to the Local Plan. It is noted that the future modelling undertaken is indicative only as Defra backgrounds have only been projected to 2040 and the predicted fleet composition is based on current understanding of projections, however, based on current expectations of future trends, this is likely to be worst case.

7.6 The impact of the Local Plan on NO_2 concentrations is generally minimal, with increases of 0.1 to 0.3 µg/m³ at most receptors.

7.7 Particulate matter (PM_{10} and $PM_{2.5}$) concentrations also remain below their respective air quality objectives across all locations. The impact of the Local Plan on PM_{10} and $PM_{2.5}$ concentrations is generally minimal, with increases of 0.1 to 0.3 µg/m³ at most receptors. These increases, however, are still within acceptable limits and do not pose significant air quality concerns.

7.8 With reference to the IAQM/EPUK guidance, the predicted changes in NO_2, PM_{10}, and $PM_{2.5}$ concentrations due to the Local Plan are considered negligible at all receptors. The only exceptions are receptors R34_MG in Medway Gap and R2_SL in Snodland where slight adverse impacts are predicted for PM_{10} and $PM_{2.5}$. As discussed above, these effects can be deemed to be insignificant.

7.9 All modelled receptors show $PM_{2.5}$ concentrations below the 10 µg/m³ target for $PM_{2.5}$ in 2042. A maximum $PM_{2.5}$ concentration of 9.8 µg/m³ is predicted at R5_WB located within the Wateringbury AQMA.

7.10 In summary, the implementation of the Local Plan does not result in exceedances of air quality objectives for NO_2, PM_{10}, or $PM_{2.5}$ at any of the selected receptors in the 11 modelled areas. While there are slight increases in pollutant concentrations, these changes are minor and are

not predicted to significantly affect air quality in the region in 2042. This is because background pollutant concentrations and vehicle fleet emissions are expected to improve as a result of fleet turnover (including due to tighter emission standards for new vehicles and an increasing uptake in electric vehicles).

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Appendix A Figures

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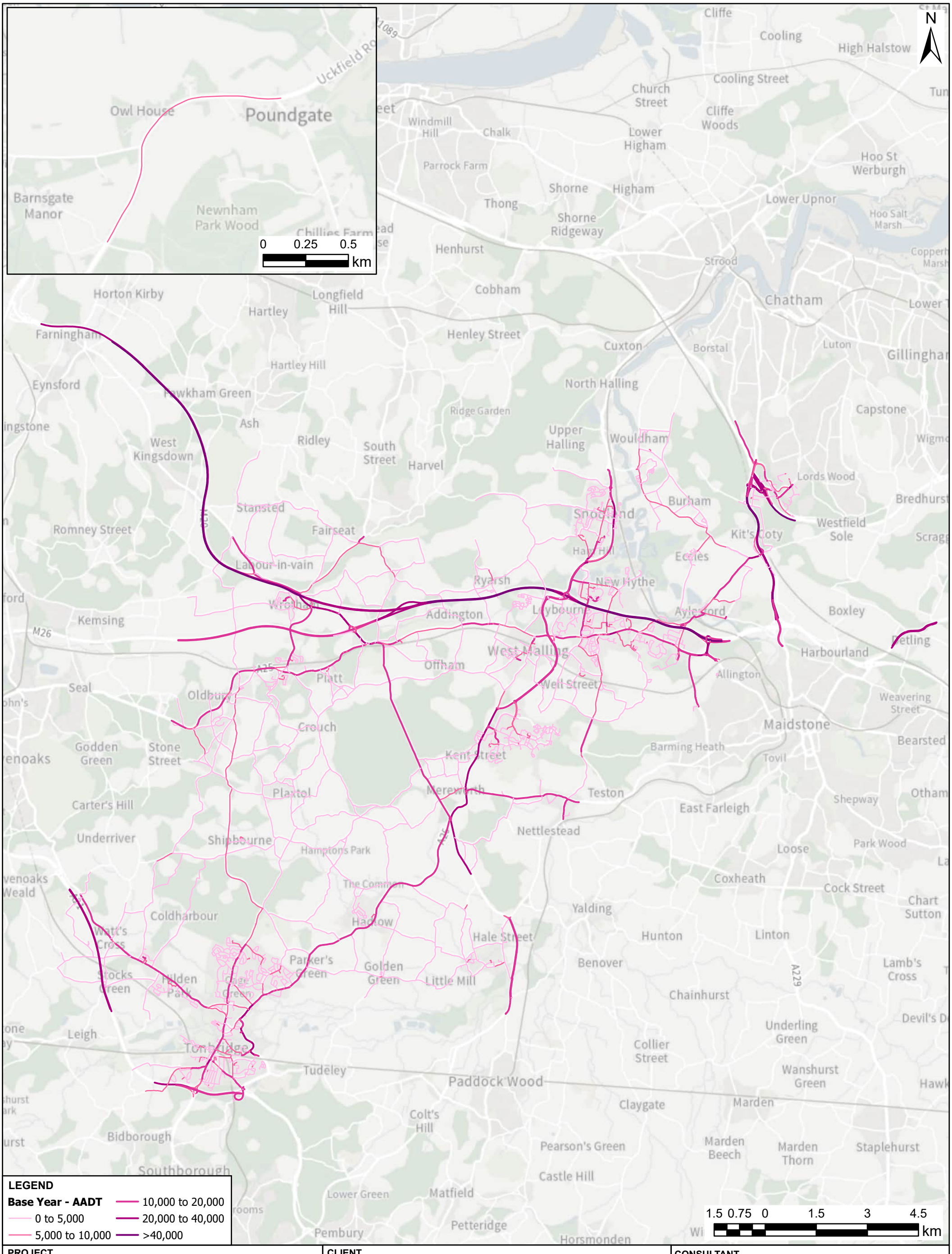

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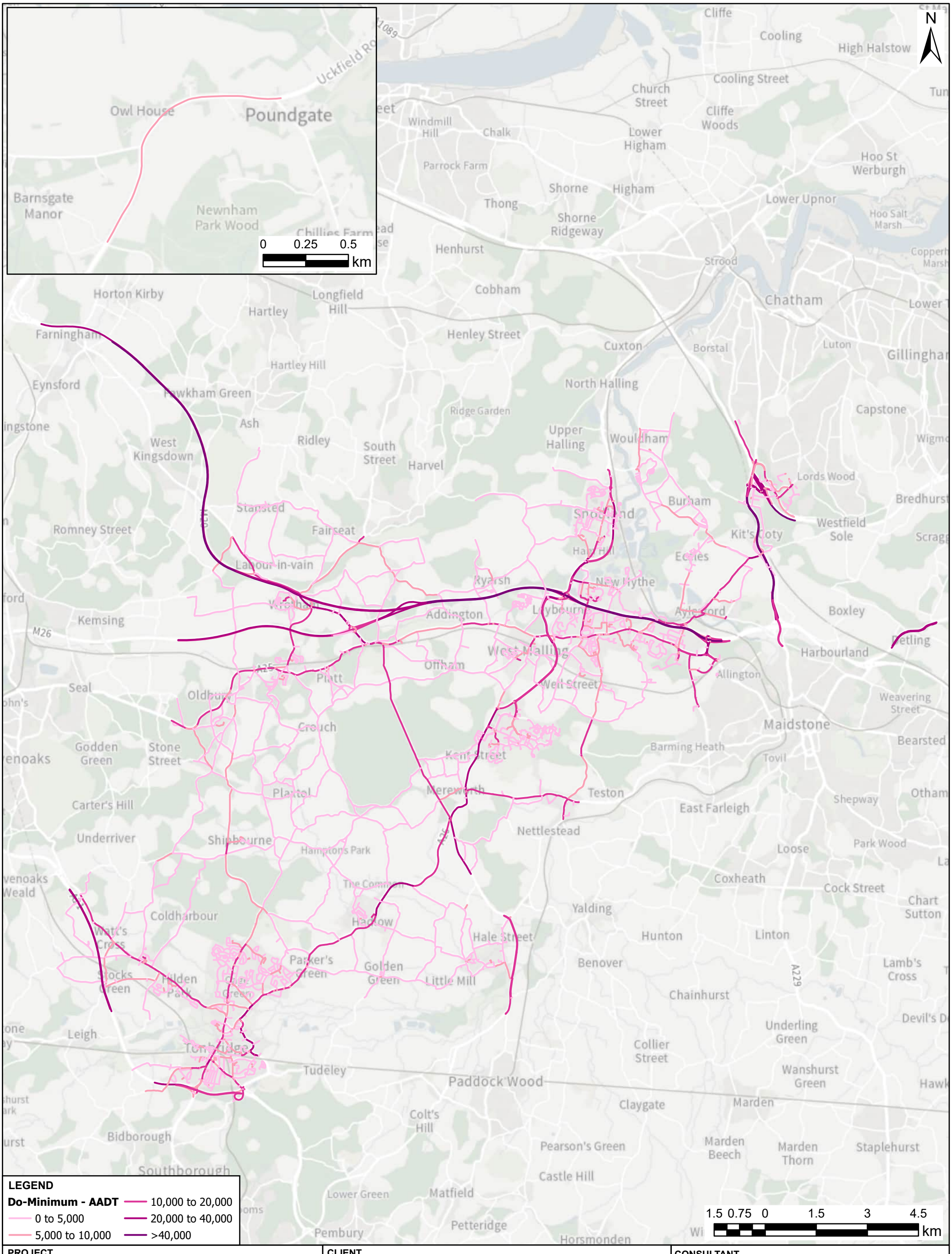

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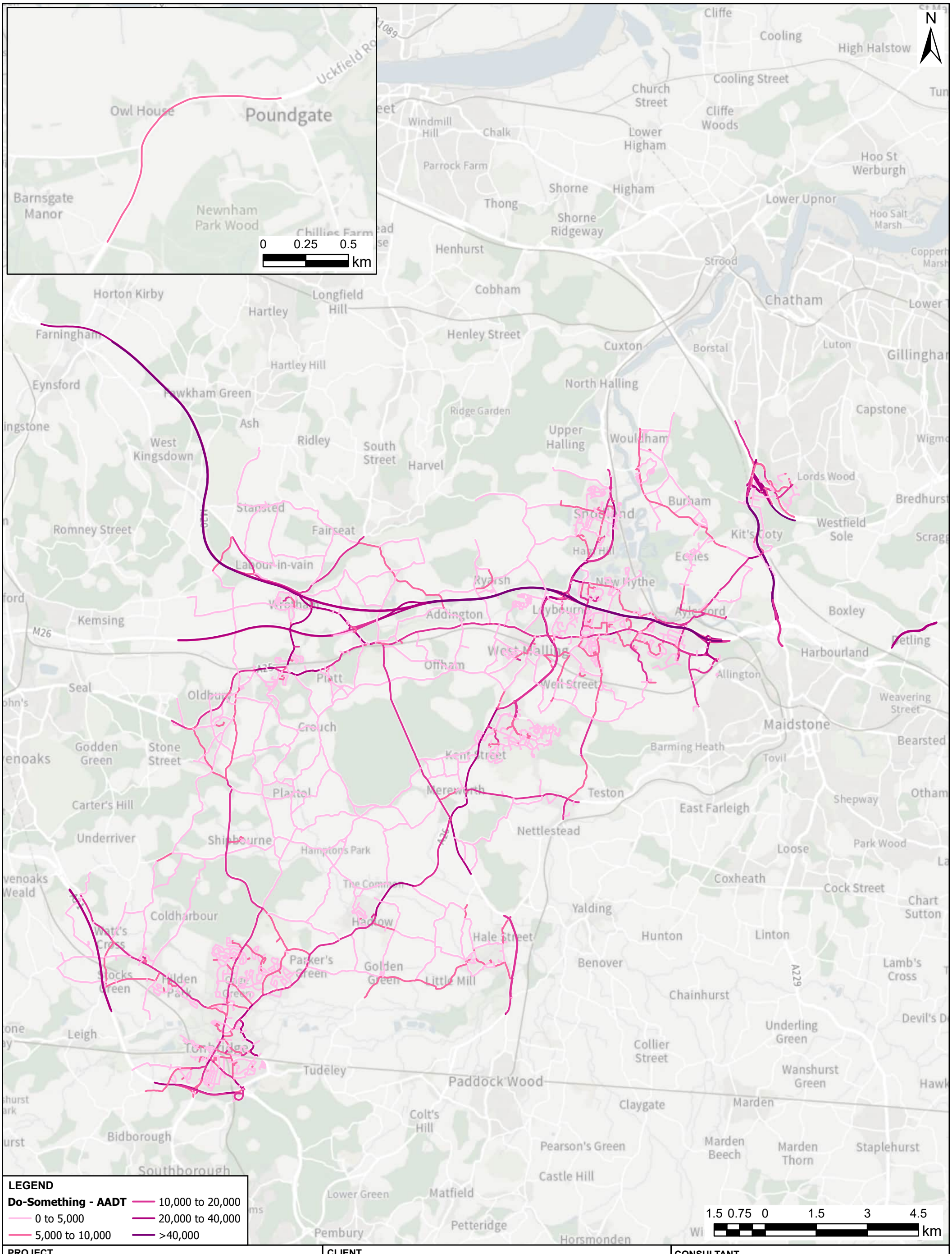

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Do-Something - AADT

- 0 to 5,000
- 5,000 to 10,000
- 10,000 to 20,000
- 20,000 to 40,000
- >40,000

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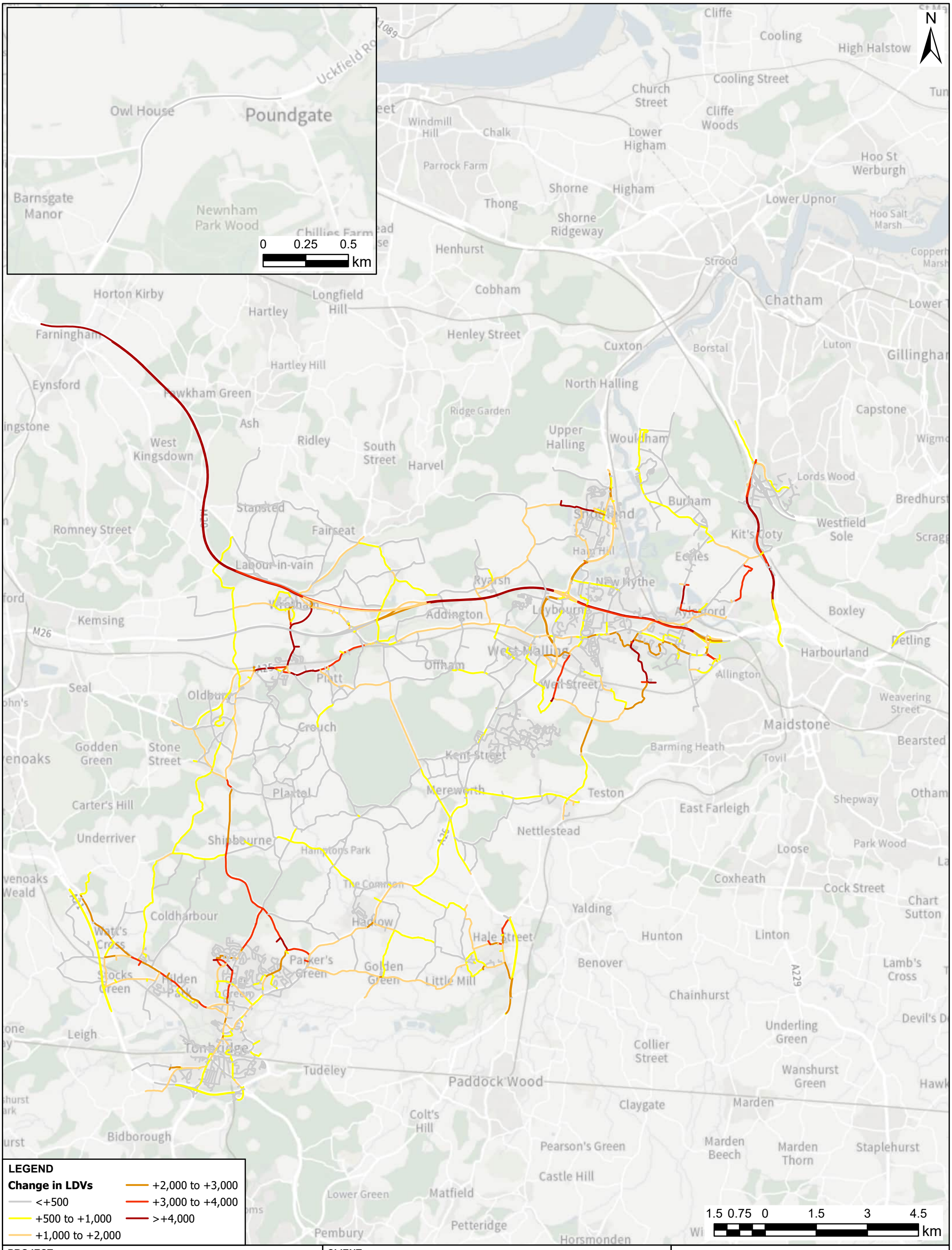

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- +500 to +1,000
- +1,000 to +2,000
- +2,000 to +3,000
- +3,000 to +4,000
- >+4,000

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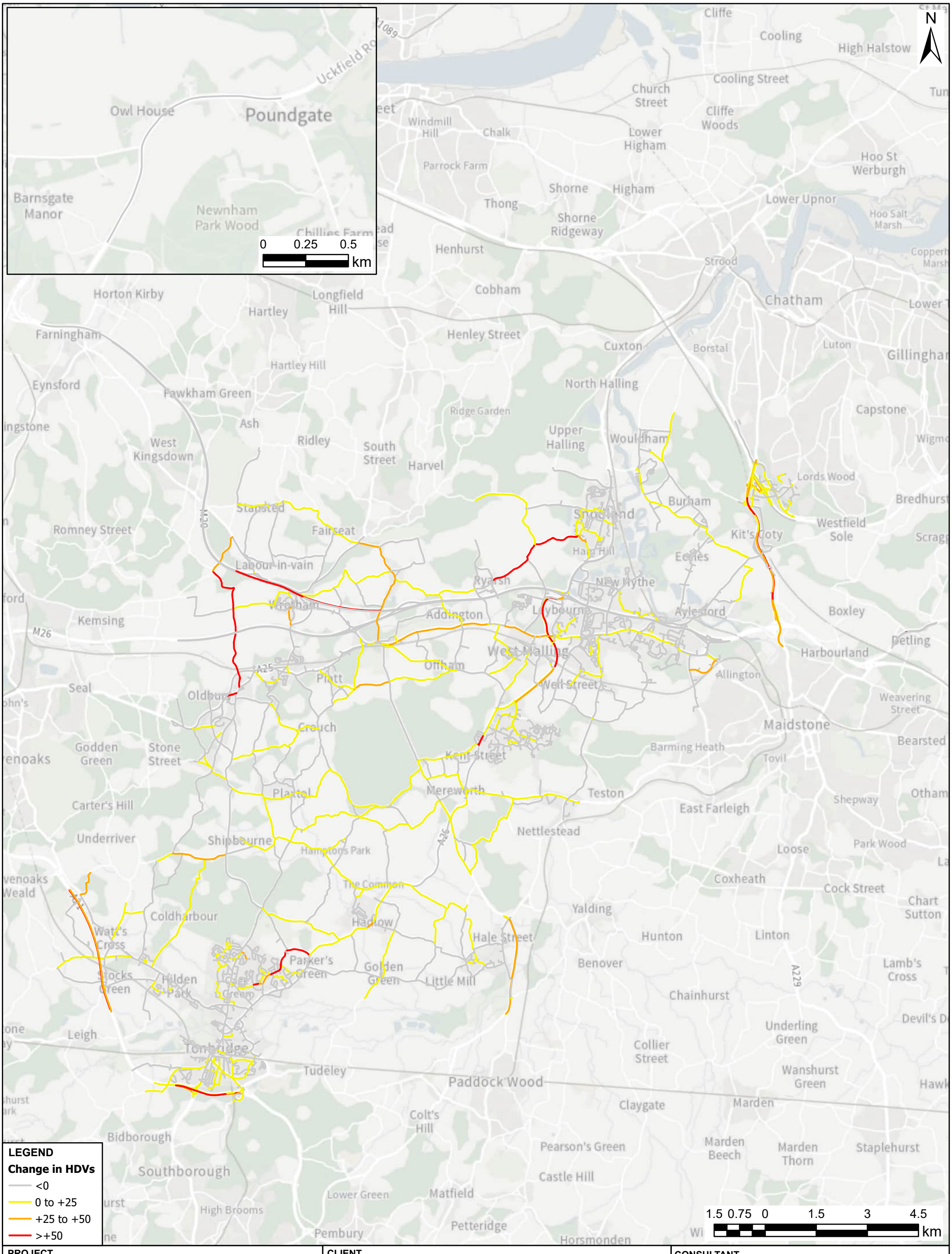

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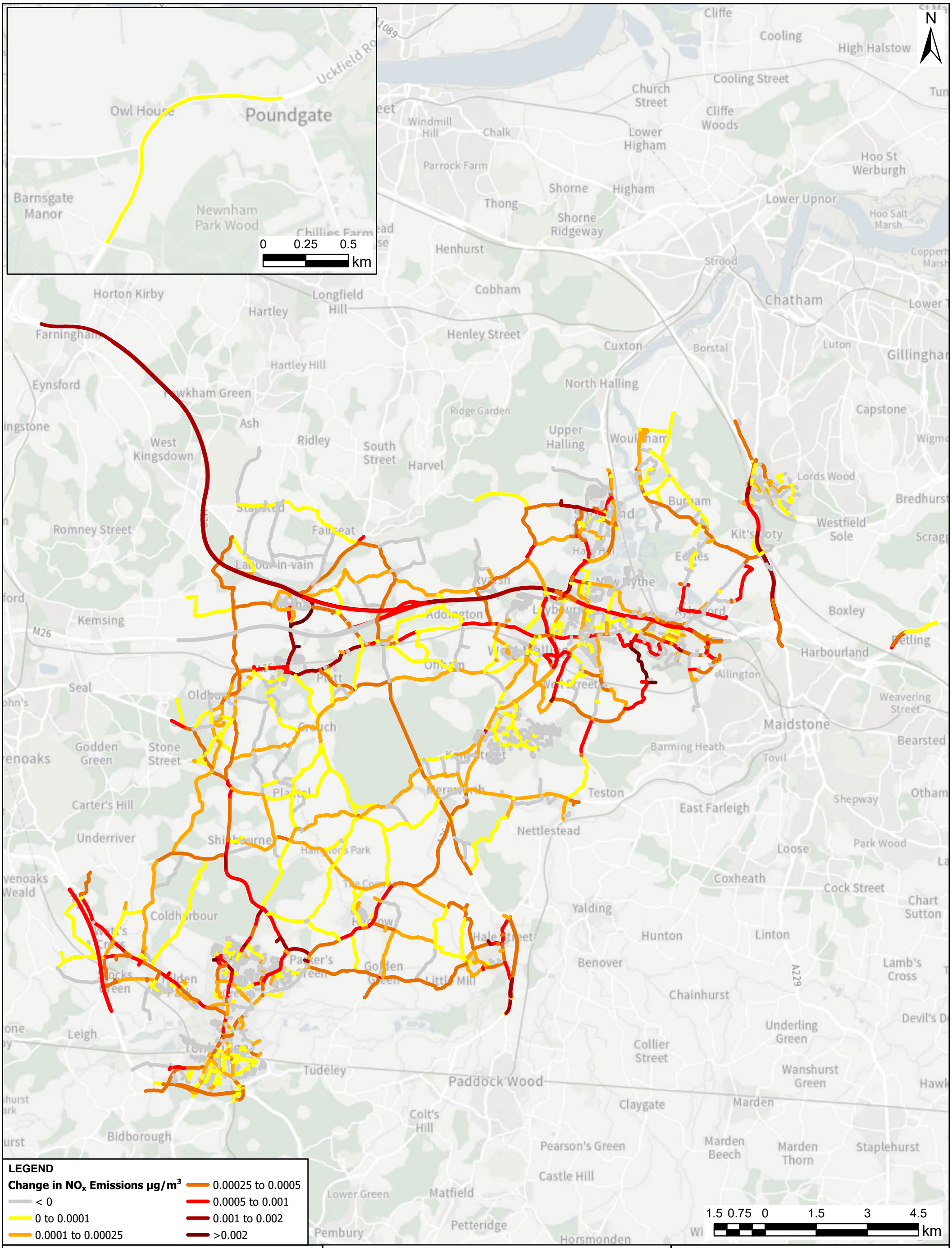

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- 0.00025 to 0.0005
- 0.0005 to 0.001
- 0.001 to 0.002
- >0.002

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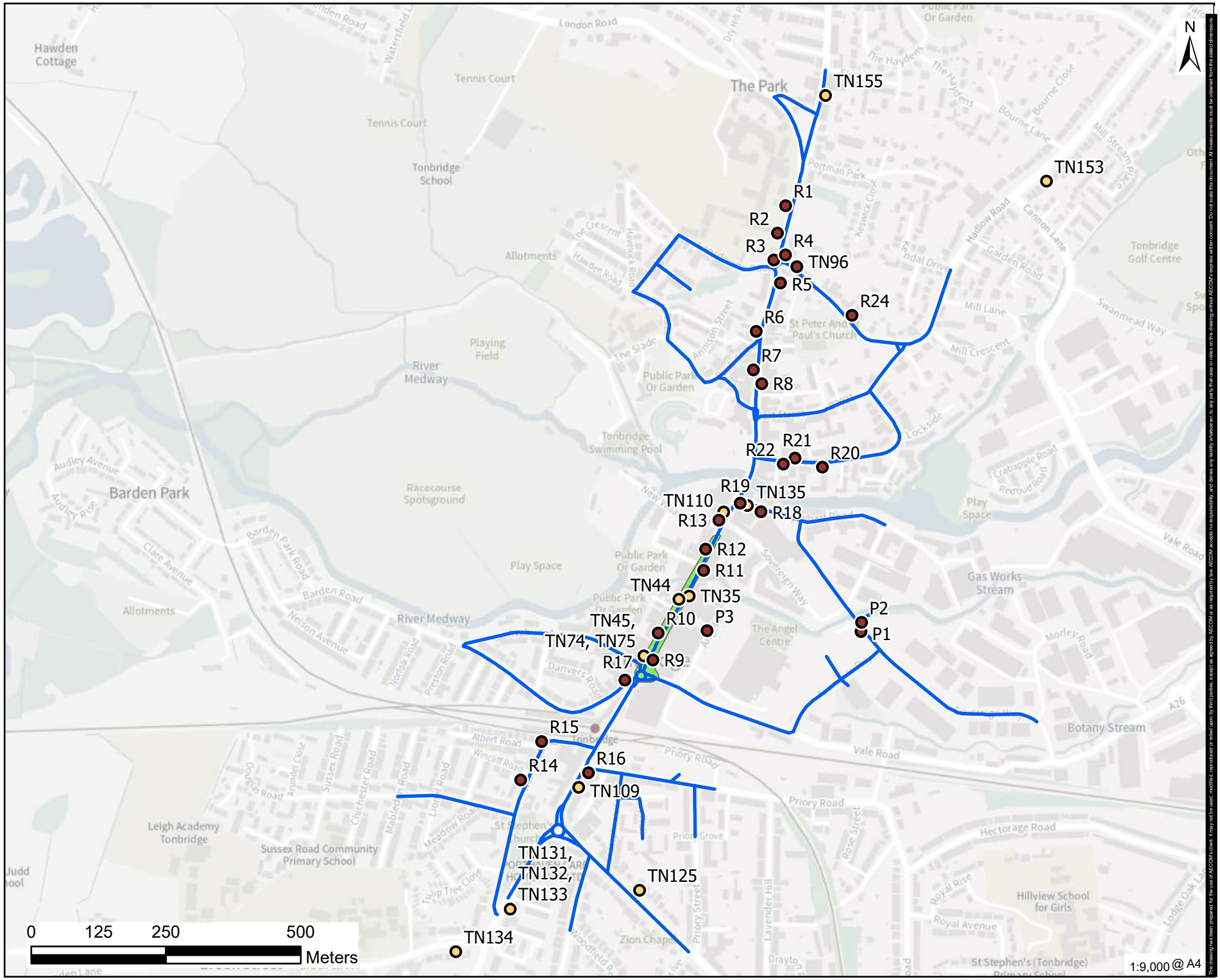

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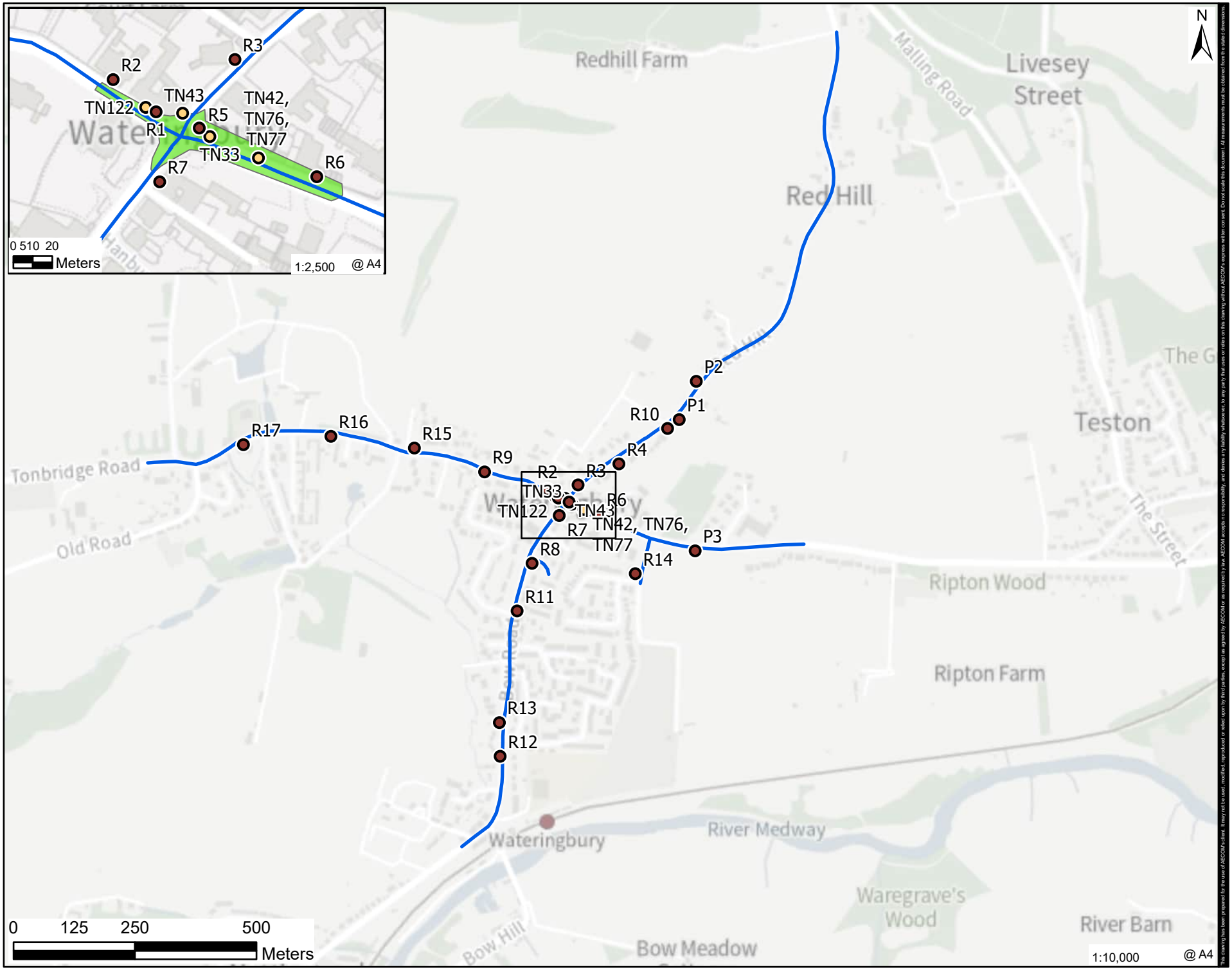

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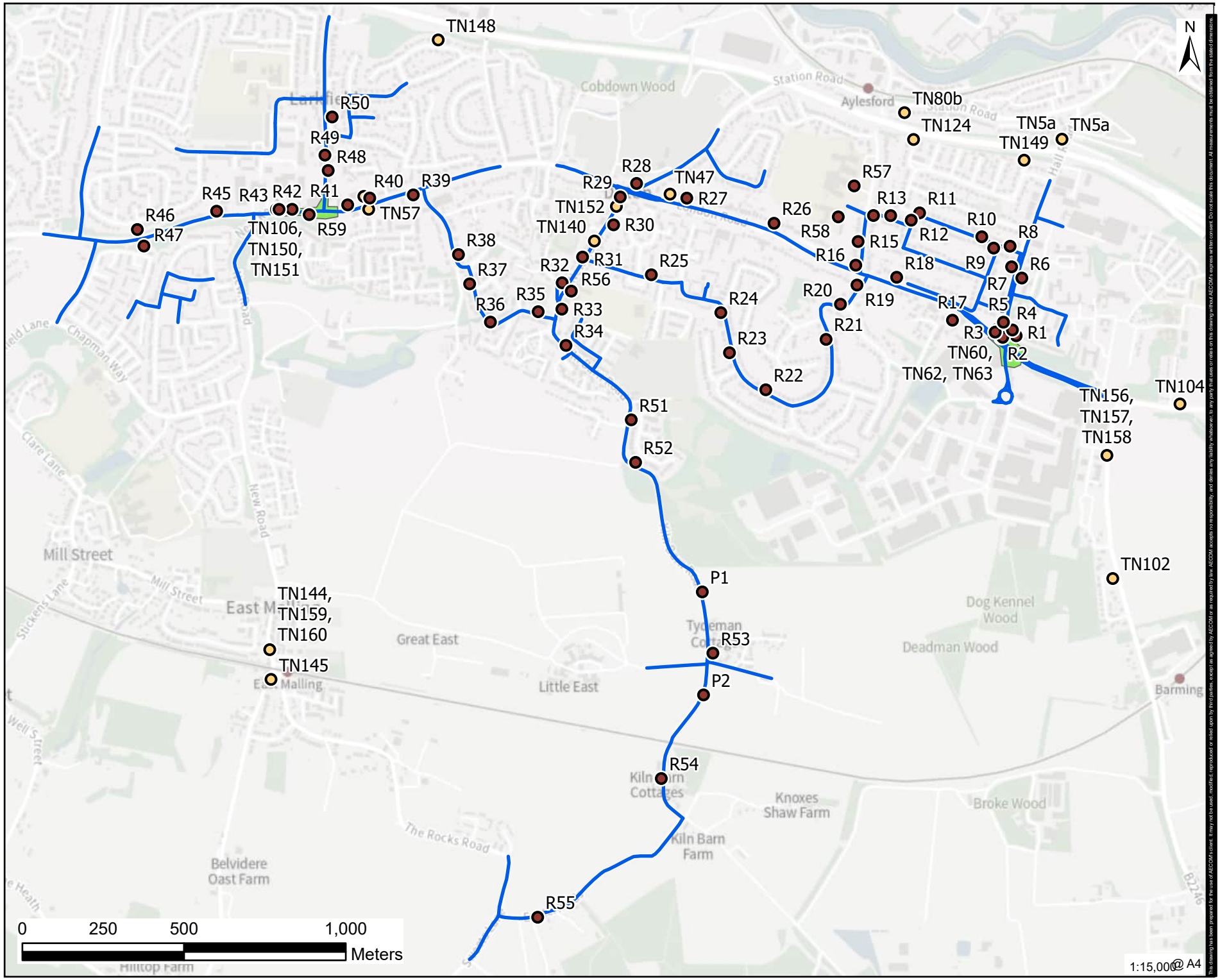

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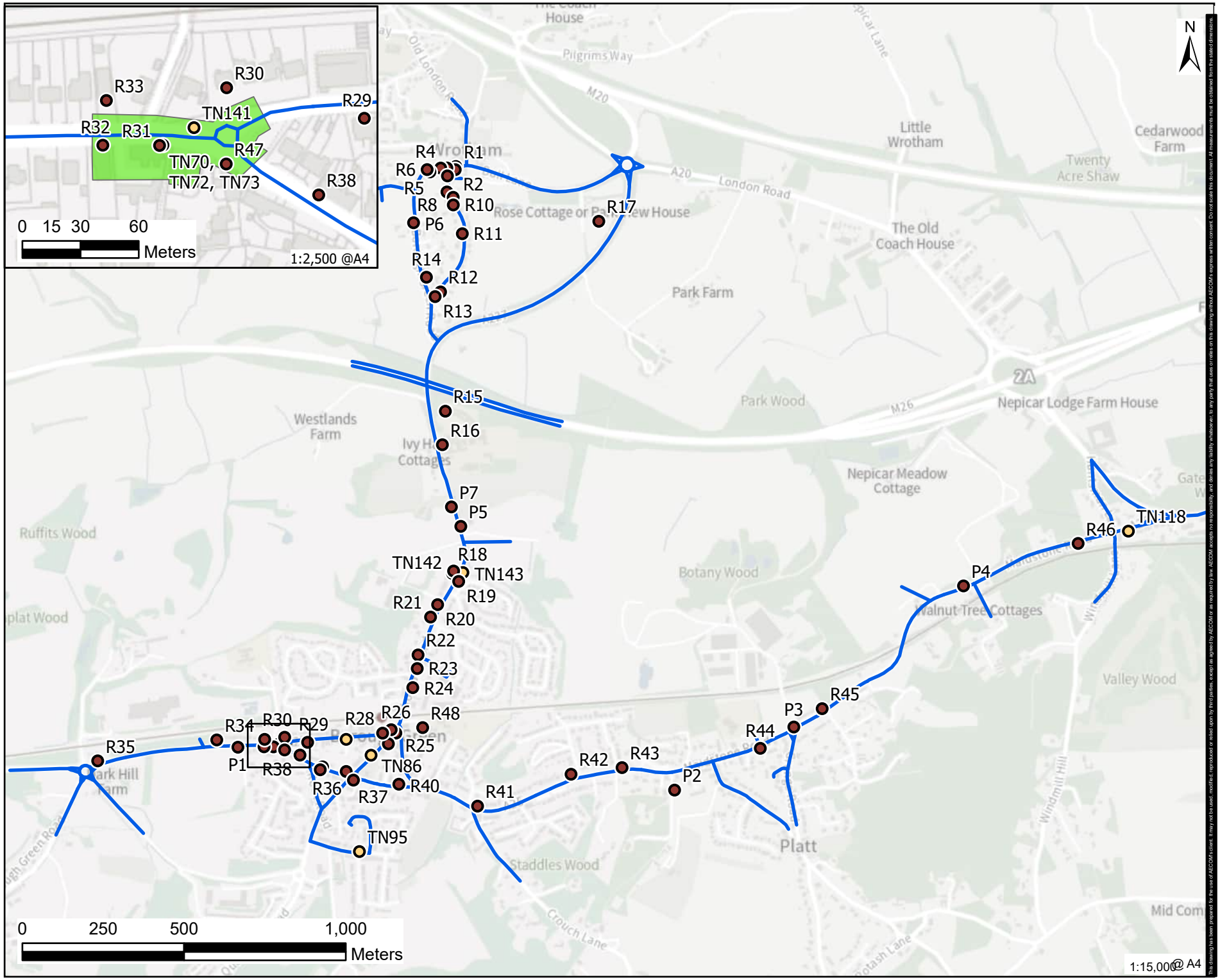

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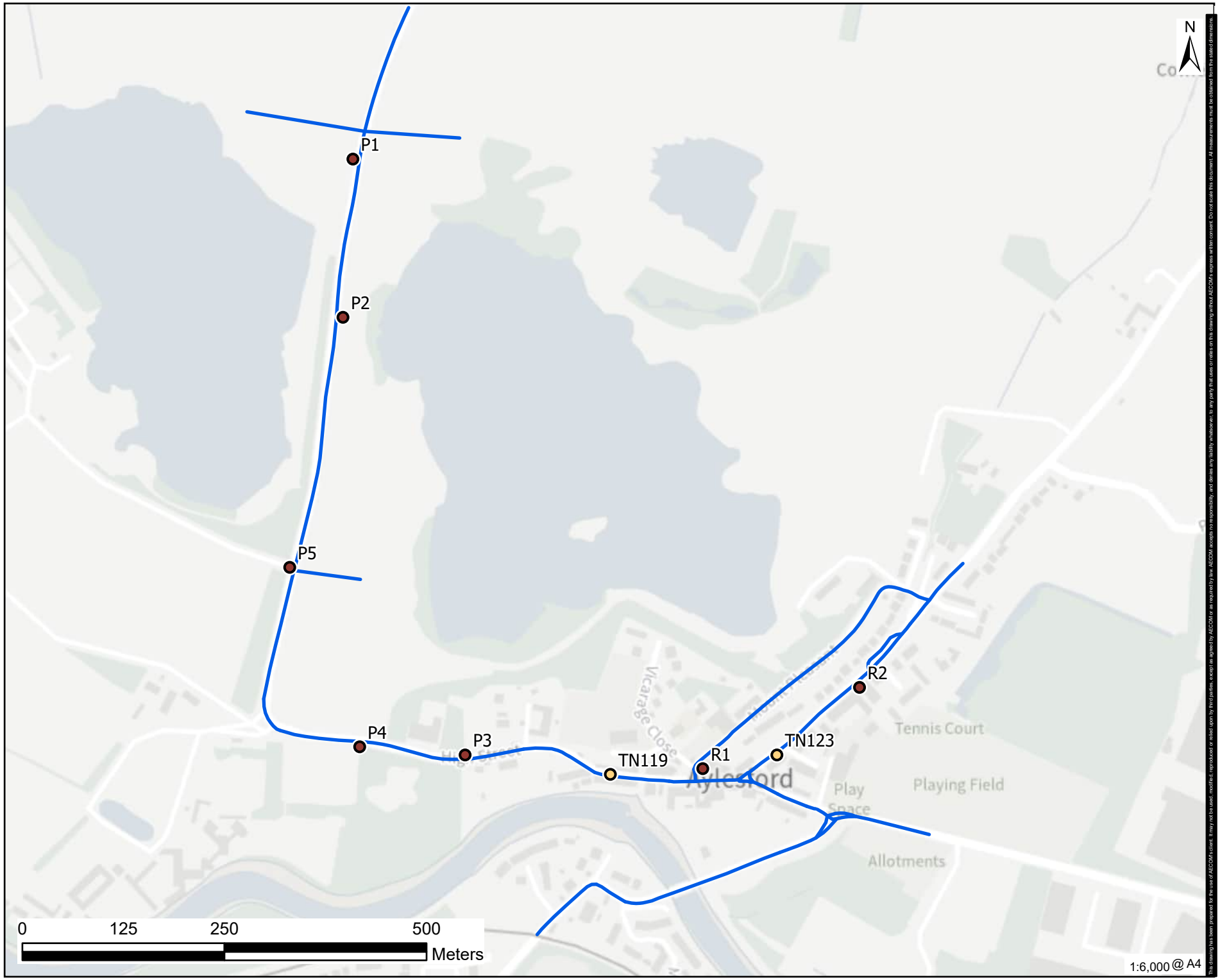

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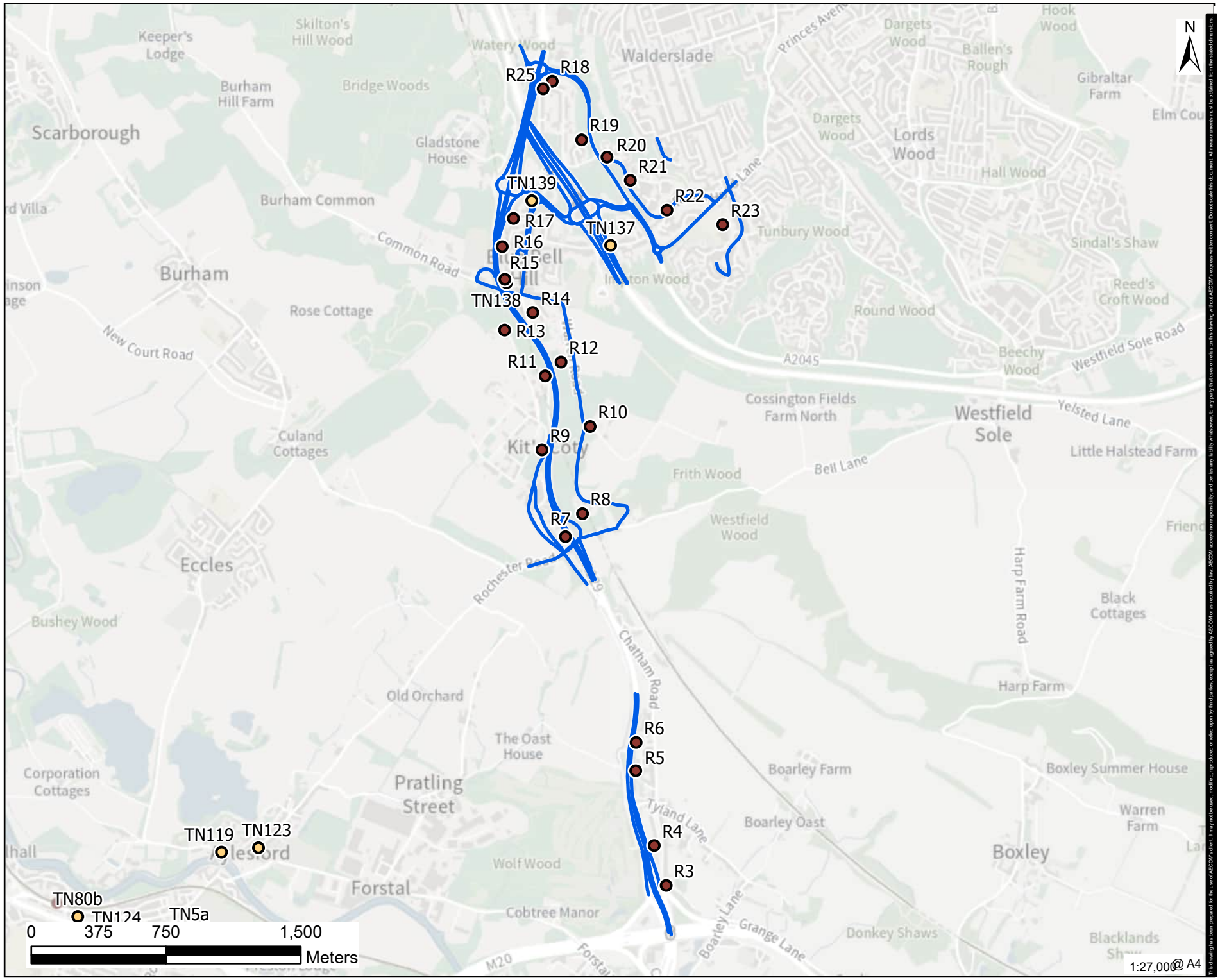

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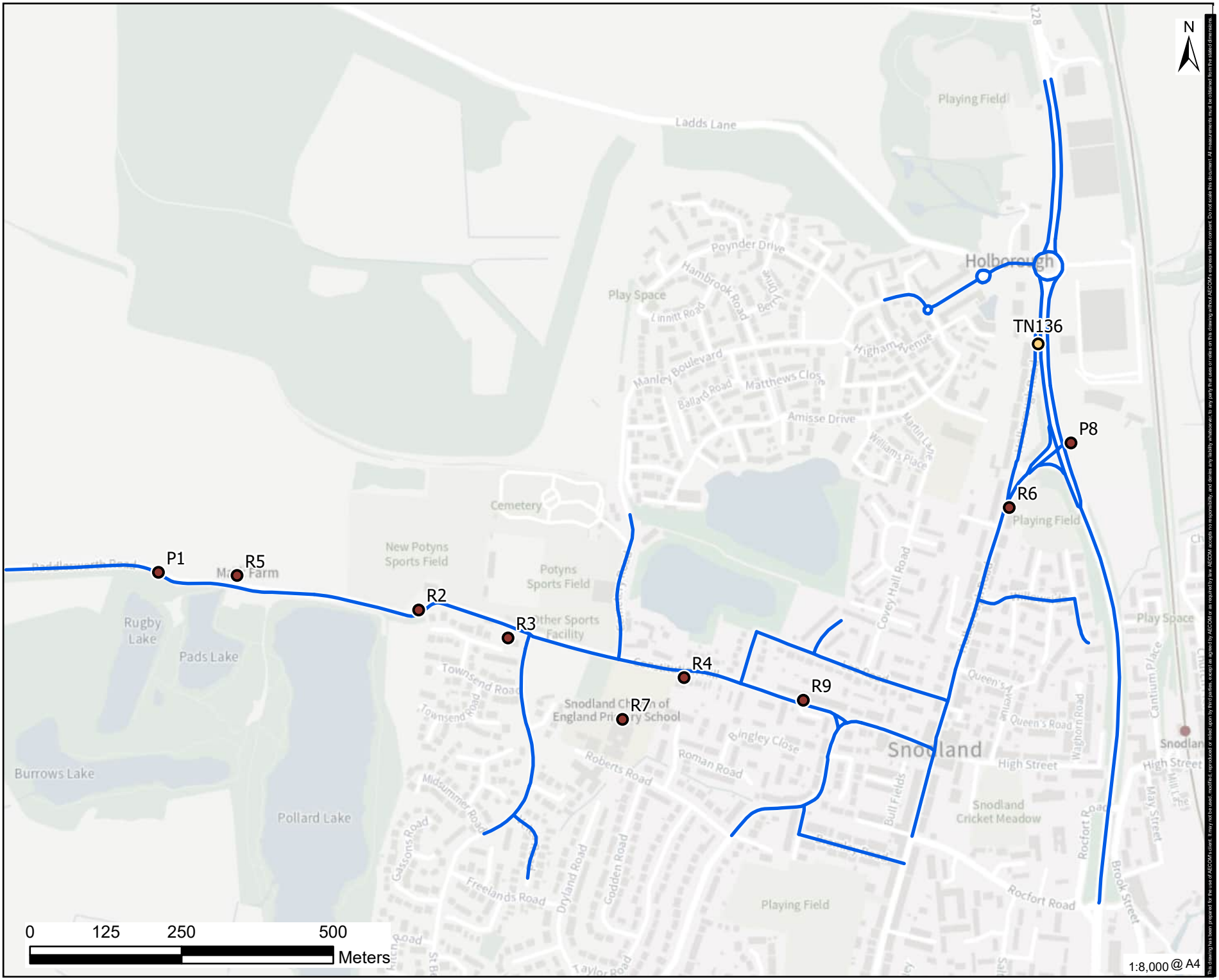

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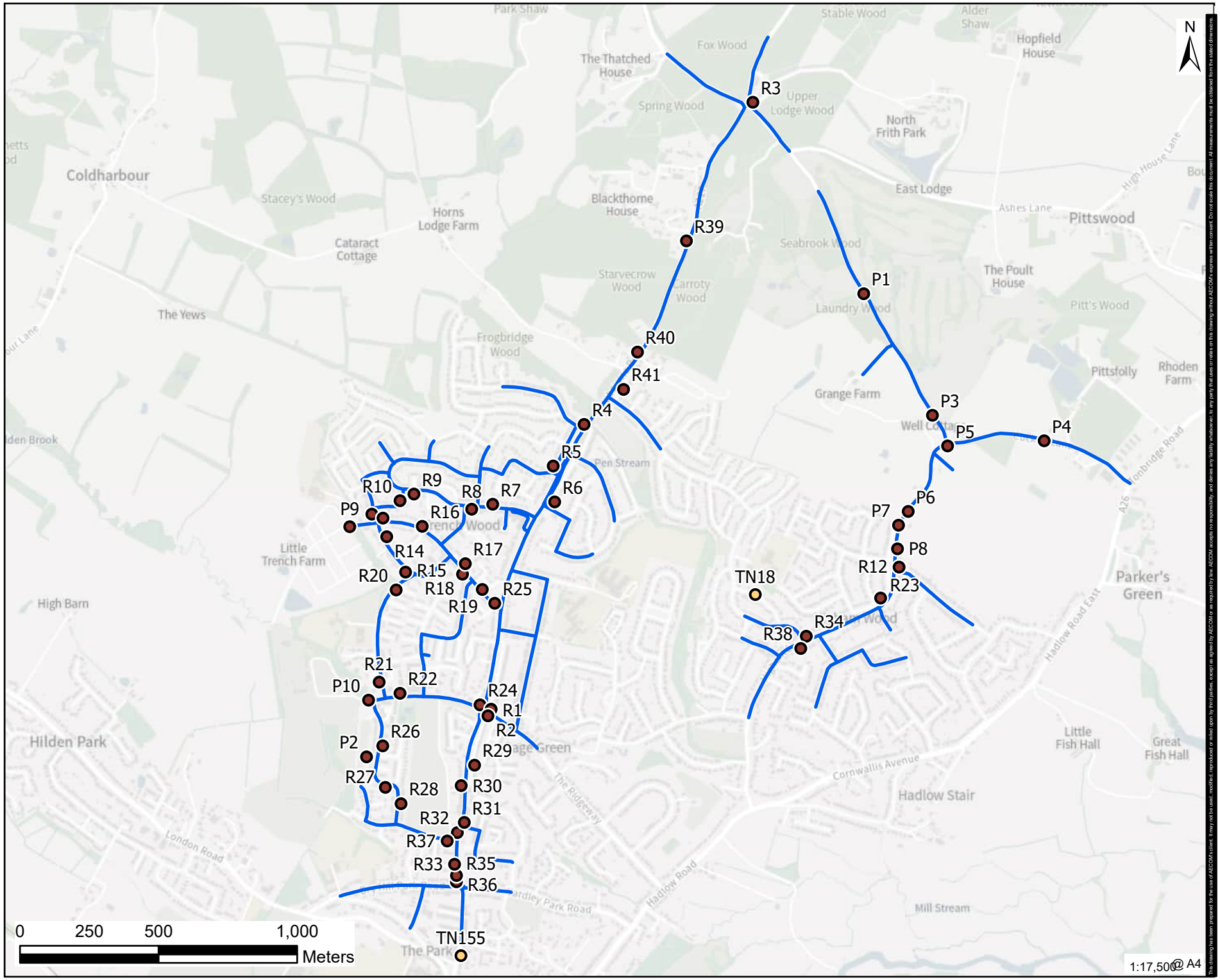

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Figure A-10

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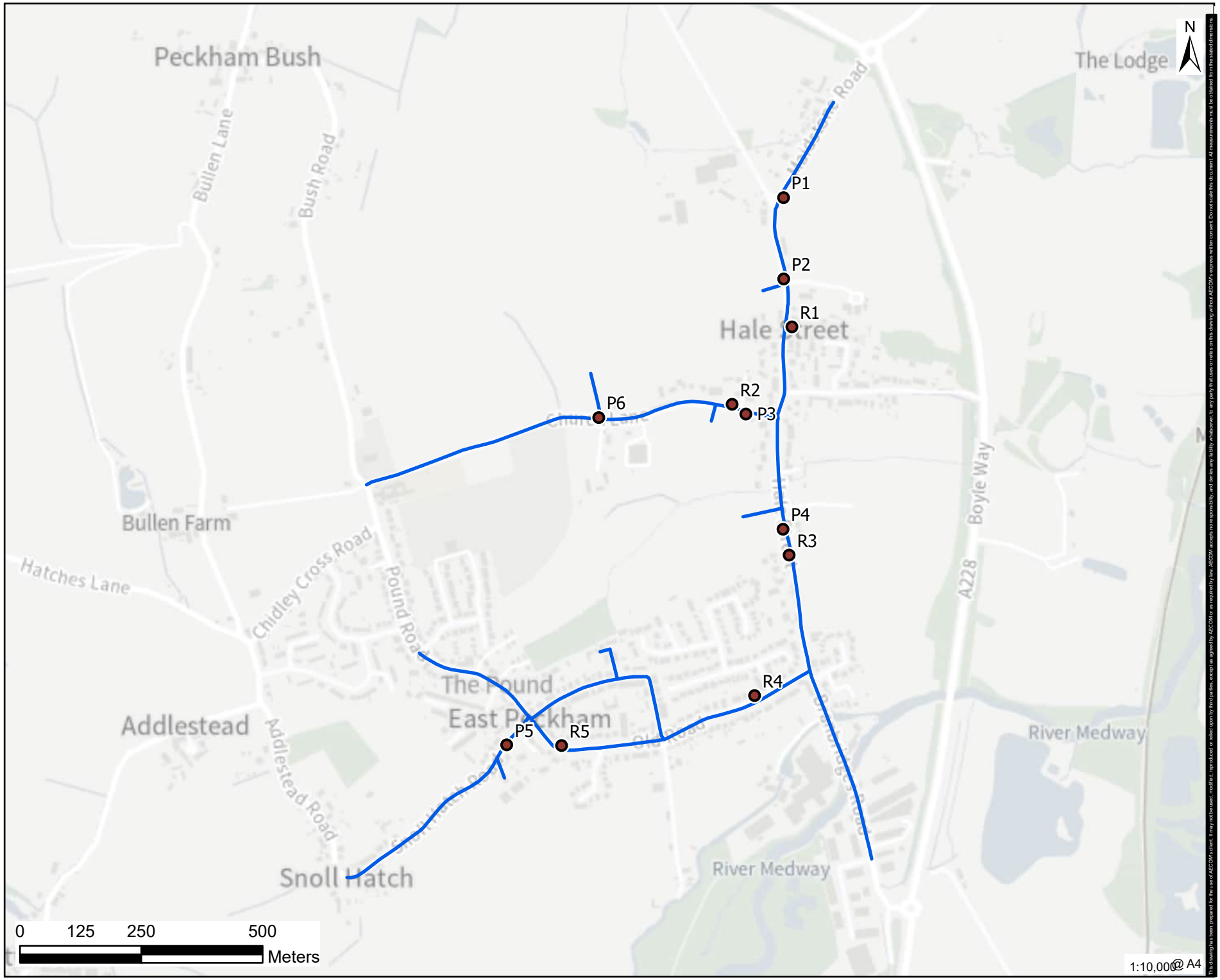

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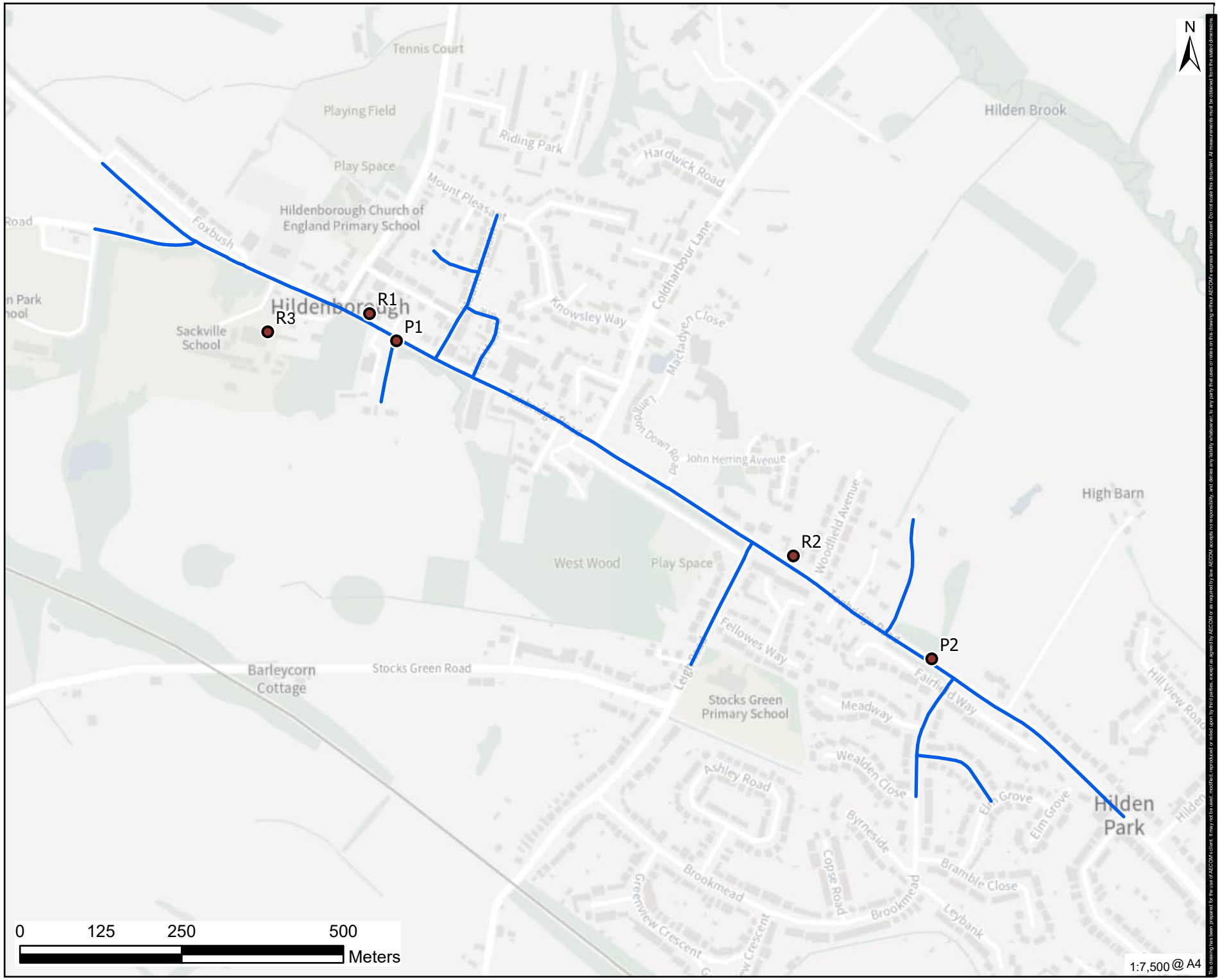

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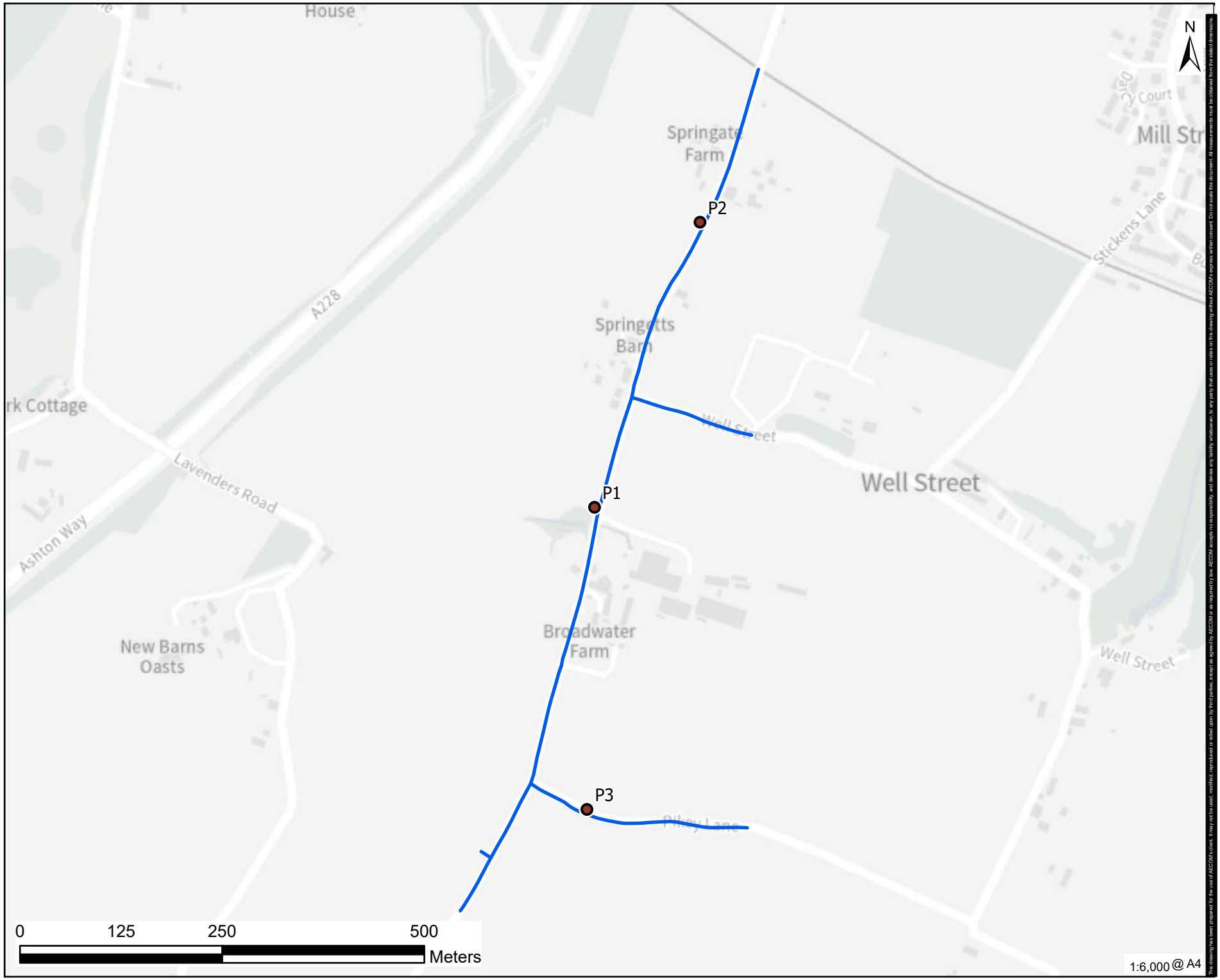

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Appendix B – Model Verification

8.1 Further detail on the area specific model verification has been provided within this appendix.

Aylesford

8.2 Table A-1 shows the local authority monitoring sites used in model verification for the Aylesford area.

8.3 No applicable sites were excluded from model verification.

Table A-1: Local Authority Monitoring Sites used in model verification Aylesford

Site ID	Site Type	Site Name	Grid reference (X, Y)
TN119	Kerbside	66 High Street, Aylesford	572924,158986
TN123	Roadside	11 Rochester Road	573130,159010

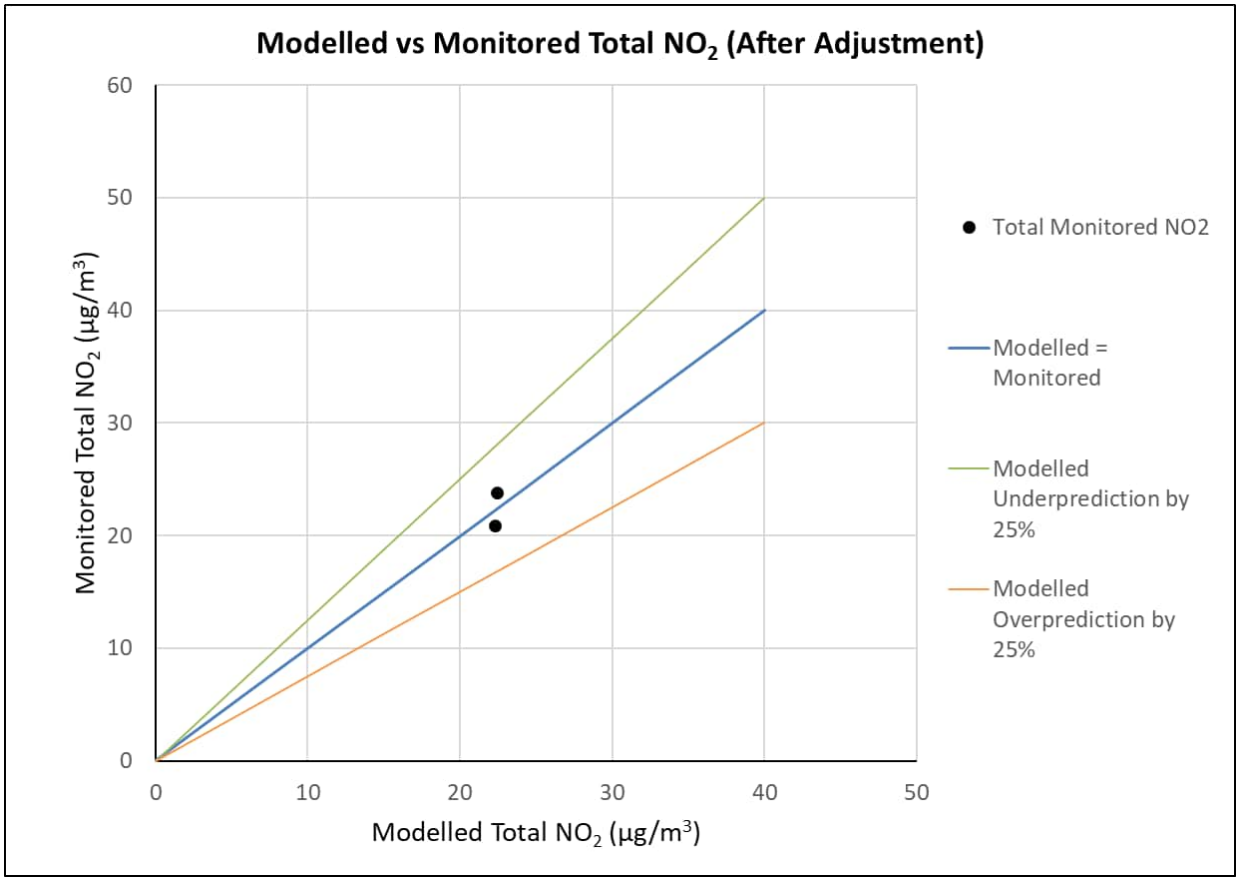
8.4 Following Defra's Technical Guidance LAQM.TG(22), model performance was analysed at these monitoring sites. An adjustment factor of 2.62 was applied as shown in Table A-2. With adjustment, the root mean square error (RMSE) was 1.4 µg/m^3. LAQM.TG(22) indicates that an RMSE within 10% of the AQO (4 µg/m^3) is ideal.

8.5 The application of adjustment factors to model outputs minimises the inherent uncertainties associated with dispersion modelling.

Table A-2: Verification details Aylesford

Number of Sites	Number of Monitoring Sites within ±10% of the Monitored Concentration Pre-Adjustment	RMSE pre-adjustment (µg/m^3)	Model Adjustment Factor Applied	Number of Sites within ±10% of the Monitored Concentration Post Adjustment	RMSE post adjustment (µg/m^3)	Fractional Bias post adjustment)
2	0	6.7	2.62	2	1.4	0.0

Figure A-14 Modelled vs Monitored Total NO_2 (after adjustment) at Aylesford



Bluebell Hill

8.6 Table A-3 shows the local authority monitoring sites identified in the model area for Bluebell Hill.

8.7 Of the sites identified, TN138 and TN139 were excluded from model verification. Both of these sites are approximately 25 metres away from the carriageway with several trees and fences in the way. These factors will have a significant impact on monitored values and cannot be accurately accounted for in the model. For this reason it was appropriate to exclude these diffusion tubes on this basis.

Table A-3: Local Authority Monitoring Sites used in model verification Bluebell Hill

Site ID	Site Type	Site Name	Grid reference (X, Y)
TN137	Roadside	Robin Hood Lane M2	575090,162364

TN138 (574511,162156) and TN139 (574651,162613) have been excluded from model verification.

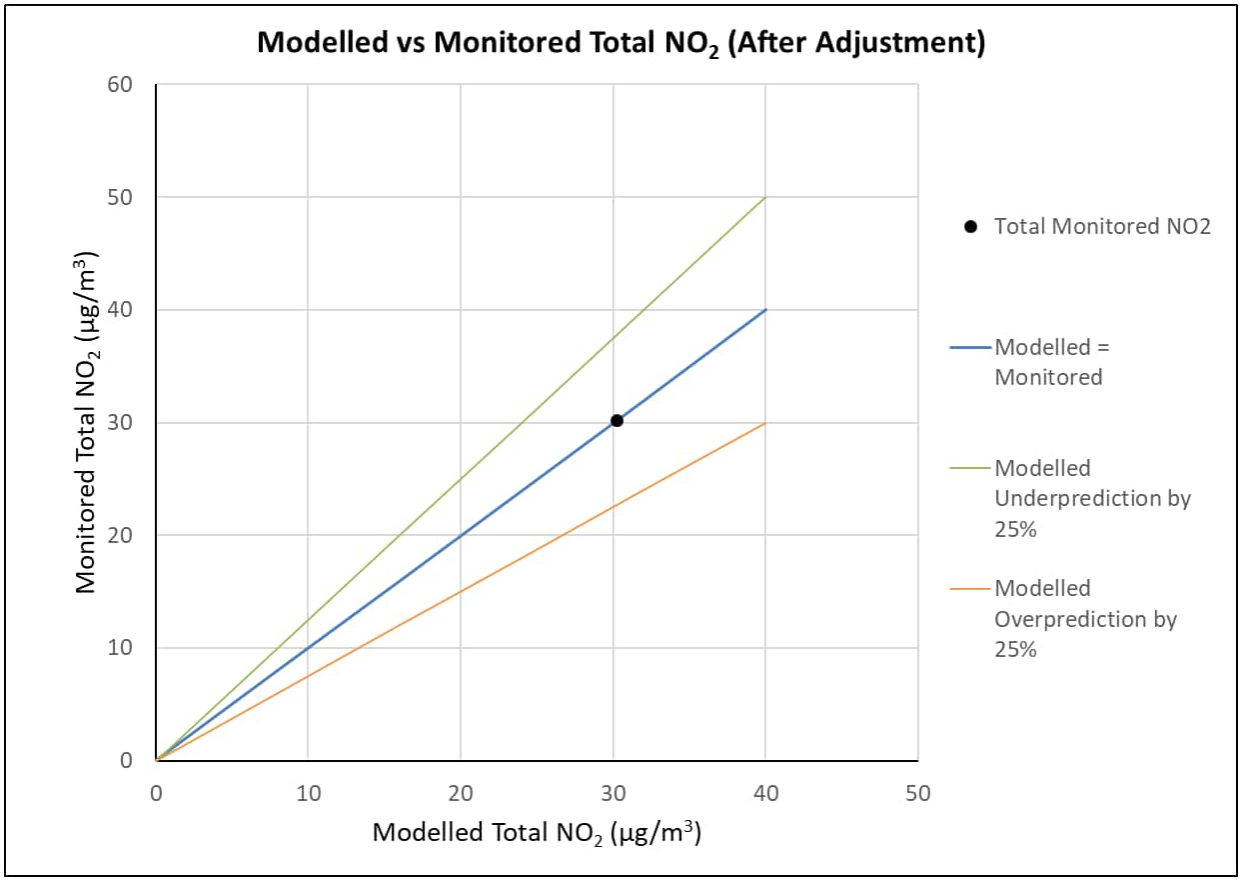
8.8 Following Defra's Technical Guidance LAQM.TG(22), model performance was analysed at this monitoring site. An adjustment factor of 1.59 was applied as shown in Table A-4. As only one verification site was used, no RMSE can be calculated.

8.9 The application of adjustment factors to model outputs minimises the inherent uncertainties associated with dispersion modelling.

Table A-4: Verification details Bluebell Hill

Number of Sites	Number of Monitoring Sites within ±10% of the Monitored Concentration Pre-Adjustment	RMSE pre-adjustment (µg/m^3)	Model Adjustment Factor Applied	Number of Sites within ±10% of the Monitored Concentration Post Adjustment	RMSE post adjustment (µg/m^3)	Fractional Bias post adjustment)
1	0	N/A	1.59	1	N/A	N/A

Figure A-15 Modelled vs Monitored Total NO_2 (after adjustment) at Bluebell Hill



Borough Green and Wrotham

8.10 Table A-5 shows the local authority monitoring sites identified in the model area for Borough Green.

8.11 Of the sites identified, TN141 was excluded from model verification. This site is co-located with the automatic monitoring site (ZT8). Automatic monitoring locations provide more accurate monitoring data compared to diffusion tubes in general. For this reason, it was appropriate to exclude this diffusion tube on this basis.

Table A-5: Local Authority Monitoring Sites used in model verification Borough Green and Wrotham

Site ID	Site Type	Site Name	Grid reference (X, Y)
ZT8	Roadside	Borough Green (Automatic Monitoring Site)	560583,157337

TN70/72/73	Kerbside	55 Sevenoaks Road, Borough Green	560567,157328
TN86	Roadside	Flat 21 High Street	560867,157302
TN93	Roadside	16 Sevenoaks Road	560717,157266
TN118	Roadside	1a Marion Cottages, Maidstone Road, Wrotham Heath	563209,157995
TN130	Roadside	31 Western Road	560790,157351
TN142	Roadside	2 Borough Green Road	561119,157864

TN141 (560583, 157337) has been excluded from model verification.

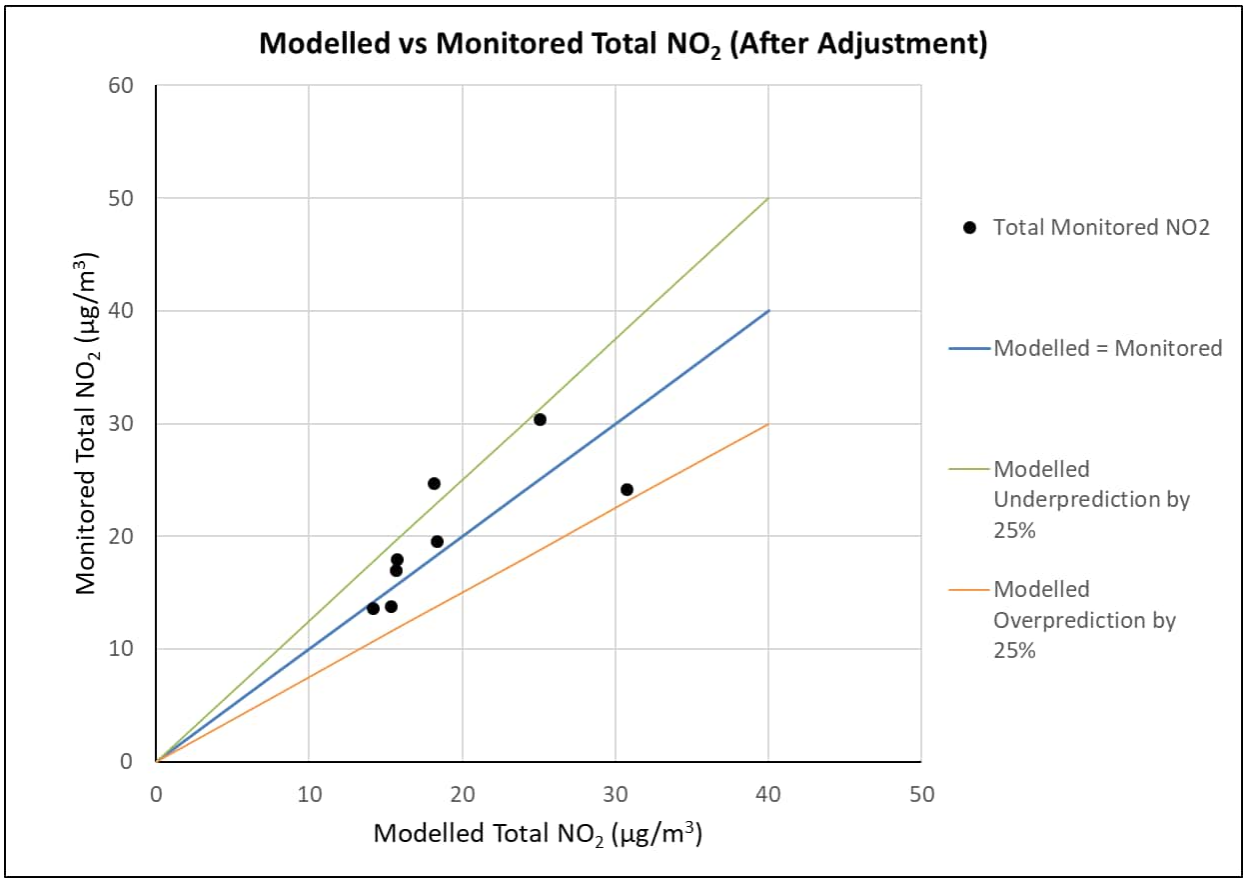
8.12 Following Defra's Technical Guidance LAQM.TG(22), model performance was analysed at these monitoring sites. An adjustment factor of 1.74 was applied as shown in Table A-6. With adjustment, the root mean square error (RMSE) was 4.0 µg/m^3. LAQM.TG(22) indicates that an RMSE within 10% of the AQO (4 µg/m^3) is ideal.

8.13 The application of adjustment factors to model outputs minimises the inherent uncertainties associated with dispersion modelling.

Table A-6: Verification details Borough Green and Wrotham

Number of Sites	Number of Monitoring Sites within ±10% of the Monitored Concentration Pre-Adjustment	RMSE pre-adjustment (µg/m^3)	Model Adjustment Factor Applied	Number of Sites within ±10% of the Monitored Concentration Post Adjustment	RMSE post adjustment (µg/m^3)	Fractional Bias post adjustment)
8	3	5.9	1.74	3	4.0	0.1

Figure A-16 Modelled vs Monitored Total NO_2 (after adjustment) at Borough Green and Wrotham



Medway Gap

8.14 Table A-7 shows the local authority monitoring sites identified in the model area for Medway Gap.

8.15 Of the sites identified, TN47 was excluded from model verification. This site is classified as an urban background site. For this reason, it was appropriate to exclude this diffusion tube on this basis.

Table A-7: Local Authority Monitoring Sites used in model verification Medway Gap

Site ID	Site Type	Site Name	Grid reference (X, Y)
TN57	Roadside	London Road Larkfield (nos 743)	570467,158328
TN60/62/63	Roadside	London Road Aylesford (nos 290)	572423,157932
TN106/150/151	Roadside	794 London Rd, Larkfield	570193,158327
TN140	Roadside	48 New Road Ditton	571165,158230
TN146	Roadside	Bell Court London Rd, Larkfield	570452,158368
TN152	Roadside	Lamp Post New Road Ditton	571233,158337

TN47 (571399,158375) was excluded from model verification.

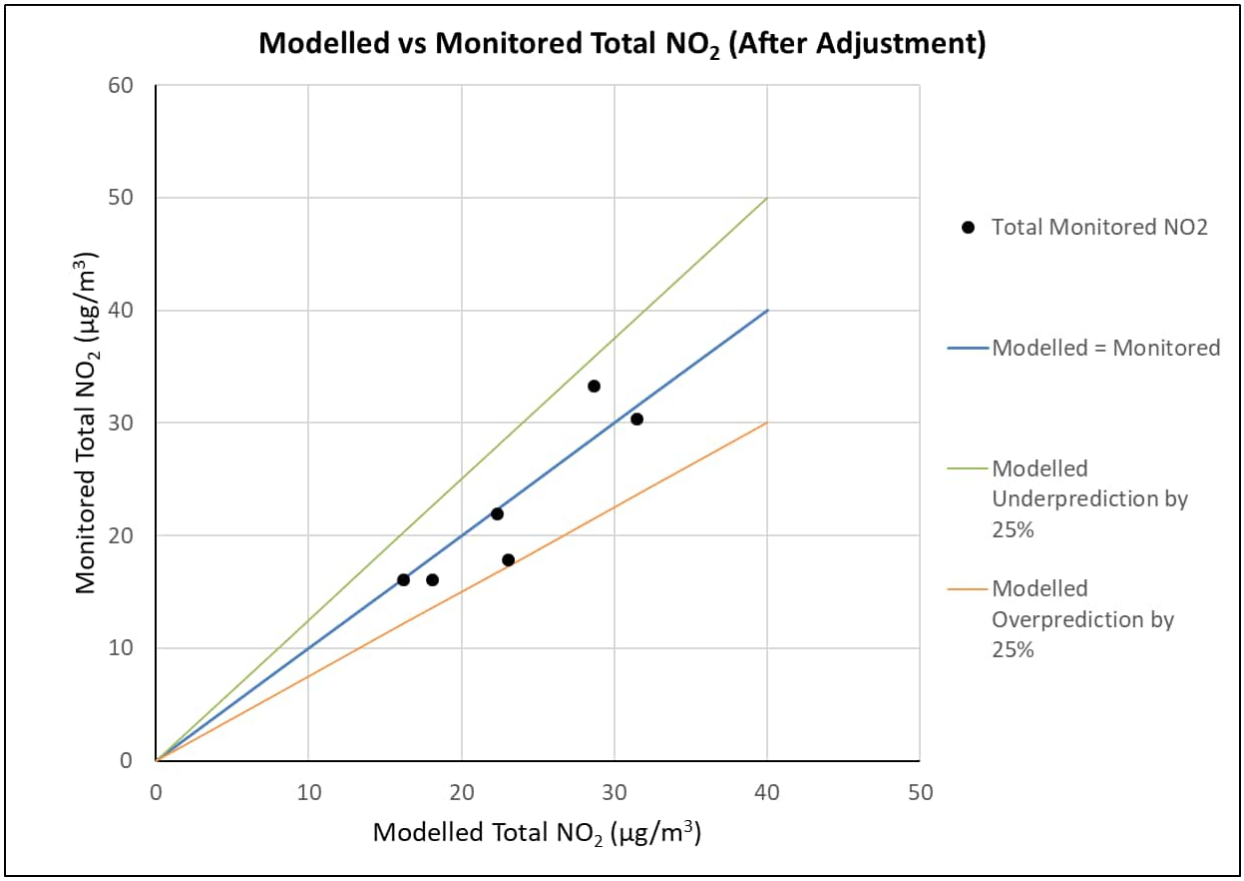
8.16 Following Defra's Technical Guidance LAQM.TG(22), model performance was analysed at these monitoring sites. An adjustment factor of 2.98 was applied as shown in Table A-8. With adjustment, the root mean square error (RMSE) was 3.0 µg/m^3. LAQM.TG(22) indicates that an RMSE within 10% of the AQO (4 µg/m^3) is ideal.

8.17 The application of adjustment factors to model outputs minimises the inherent uncertainties associated with dispersion modelling.

Table A-8: Verification details Medway Gap for Medway Gap

Number of Sites	Number of Monitoring Sites within ±10% of the Monitored Concentration Pre-Adjustment	RMSE pre-adjustment (µg/m^3)	Model Adjustment Factor Applied	Number of Sites within ±10% of the Monitored Concentration Post Adjustment	RMSE post adjustment (µg/m^3)	Fractional Bias post adjustment)
6	0	8.7	2.98	3	3.0	0.0

Figure A-17 Modelled vs Monitored Total NO_2 (after adjustment) at Medway Gap



Snodland

8.18 Table A-9 shows the local authority monitoring site identified in the model area for Snodland.

8.19 No applicable sites were excluded from model verification.

Table A-9: Local Authority Monitoring Site used in model verification Snodland

Site ID	Site Type	Site Name	Grid reference (X, Y)
TN136	Roadside	205 Holborough Road	570430,162502

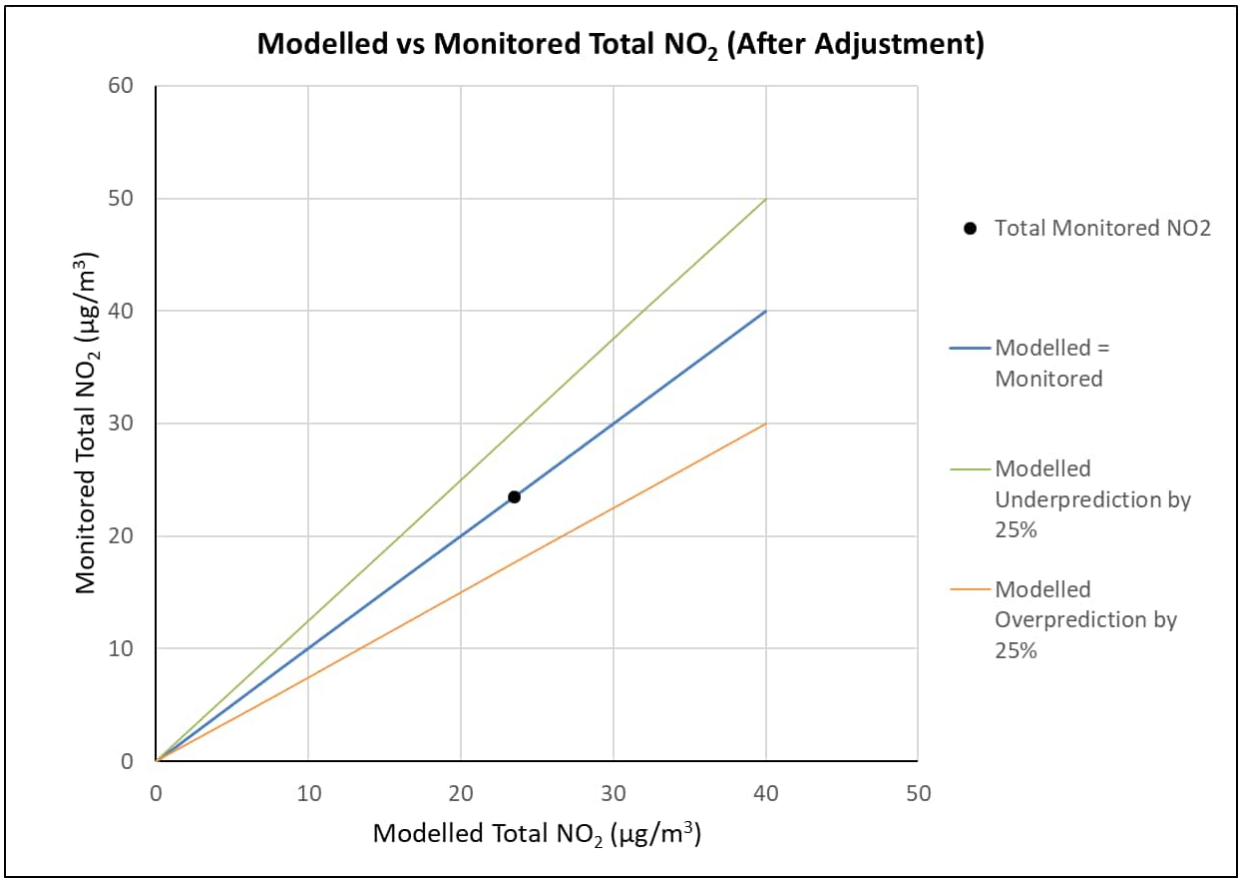
8.20 Following Defra's Technical Guidance LAQM.TG(22), model performance was analysed at this monitoring site. An adjustment factor of 4.43 was applied as shown in Table A-10. As only one verification site was used, no RMSE can be calculated.

8.21 The application of adjustment factors to model outputs minimises the inherent uncertainties associated with dispersion modelling.

Table A-10: Verification details Snodland

Number of Sites	Number of Monitoring Sites within ±10% of the Monitored Concentration Pre-Adjustment	RMSE pre-adjustment (µg/m^3)	Model Adjustment Factor Applied	Number of Sites within ±10% of the Monitored Concentration Post Adjustment	RMSE post adjustment (µg/m^3)	Fractional Bias post adjustment)
1	0	N/A	4.43	1	N/A	N/A

Figure A-18 Modelled vs Monitored Total NO_2 (after adjustment) for Snodland



Tonbridge Town Centre

8.22 Table A-11 shows the local authority monitoring sites identified in the model area for Tonbridge High Street.

8.23 Of the sites identified, ZT9 was excluded from model verification. This site is classified as an urban centre site. It is located at a height of 6.2 metres and more than 6.0m away from the nearest road behind a line of buildings, close to the busy high street AQMA area. Hence monitored data would not accurately reflect true concentrations at ground level within the

AQMA due to dispersion effects and turbulence created by the buildings. For this reason, it was appropriate to exclude this automatic monitoring site on this basis.

Table A-11: Local Authority Monitoring Sites used in model verification Tonbridge Town Centre

Site ID	Site Type	Site Name	Grid reference (X, Y)
TN35	Roadside	High Street Tonbridge (no 35, WH Smith)	558948,146277
TN44	Roadside	High Street Tonbridge (no 46a)	558929,146271
TN45/74/75	Roadside	High Street Tonbridge (no 10)	558864,146166
TN96	Roadside	1 Bordyke, Tonbridge	559148,146889
TN109	Roadside	St Augustines, Quarry Hill, Tonbridge	558743,145922
TN110	Roadside	88 High St, Tonbridge	559012,146433
TN135	Roadside	Medway Wharf Road	559056,146445

ZT9 (558890, 146203) was excluded from model verification.

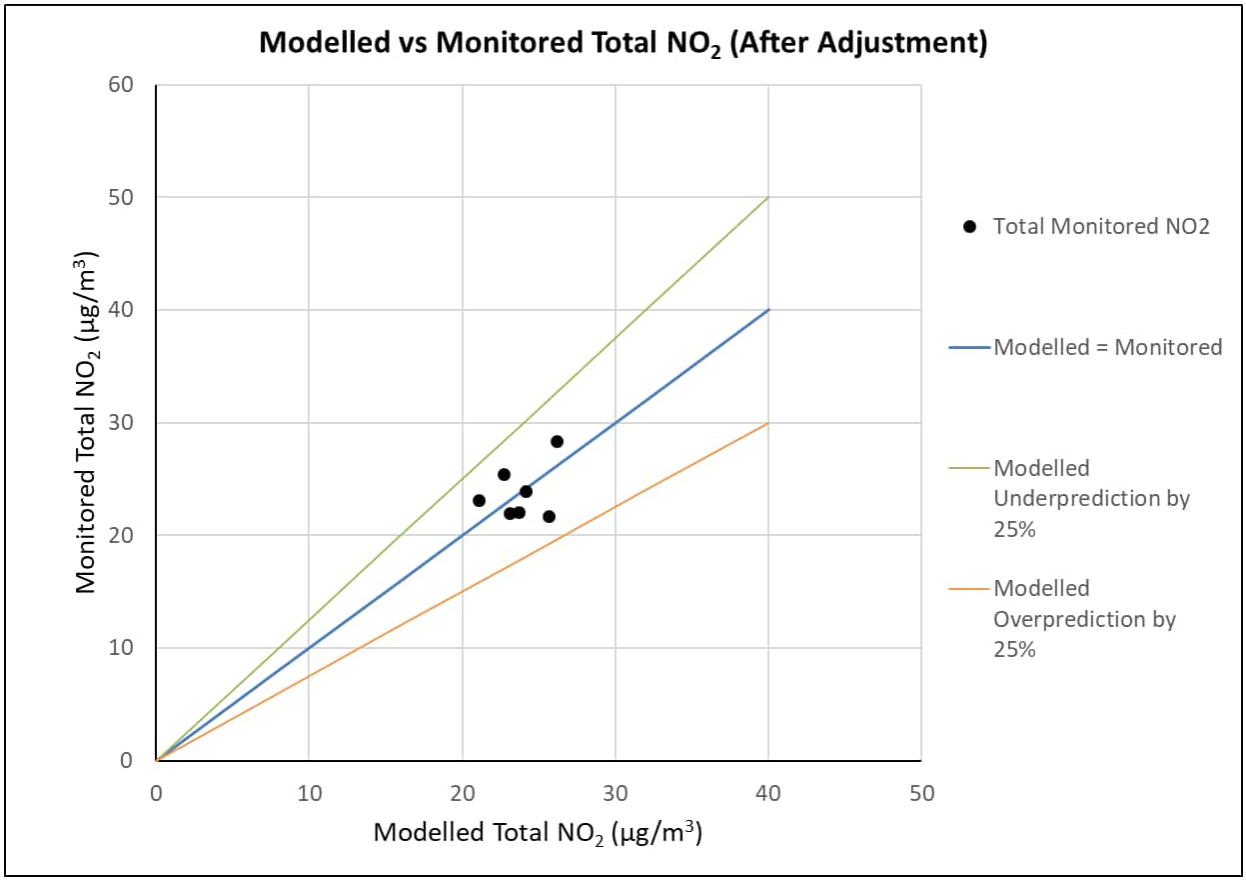
8.24 Following Defra's Technical Guidance LAQM.TG(22), model performance was analysed at these monitoring sites. An adjustment factor of 3.34 was applied as shown in Table A-12. adjustment, the root mean square error (RMSE) was 2.2 µg/m^3. LAQM.TG(22) indicates that an RMSE within 10% of the AQO (4 µg/m^3) is ideal.

8.25 The application of adjustment factors to model outputs minimises the inherent uncertainties associated with dispersion modelling.

Table A-12: Verification details Tonbridge Town Centre

Number of Sites	Number of Monitoring Sites within ±10% of the Monitored Concentration Pre-Adjustment	RMSE pre-adjustment (µg/m^3)	Model Adjustment Factor Applied	Number of Sites within ±10% of the Monitored Concentration Post Adjustment	RMSE post adjustment (µg/m^3)	Fractional Bias post adjustment)
7	0	9.7	3.34	5	2.2	0.0

Figure A-19 Modelled vs Monitored Total NO_2 (after adjustment) for Tonbridge Town Centre



Wateringbury

8.26 Table A-13 shows the local authority monitoring sites identified within the model area for Wateringbury.

8.27 Of the sites identified, TN43 and TN122 were excluded from model verification. All four monitoring sites in Wateringbury are located within the AQMA and are within 100m of each other. Monitored data for 2022 (previously discussed within the baseline section) shows a discernible trend. TN43 and TN122 monitor similar concentrations to each other for the verification year (2022). TN33 and TN42/76/77 also monitor similar concentrations too, which are much higher compared to TN43 and TN122. This indicates that monitored concentrations are highly dependent on localised congestion effects not accounted for within the original traffic data provided. To provide a worst-case verification factor, only TN33 and TN42/76/77 were used for model verification.

Table A-13: Local Authority Monitoring Sites used in model verification Wateringbury

Site ID	Site Type	Site Name	Grid reference (X, Y)
TN33	Roadside	Tonbridge Road, Wateringbury (Red Corner)	569201,153486
TN42/76/77	Roadside	Tonbridge Road, Wateringbury (Opposite Garage)	569226,153475

TN43 (569187,153498) and TN122 (569168, 153501) have been excluded from model verification.

8.28 Following Defra's Technical Guidance LAQM.TG(22), model performance was analysed at these monitoring sites. An adjustment factor of 3.28 was applied as shown in Table A-14. With adjustment, the root mean square error (RMSE) was 5.0 µg/m^3. LAQM.TG(22) indicates that an RMSE within 10% of the AQO (4 µg/m^3) is ideal. Although this is more than 10% of the

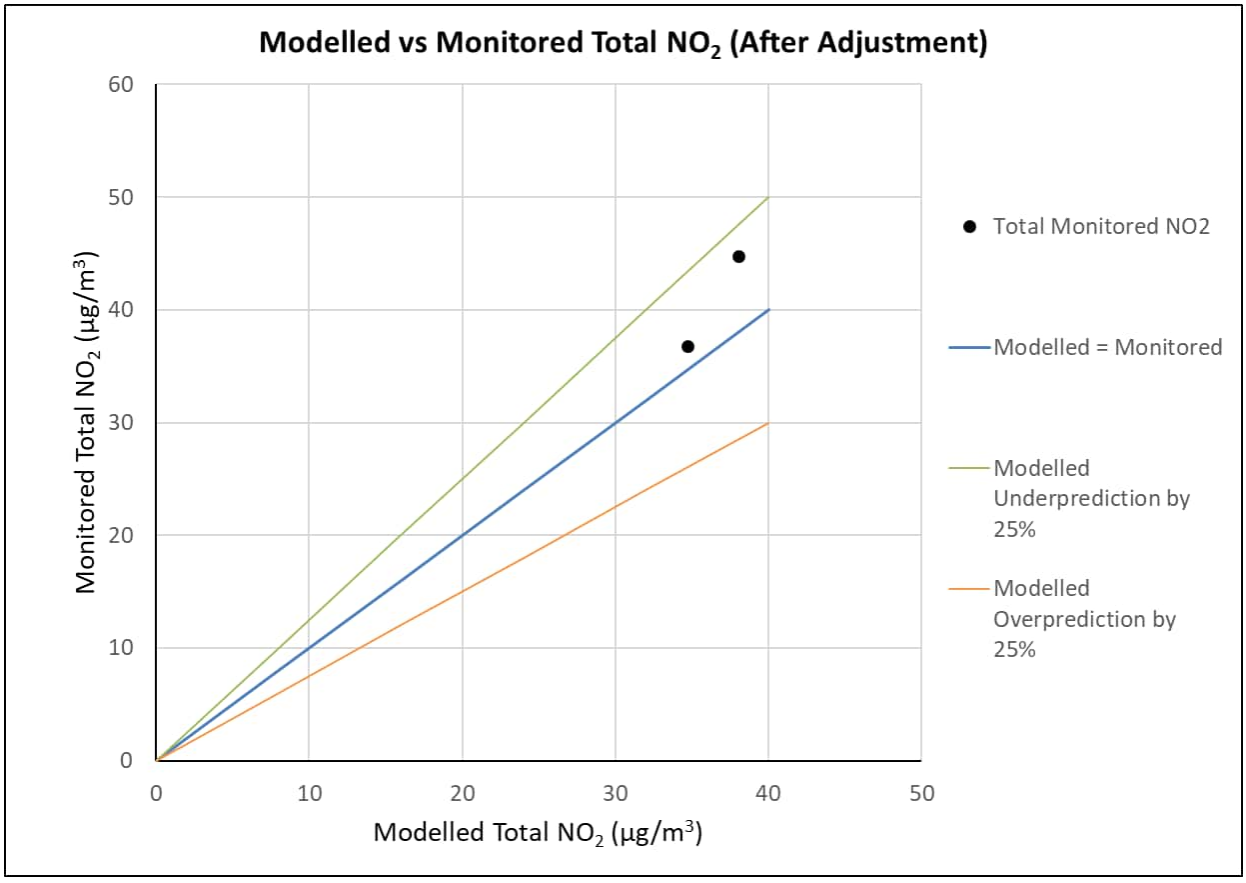
objective which is not ideal, a value of less than 10.0 µg/m^3 is acceptable according to the guidance in LAQM.TG(22).

8.29 The application of adjustment factors to model outputs minimises the inherent uncertainties associated with dispersion modelling.

Table A-14: Verification details Wateringbury

Number of Sites	Number of Monitoring Sites within ±10% of the Monitored Concentration Pre-Adjustment	RMSE pre-adjustment (µg/m^3)	Model Adjustment Factor Applied	Number of Sites within ±10% of the Monitored Concentration Post Adjustment	RMSE post adjustment (µg/m^3)	Fractional Bias post adjustment)
2	0	20.2	3.28	1	5.0	0.1

Figure A-20 Modelled vs Monitored Total NO_2 (after adjustment) for Wateringbury



Combined

8.30 Table A-15 shows the local authority monitoring sites used for the combined urban verification factor. This verification factor was applied to Trench Wood, Hildenborough and Kings Hill, where no relevant monitoring was undertaken in 2022. Further information is provided in paragraphs 4.39, 4.40, 4.41 and 4.42 in Section 4.

Table A-15: Local Authority Monitoring Sites used in Combined model verification

Site ID	Site Type	Site Name	Grid reference (X, Y)
TN119	Kerbside	66 High Street, Aylesford	572924,158986
TN123	Roadside	11 Rochester Road	573130,159010
TN57	Roadside	London Road Larkfield (nos 743)	570467,158328
TN60/62/63	Roadside	London Road Aylesford (nos 290)	572423,157932
TN106/150/151	Roadside	794 London Rd, Larkfield	570193,158327
TN140	Roadside	48 New Road Ditton	571165,158230
TN146	Roadside	Bell Court London Rd, Larkfield	570452,158368
TN152	Roadside	Lamp Post New Road Ditton	571233,158337
TN35	Roadside	High Street Tonbridge (no 35, WH Smith)	558948,146277
TN44	Roadside	High Street Tonbridge (no 46a)	558929,146271
TN45/74/75	Roadside	High Street Tonbridge (no 10)	558864,146166
TN96	Roadside	1 Bordyke, Tonbridge	559148,146889
TN109	Roadside	St Augustines, Quarry Hill, Tonbridge	558743,145922
TN110	Roadside	88 High St, Tonbridge	559012,146433
TN135	Roadside	Medway Wharf Road	559056,146445

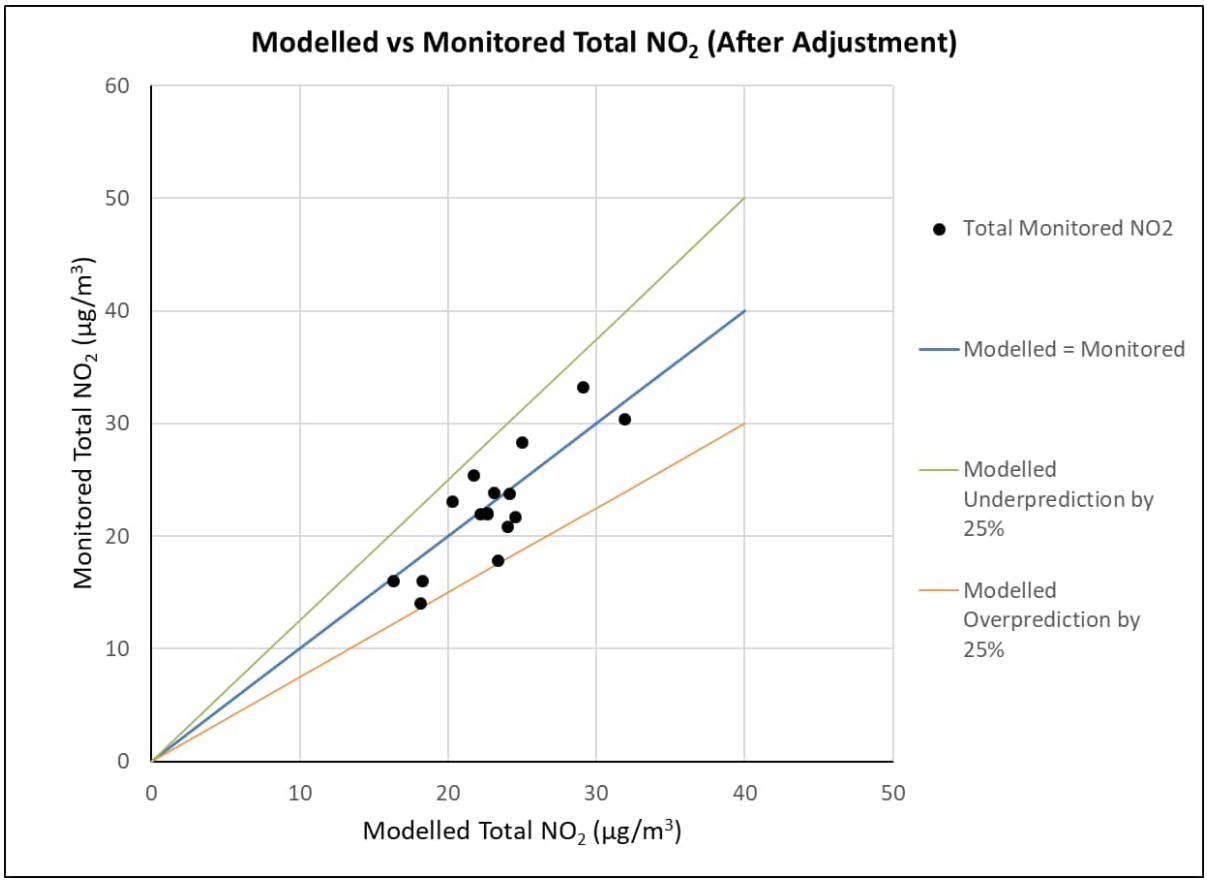
8.31 Following Defra's Technical Guidance LAQM.TG(22), model performance was analysed at these monitoring sites. An adjustment factor of 3.06 was applied as shown in Table A-16. With adjustment, the root mean square error (RMSE) was 2.8 µg/m^3. LAQM.TG(22) indicates that an RMSE within 10% of the AQO (4 µg/m^3) is ideal.

8.32 The application of adjustment factors to model outputs minimises the inherent uncertainties associated with dispersion modelling.

Table A-16: Verification details Combined model verification

Number of Sites	Number of Monitoring Sites within ±10% of the Monitored Concentration Pre-Adjustment	RMSE pre-adjustment (µg/m^3)	Model Adjustment Factor Applied	Number of Sites within ±10% of the Monitored Concentration Post Adjustment	RMSE post adjustment (µg/m^3)	Fractional Bias post adjustment)
16	1	8.7	3.06	7	2.8	0.0

Figure A-21 Modelled vs Monitored Total NO_2 (after adjustment) for Combined model verification



Appendix C – Modelled Results Tables

2022 Baseline (Human Health)

Modelled Concentrations

Table A-17: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Tonbridge Town Centre

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R1_TH	559127	147001	1.5	22.3	14.0	8.8
R2_TH	559112	146951	1.5	22.9	14.1	8.7
R3_TH	559105	146901	1.5	24.4	14.5	8.9
R4_TH	559127	146910	1.5	28.1	15.6	9.5
R5_TH	559117	146858	4.5	18.3	12.9	8.0
R6_TH	559072	146768	4.5	17.7	12.8	8.0
R7_TH	559067	146697	4.5	17.4	12.8	7.9
R8_TH	559083	146671	4.5	18.3	13.0	8.1
R9_TH	558881	146158	4.5	18.7	12.7	8.0
R10_TH	558890	146208	4.5	17.8	12.5	7.9
R11_TH	558975	146325	4.5	16.6	12.1	7.7
R12_TH	558979	146364	4.5	16.8	12.2	7.7
R13_TH	559003	146418	4.5	18.5	13.0	8.1
P1_TH	559267	146211	1.5	N/A	N/A	N/A
P2_TH	559268	146228	1.5	N/A	N/A	N/A
P3_TH	558981	146213	1.5	N/A	N/A	N/A
R14_TH	558635	145936	1.5	16.2	13.0	8.2
R15_TH	558674	146007	1.5	16.9	12.5	7.9
R16_TH	558761	145949	1.5	24.7	15.7	9.7
R17_TH	558829	146121	1.5	26.9	15.3	9.4
R18_TH	559081	146433	1.5	21.0	13.8	8.5
R19_TH	559043	146449	1.5	31.5	17.0	10.2
R20_TH	559195	146516	1.5	17.2	12.8	8.0
R21_TH	559144	146533	1.5	21.1	14.0	8.6
R22_TH	559123	146522	1.5	20.9	13.8	8.5
R23_TH	559148	146888	1.5	22.2	13.9	8.6
R24_TH	559250	146798	1.5	16.9	12.8	7.9

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario.

Table A-18: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Wateringbury

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R1_WB	569173	153499	1.5	**43.7**	18.7	10.9

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R2_WB	569151	153515	1.5	34.6	16.4	9.6
R3_WB	569214	153526	1.5	31.6	15.3	9.0
R4_WB	569298	153569	1.5	17.2	12.4	7.3
R5_WB	569196	153490	1.5	**53.4**	20.5	11.9
R6_WB	569256	153465	1.5	**51.8**	19.1	11.2
R7_WB	569175	153463	1.5	35.2	16.4	9.6
R8_WB	569119	153364	1.5	22.1	14.5	8.5
R9_WB	569022	153552	1.5	22.5	14.8	8.7
R10_WB	569398	153642	1.5	14.8	12.2	7.2
R11_WB	569088	153266	1.5	22.2	14.8	8.6
P1_WB	569422	153660	1.5	N/A	N/A	N/A
P2_WB	569457	153739	1.5	N/A	N/A	N/A
P3_WB	569455	153390	1.5	N/A	N/A	N/A
R12_WB	569054	152967	1.5	20.9	14.6	8.3
R13_WB	569052	153037	1.5	17.9	13.4	7.9
R14_WB	569332	153343	1.5	12.0	11.4	6.8
R15_WB	568877	153602	1.5	20.1	13.8	8.2
R16_WB	568705	153626	1.5	16.9	12.8	7.6
R17_WB	568525	153608	1.5	17.0	12.8	7.6

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario. Exceedances of the relevant AQO are denoted in bold.

Table A-19: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Medway Gap

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R1_MG	572469	157937	1.5	22.5	14.7	8.6
R2_MG	572428	157932	1.5	30.5	17.0	9.9
R3_MG	572405	157948	1.5	26.6	16.0	9.3
R4_MG	572458	157955	1.5	22.7	14.8	8.6
R5_MG	572430	157979	1.5	21.4	14.5	8.5
R6_MG	572487	158115	1.5	18.7	16.1	8.7
R7_MG	572455	158150	1.5	16.9	15.5	8.4
R8_MG	572451	158214	1.5	15.1	15.0	8.1
R9_MG	572400	158208	1.5	14.1	14.6	7.9
R10_MG	572363	158243	1.5	13.9	14.6	7.9
R11_MG	572171	158317	1.5	13.5	14.5	7.8
R12_MG	572145	158294	1.5	14.0	14.6	7.9
R13_MG	572081	158309	1.5	14.1	14.6	7.9
R14_MG	572028	158309	1.5	14.1	14.6	7.9
R15_MG	571980	158228	1.5	14.1	14.4	7.9
R16_MG	571973	158155	1.5	18.6	15.7	8.6

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R17_MG	572272	157985	1.5	15.5	12.8	7.5
R18_MG	572100	158118	1.5	18.2	15.9	8.6
R19_MG	571977	158094	1.5	16.8	15.2	8.3
R20_MG	571926	158034	1.5	16.8	15.2	8.3
R21_MG	571881	157926	1.5	13.7	12.2	7.3
R22_MG	571695	157770	1.5	14.5	12.4	7.5
R23_MG	571583	157884	1.5	13.6	12.2	7.3
R24_MG	571556	158008	1.5	14.4	14.5	7.9
R25_MG	571341	158126	1.5	14.9	14.7	8.0
R26_MG	571721	158285	1.5	16.4	15.1	8.3
R27_MG	571451	158363	1.5	17.3	15.3	8.4
R28_MG	571295	158408	1.5	23.9	16.9	9.3
R29_MG	571245	158366	1.5	21.5	16.3	8.9
R30_MG	571224	158280	1.5	14.6	14.6	8.0
R31_MG	571128	158180	1.5	18.2	15.8	8.6
R32_MG	571065	158101	1.5	21.0	16.8	9.2
R33_MG	571064	158019	1.5	17.4	15.4	8.4
R34_MG	571077	157907	1.5	22.1	14.8	8.7
R35_MG	570991	158011	1.5	18.4	15.8	8.7
R36_MG	570844	157979	1.5	18.9	13.5	8.1
R37_MG	570779	158097	1.5	16.0	15.1	8.3
R38_MG	570745	158188	1.5	16.5	15.3	8.5
R39_MG	570605	158373	1.5	22.9	17.4	9.6
R40_MG	570470	158363	1.5	22.8	17.3	9.6
R41_MG	570402	158342	1.5	24.8	17.7	9.8
R42_MG	570230	158328	1.5	32.5	19.6	10.8
R43_MG	570182	158328	1.5	30.7	19.0	10.5
R44_MG	570190	158328	1.5	31.1	19.1	10.6
R45_MG	569997	158322	1.5	20.5	14.6	8.9
R46_MG	569752	158266	1.5	17.2	13.5	8.3
R47_MG	569772	158214	1.5	15.7	13.1	8.1
R48_MG	570342	158448	1.5	22.3	16.8	9.3
R49_MG	570332	158496	1.5	23.3	17.1	9.5
R50_MG	570354	158614	1.5	19.0	15.9	8.8
R51_MG	571279	157677	1.5	12.7	11.9	7.2
R52_MG	571292	157545	1.5	12.3	11.8	7.1
R53_MG	571531	156955	1.5	11.0	10.8	6.6
R54_MG	571372	156567	1.5	11.3	10.9	6.7
R55_MG	570990	156138	1.5	11.0	10.8	6.7
R56_MG	571094	158075	1.5	15.1	14.7	8.1
R57_MG	571968	158400	1.5	12.3	13.9	7.6

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R58_MG	571919	158305	1.5	12.9	14.0	7.7
P1_MG	571499	157145	1.5	N/A	N/A	N/A
P2_MG	571503	156826	1.5	N/A	N/A	N/A
R59_MG	570283	158312	1.5	26.9	17.8	9.9

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario.

Table A-20: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Borough Green and Wrotham

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R1_BG	561129	159123	1.5	14.4	14.0	7.2
R2_BG	561127	159113	1.5	13.4	13.7	7.1
R3_BG	561101	159118	1.5	14.1	13.9	7.2
R4_BG	561082	159118	1.5	13.6	13.8	7.1
R5_BG	561049	159106	1.5	13.0	13.6	7.0
R6_BG	561040	159113	1.5	13.7	13.8	7.1
R7_BG	561103	159094	1.5	11.9	13.2	6.8
R8_BG	561102	159044	1.5	11.3	13.1	6.7
R9_BG	561121	159028	1.5	11.2	13.1	6.7
R10_BG	561121	159004	1.5	11.2	13.1	6.7
R11_BG	561149	158915	1.5	11.2	13.1	6.7
R12_BG	561082	158735	1.5	12.6	13.4	6.9
R13_BG	561065	158721	1.5	13.1	13.5	7.0
R14_BG	561038	158780	1.5	12.6	13.4	6.9
R15_BG	561097	158366	1.5	15.3	13.9	7.2
R16_BG	561088	158262	1.5	15.5	14.3	7.4
R17_BG	561571	158953	1.5	12.2	13.3	6.9
R18_BG	561122	157872	1.5	14.2	12.5	7.3
R19_BG	561138	157840	1.5	16.0	13.1	7.6
R20_BG	561073	157768	1.5	16.3	13.1	7.6
R21_BG	561051	157729	1.5	15.5	12.9	7.5
R22_BG	561012	157612	1.5	18.1	13.6	7.9
R23_BG	561010	157570	1.5	19.6	14.2	8.2
R24_BG	560996	157511	1.5	16.5	13.8	7.5
R25_BG	560944	157370	1.5	18.2	14.3	7.7
R26_BG	560929	157381	1.5	18.1	14.2	7.7
R27_BG	560921	157337	1.5	15.1	13.3	7.2
R28_BG	560903	157370	1.5	18.7	14.4	7.8
R29_BG	560671	157342	1.5	16.9	13.8	7.5
R30_BG	560600	157358	1.5	19.0	13.9	7.6

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R31_BG	560565	157328	1.5	25.7	15.2	8.3
R32_BG	560536	157328	1.5	21.4	15.1	8.2
R33_BG	560538	157351	1.5	18.5	14.2	7.7
R34_BG	560390	157349	1.5	17.3	14.0	7.6
R35_BG	560022	157285	1.5	21.2	14.7	8.0
R36_BG	560790	157252	1.5	18.0	14.2	7.7
R37_BG	560813	157225	1.5	18.2	14.2	7.7
R38_BG	560647	157302	1.5	19.6	14.6	7.9
R39_BG	560710	157257	1.5	17.0	13.9	7.5
R40_BG	560953	157212	1.5	20.2	15.0	8.1
R41_BG	561196	157145	1.5	18.0	13.7	7.9
R42_BG	561485	157243	1.5	15.2	12.8	7.4
R43_BG	561643	157264	1.5	18.4	13.7	8.0
R44_BG	562071	157323	1.5	15.5	12.3	7.2
R45_BG	562262	157446	1.5	16.8	12.7	7.5
R46_BG	563054	157957	1.5	16.7	12.4	7.3
R47_BG	560600	157318	1.5	19.8	14.2	7.7
P1_BG	560455	157327	1.5	N/A	N/A	N/A
P2_BG	561806	157194	1.5	N/A	N/A	N/A
P3_BG	562174	157389	1.5	N/A	N/A	N/A
P4_BG	562699	157826	1.5	N/A	N/A	N/A
P5_BG	561145	158010	1.5	N/A	N/A	N/A
P6_BG	560998	158949	1.5	N/A	N/A	N/A
P7_BG	561116	158070	1.5	N/A	N/A	N/A
R48_BG	561027	157387	1.5	11.7	11.8	6.9

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario.

Table A-21: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Aylesford

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
P1_AY	572606	159747	1.5	N/A	N/A	N/A
P2_AY	572593	159551	1.5	N/A	N/A	N/A
P3_AY	572744	159010	1.5	N/A	N/A	N/A
P4_AY	572614	159020	1.5	N/A	N/A	N/A
P5_AY	572527	159242	1.5	N/A	N/A	N/A
R1_AY	573038	158993	1.5	16.9	16.4	9.1
R2_AY	573232	159094	1.5	19.4	14.5	8.3

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario.

Table A-22: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Bluebell Hill

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R3_BB	575399	158800	1.5	15.8	14.8	7.5
R4_BB	575333	159023	1.5	20.5	15.0	7.4
R5_BB	575230	159439	1.5	24.7	15.4	7.4
R6_BB	575232	159596	1.5	28.0	15.9	7.5
R7_BB	574838	160742	1.5	28.6	15.6	7.4
R8_BB	574934	160870	1.5	18.6	13.8	7.2
R9_BB	574708	161225	1.5	23.8	14.6	7.2
R10_BB	574976	161356	1.5	15.7	13.1	7.1
R11_BB	574726	161637	1.5	23.7	14.3	7.2
R12_BB	574814	161714	1.5	22.5	14.2	7.2
R13_BB	574500	161892	1.5	16.9	13.3	7.1
R14_BB	574657	161990	1.5	22.0	14.1	7.2
R15_BB	574501	162175	1.5	29.0	16.6	7.7
R16_BB	574487	162357	1.5	27.3	16.8	7.7
R17_BB	574549	162514	1.5	23.3	16.4	7.6
R18_BB	574765	163278	1.5	18.8	15.1	7.4
R19_BB	574929	162951	1.5	19.6	15.2	7.6
R20_BB	575070	162855	1.5	20.7	15.1	7.7
R21_BB	575200	162726	1.5	20.4	15.0	7.7
R22_BB	575404	162560	1.5	18.9	14.8	7.6
R23_BB	575714	162479	1.5	14.4	13.6	7.6
R25_BB	574715	163236	1.5	20.9	15.7	7.5

Table A-23: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Snodland

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
P1_SL	568979	162125	1.5	N/A	N/A	N/A
R2_SL	569409	162063	1.5	11.4	12.0	6.8
R3_SL	569556	162017	1.5	11.6	12.0	6.8
R4_SL	569846	161952	1.5	13.3	12.2	7.4
R5_SL	569109	162120	1.5	10.8	11.8	6.7
R6_SL	570382	162232	1.5	27.7	16.8	9.7
R7_SL	569745	161883	1.5	12.1	11.9	7.2
R8_SL	570484	162339	1.5	30.9	17.7	10.3
R9_SL	570043	161914	1.5	19.1	13.8	8.4

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario.

Table A-24: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Trench Wood

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R3_TW	560254	150286	1.5	14.8	11.2	6.9
P1_TW	560654	149595	1.5	N/A	N/A	N/A
P3_TW	560902	149156	1.5	N/A	N/A	N/A
P4_TW	561305	149064	1.5	N/A	N/A	N/A
P5_TW	560957	149045	1.5	N/A	N/A	N/A
P6_TW	560815	148809	1.5	N/A	N/A	N/A
P7_TW	560780	148759	1.5	N/A	N/A	N/A
P8_TW	560776	148674	1.5	N/A	N/A	N/A
R12_TW	560782	148608	1.5	12.7	11.7	7.4
R23_TW	560715	148496	1.5	13.5	11.9	7.5
R34_TW	560447	148359	1.5	15.4	12.5	7.8
R38_TW	560427	148314	1.5	11.9	11.5	7.3
R39_TW	560014	149785	1.5	15.3	11.7	7.1
R25_TW	559323	148478	1.5	14.6	12.0	7.7
R40_TW	559838	149384	1.5	15.7	12.0	7.5
R41_TW	559788	149249	1.5	13.1	11.3	7.1
R4_TW	559645	149123	1.5	22.0	14.0	8.6
R5_TW	559534	148973	1.5	14.7	12.1	7.7
R6_TW	559539	148843	1.5	14.5	12.0	7.7
R7_TW	559316	148835	1.5	12.7	11.5	7.4
R8_TW	559240	148817	1.5	11.7	11.2	7.2
R9_TW	559031	148872	1.5	10.6	10.9	7.1
R10_TW	558981	148848	1.5	9.3	10.0	6.4
R11_TW	558879	148799	1.5	9.2	10.0	6.4
R13_TW	558920	148785	1.5	9.2	10.0	6.4
R14_TW	558933	148718	1.5	9.1	10.0	6.4
R15_TW	559001	148590	1.5	10.3	10.8	7.0
R16_TW	559061	148755	1.5	10.2	10.7	7.0
R36_TW	559185	147473	1.5	22.8	14.0	8.8
R35_TW	559185	147495	1.5	21.6	13.9	8.7
R33_TW	559178	147536	1.5	20.1	13.8	8.6
R32_TW	559188	147650	1.5	22.2	14.6	9.0
R31_TW	559213	147687	1.5	21.9	14.4	9.0
R30_TW	559202	147820	1.5	16.0	12.6	8.0
R29_TW	559250	147893	1.5	14.6	12.1	7.7
R28_TW	558985	147754	1.5	10.6	10.4	6.7
R27_TW	558928	147813	1.5	10.2	10.3	6.6
R26_TW	558919	147963	1.5	9.9	10.2	6.6
R24_TW	559270	148111	1.5	22.1	13.8	8.7

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R22_TW	558981	148153	1.5	10.4	10.3	6.5
R21_TW	558906	148193	1.5	10.1	10.2	6.5
R20_TW	558967	148526	1.5	9.7	10.1	6.4
R19_TW	559278	148527	1.5	11.9	11.2	7.3
R18_TW	559207	148582	1.5	10.7	10.9	7.1
R17_TW	559217	148620	1.5	10.7	10.9	7.1
P9_TW	558800	148754	1.5	N/A	N/A	N/A
P10_TW	558868	148128	1.5	N/A	N/A	N/A
P2_TW	558860	147923	1.5	N/A	N/A	N/A
R37_TW	559151	147620	1.5	16.1	12.5	7.9
R1_TW	559310	148095	1.5	19.5	13.1	8.3
R2_TW	559298	148071	1.5	18.8	12.9	8.2

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario.

Table A-25: Predicted Annual Mean Concentrations at Selected Receptors for 2022, East Peckham

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R1_EP	567302	149415	1.5	10.1	10.8	6.5
R2_EP	567179	149256	1.5	9.9	10.7	6.5
R3_EP	567296	148945	1.5	10.2	11.0	6.5
R4_EP	567225	148655	1.5	12.5	11.6	6.8
R5_EP	566827	148552	1.5	10.7	11.3	6.7
P1_EP	567285	149682	1.5	N/A	N/A	N/A
P2_EP	567285	149514	1.5	N/A	N/A	N/A
P3_EP	567207	149236	1.5	N/A	N/A	N/A
P4_EP	567284	148998	1.5	N/A	N/A	N/A
P5_EP	566714	148554	1.5	N/A	N/A	N/A
P6_EP	566904	149228	1.5	N/A	N/A	N/A

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario.

Table A-26: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Hildenborough

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
R1_HB	556620	148754	1.5	18.2	12.7	7.7
R2_HB	557275	148379	1.5	18.0	12.8	7.8
R3_HB	556463	148726	1.5	10.0	10.1	6.3
P1_HB	556662	148712	1.5	20.7	13.6	8.2
P2_HB	557489	148220	1.5	25.1	15.4	9.2

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario.

Table A-27: Predicted Annual Mean Concentrations at Selected Receptors for 2022, Kings Hill

Receptor ID	X co-ordinate	Y co-ordinate	Height (m)	Annual Mean (µg/m^3)		
				NO_2	PM_{10}	$PM_{2.5}$
P1_KH*	568839	156798	1.5	9.7	10.6	6.5
P2_KH	568970	157151	1.5	N/A	N/A	N/A
P3_KH	568830	156424	1.5	N/A	N/A	N/A

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the baseline scenario. P1 has been…

2042 Local Plan (Human Health)

Modelled Concentrations

Table A-28: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3 – Tonbridge Town Centre

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R1_TH	7.6	12.2	7.2	7.8	12.6	7.5	0.2	0.4	0.2
R2_TH	8.8	12.4	7.2	8.9	12.8	7.4	0.1	0.4	0.2
R3_TH	9.1	12.6	7.4	9.2	13.0	7.5	0.1	0.4	0.2
R4_TH	9.7	13.5	7.8	9.8	14.1	8.1	0.2	0.6	0.3
R5_TH	8.2	11.4	6.7	8.2	11.5	6.8	0.1	0.2	0.1
R6_TH	8.1	11.3	6.7	8.1	11.5	6.7	0.1	0.1	0.1
R7_TH	8.0	11.3	6.6	8.1	11.4	6.7	0.1	0.2	0.1
R8_TH	8.2	11.5	6.7	8.2	11.6	6.8	0.1	0.2	0.1
R9_TH	6.9	11.0	6.6	7.0	11.2	6.7	<0.1	0.1	0.1
R10_TH	6.8	10.8	6.5	6.9	11.0	6.6	<0.1	0.1	0.1
R11_TH	6.7	10.5	6.4	6.7	10.7	6.4	<0.1	0.1	0.1
R12_TH	6.7	10.6	6.4	6.8	10.7	6.4	<0.1	0.1	0.1
R13_TH	8.2	11.4	6.7	8.2	11.6	6.8	0.1	0.2	0.1
P1_TH	N/A	N/A	N/A	8.2	12.2	7.2	N/A	N/A	N/A
P2_TH	N/A	N/A	N/A	8.5	13.1	7.6	N/A	N/A	N/A
P3_TH	N/A	N/A	N/A	6.3	10.1	6.1	N/A	N/A	N/A
R14_TH	6.7	11.4	6.8	6.7	11.5	6.9	<0.1	0.1	0.1
R15_TH	6.6	11.0	6.6	6.7	11.2	6.7	0.1	0.2	0.1
R16_TH	8.0	13.5	7.9	8.1	13.8	8.1	0.1	0.2	0.1
R17_TH	8.1	13.1	7.7	8.2	13.3	7.8	<0.1	0.2	0.1
R18_TH	8.4	12.2	7.1	8.5	12.5	7.3	0.1	0.3	0.2
R19_TH	10.1	14.6	8.4	10.3	15.1	8.7	0.2	0.5	0.3
R20_TH	7.9	11.3	6.6	8.0	11.5	6.7	0.1	0.2	0.1
R21_TH	8.4	12.2	7.1	8.6	12.6	7.3	0.1	0.4	0.2
R22_TH	8.4	12.0	7.0	8.5	12.4	7.2	0.1	0.3	0.2
R23_TH	8.7	12.2	7.1	8.8	12.6	7.3	0.1	0.4	0.2
R24_TH	7.9	11.3	6.6	8.0	11.5	6.8	0.1	0.3	0.1

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Table A-29: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3 – Wateringbury

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R1_WB	12.8	16.0	8.8	13.0	16.4	9.0	0.2	0.4	0.2
R2_WB	10.2	14.2	7.9	10.4	14.5	8.0	0.2	0.3	0.1
R3_WB	10.4	13.7	7.6	10.4	14.0	7.7	<0.1	0.3	0.2
R4_WB	7.1	11.1	6.2	7.2	11.2	6.3	<0.1	0.1	0.1
R5_WB	18.7	17.4	9.6	18.9	17.9	9.8	0.2	0.5	0.3
R6_WB	19.4	16.0	8.8	19.7	16.4	9.0	0.3	0.4	0.2
R7_WB	10.7	14.3	7.9	10.7	14.6	8.1	<0.1	0.3	0.2
R8_WB	7.4	12.9	7.1	7.5	13.1	7.3	0.1	0.3	0.1
R9_WB	7.4	13.0	7.2	7.4	13.2	7.3	0.1	0.2	0.1
R10_WB	6.5	11.0	6.2	6.6	11.1	6.2	<0.1	0.1	0.1
R11_WB	7.3	13.2	7.3	7.4	13.5	7.5	0.1	0.3	0.2
P1_WB	N/A	N/A	N/A	6.4	11.0	6.1	N/A	N/A	N/A
P2_WB	N/A	N/A	N/A	6.6	11.4	6.4	N/A	N/A	N/A
P3_WB	N/A	N/A	N/A	7.3	13.1	7.3	N/A	N/A	N/A
R12_WB	7.1	13.1	7.1	7.2	13.4	7.2	0.1	0.3	0.2
R13_WB	6.7	12.0	6.7	6.8	12.2	6.8	0.1	0.2	0.1
R14_WB	6.1	10.2	5.7	6.1	10.3	5.8	0.1	0.2	0.1
R15_WB	6.9	12.1	6.8	7.0	12.3	6.9	0.1	0.2	0.1
R16_WB	6.5	11.3	6.4	6.6	11.4	6.4	0.1	0.1	0.1
R17_WB	6.5	11.3	6.4	6.6	11.4	6.4	0.1	0.1	0.1

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Table A-30: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3, Medway Gap

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R1_MG	9.3	13.4	7.4	9.3	13.6	7.5	<0.1	0.2	0.1
R2_MG	11.0	15.5	8.5	11.1	15.9	8.7	0.1	0.4	0.2
R3_MG	10.1	14.6	8.0	10.3	15.1	8.3	0.2	0.5	0.3
R4_MG	9.3	13.4	7.4	9.3	13.5	7.5	<0.1	0.2	0.1
R5_MG	9.0	13.2	7.2	9.1	13.3	7.3	<0.1	0.2	0.1
R6_MG	8.2	14.7	7.4	8.2	14.9	7.5	<0.1	0.2	0.1
R7_MG	7.9	14.2	7.2	7.9	14.3	7.2	<0.1	0.1	0.1
R8_MG	7.7	14.0	7.0	7.8	14.2	7.2	0.1	0.2	0.1
R9_MG	7.6	13.6	6.9	7.6	13.8	6.9	<0.1	0.2	0.1
R10_MG	7.5	13.5	6.8	7.6	13.8	7.0	0.1	0.3	0.1
R11_MG	7.5	13.4	6.8	7.6	13.7	6.9	0.1	0.3	0.2
R12_MG	7.5	13.5	6.8	7.6	13.9	7.0	0.1	0.3	0.2
R13_MG	7.5	13.6	6.8	7.6	13.8	7.0	0.1	0.3	0.1

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R14_MG	7.5	13.6	6.8	7.6	13.8	7.0	0.1	0.3	0.1
R15_MG	7.4	13.3	6.8	7.5	13.5	6.9	0.1	0.2	0.1
R16_MG	8.1	14.4	7.4	8.2	14.8	7.6	0.1	0.3	0.2
R17_MG	8.0	11.7	6.4	8.0	11.8	6.5	0.1	0.1	0.1
R18_MG	8.3	14.7	7.4	8.4	15.0	7.6	0.1	0.3	0.2
R19_MG	8.0	14.1	7.2	8.2	14.7	7.5	0.2	0.5	0.3
R20_MG	8.1	14.3	7.3	8.3	15.0	7.7	0.2	0.7	0.4
R21_MG	7.2	11.2	6.3	7.3	11.6	6.5	0.1	0.4	0.2
R22_MG	7.3	11.5	6.5	7.5	12.0	6.8	0.2	0.6	0.3
R23_MG	7.2	11.2	6.3	7.3	11.6	6.5	0.2	0.5	0.2
R24_MG	7.5	13.5	6.9	7.7	13.9	7.1	0.2	0.5	0.2
R25_MG	7.3	13.3	6.8	7.5	13.9	7.1	0.2	0.6	0.3
R26_MG	7.7	13.8	7.1	7.8	13.9	7.1	0.1	0.2	0.1
R27_MG	7.8	13.9	7.1	7.9	14.1	7.2	0.1	0.2	0.1
R28_MG	8.4	14.8	7.6	8.5	15.2	7.8	0.2	0.4	0.2
R29_MG	8.1	14.5	7.4	8.3	15.1	7.8	0.2	0.6	0.3
R30_MG	7.3	13.2	6.8	7.4	13.6	7.0	0.1	0.4	0.2
R31_MG	7.6	14.1	7.2	8.0	15.2	7.8	0.4	1.2	0.6
R32_MG	7.6	14.2	7.3	8.1	15.5	8.0	0.5	1.4	0.7
R33_MG	7.5	13.9	7.1	7.9	14.9	7.7	0.4	1.0	0.6
R34_MG	7.8	13.2	7.4	8.7	15.5	8.6	0.9	2.3	1.2
R35_MG	7.7	14.0	7.2	8.0	14.8	7.7	0.3	0.8	0.4
R36_MG	7.1	11.6	6.6	7.5	12.4	7.1	0.3	0.8	0.5
R37_MG	7.5	13.5	7.0	7.6	13.9	7.2	0.2	0.5	0.2
R38_MG	7.5	13.6	7.1	7.7	14.1	7.3	0.2	0.5	0.3
R39_MG	8.5	15.1	7.9	8.5	15.5	8.1	<0.1	0.4	0.2
R40_MG	8.5	15.1	7.9	8.4	15.5	8.0	-0.1	0.4	0.2
R41_MG	8.7	15.4	8.0	8.8	15.8	8.2	0.1	0.4	0.2
R42_MG	10.0	17.1	8.9	10.2	17.6	9.2	0.2	0.4	0.2
R43_MG	9.7	16.6	8.7	9.9	17.0	8.9	0.2	0.4	0.2
R44_MG	9.8	16.8	8.7	9.9	17.2	8.9	0.2	0.4	0.2
R45_MG	8.3	12.7	7.4	8.5	13.1	7.6	0.2	0.4	0.2
R46_MG	7.8	12.0	7.0	7.9	12.2	7.1	0.1	0.2	0.1
R47_MG	7.6	11.6	6.8	7.7	11.8	6.9	0.1	0.2	0.1
R48_MG	8.4	14.7	7.6	8.5	14.9	7.7	0.1	0.2	0.1
R49_MG	8.6	14.9	7.8	8.6	15.1	7.9	0.1	0.2	0.1
R50_MG	8.0	14.1	7.3	8.0	14.2	7.4	<0.1	0.1	0.1
R51_MG	6.9	10.8	6.1	7.5	12.6	7.1	0.6	1.8	1.0
R52_MG	6.8	10.7	6.1	7.4	12.3	6.9	0.5	1.6	0.9
R53_MG	6.4	9.8	5.6	6.9	11.3	6.5	0.5	1.6	0.8
R54_MG	6.5	9.9	5.7	6.6	10.4	6.0	0.1	0.5	0.3

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R55_MG	6.4	9.8	5.7	6.5	10.2	5.9	0.1	0.4	0.2
R56_MG	7.4	13.4	6.9	7.6	14.1	7.2	0.2	0.7	0.4
R57_MG	7.1	12.8	6.5	7.2	12.9	6.6	<0.1	0.1	<0.1
R58_MG	7.2	12.9	6.6	7.3	13.1	6.7	<0.1	0.1	0.1
P1_MG	N/A	N/A	N/A	7.7	13.4	7.5	N/A	N/A	N/A
P2_MG	N/A	N/A	N/A	6.9	11.1	6.4	N/A	N/A	N/A
R59_MG	9.1	15.6	8.1	9.2	15.9	8.3	0.1	0.3	0.2

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Table A-31: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3, Borough Green and Wrotham

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R1_BG	6.7	12.9	6.2	6.9	13.5	6.6	0.2	0.6	0.3
R2_BG	6.5	12.7	6.1	6.7	13.1	6.3	0.2	0.4	0.2
R3_BG	6.6	12.7	6.1	6.8	13.3	6.4	0.2	0.6	0.3
R4_BG	6.5	12.5	6.0	6.7	13.0	6.3	0.2	0.5	0.3
R5_BG	6.4	12.4	6.0	6.6	12.8	6.2	0.2	0.4	0.2
R6_BG	6.5	12.5	6.0	6.7	13.0	6.3	0.2	0.5	0.3
R7_BG	6.4	12.3	5.9	6.5	12.6	6.1	0.1	0.2	0.1
R8_BG	6.3	12.2	5.9	6.4	12.4	6.0	0.1	0.2	0.1
R9_BG	6.3	12.2	5.9	6.4	12.4	6.0	0.1	0.2	0.1
R10_BG	6.3	12.2	5.9	6.4	12.4	6.0	0.1	0.2	0.1
R11_BG	6.3	12.2	5.9	6.4	12.4	6.0	0.1	0.2	0.1
R12_BG	6.6	12.6	6.1	6.8	13.1	6.3	0.2	0.5	0.2
R13_BG	6.6	12.7	6.1	6.9	13.2	6.4	0.2	0.5	0.3
R14_BG	6.4	12.3	5.9	6.6	12.7	6.1	0.2	0.4	0.2
R15_BG	7.0	12.9	6.2	7.1	13.2	6.4	0.1	0.3	0.2
R16_BG	6.9	13.2	6.4	7.1	13.8	6.7	0.2	0.6	0.3
R17_BG	6.4	12.3	5.9	6.5	12.6	6.1	0.1	0.3	0.1
R18_BG	6.8	11.3	6.2	6.9	11.9	6.5	0.2	0.6	0.3
R19_BG	7.0	11.9	6.5	7.3	12.7	6.9	0.3	0.8	0.4
R20_BG	7.0	11.9	6.5	7.3	12.7	7.0	0.2	0.8	0.4
R21_BG	6.9	11.7	6.4	7.1	12.4	6.8	0.2	0.7	0.4
R22_BG	7.3	12.4	6.8	7.5	13.2	7.2	0.3	0.9	0.5
R23_BG	7.5	12.8	7.0	7.8	14.0	7.6	0.3	1.2	0.6
R24_BG	8.1	12.6	6.4	8.3	13.2	6.7	0.2	0.7	0.4
R25_BG	8.4	13.0	6.6	8.6	13.8	7.0	0.2	0.8	0.4
R26_BG	8.4	13.0	6.6	8.6	13.7	7.0	0.2	0.7	0.4
R27_BG	8.0	12.1	6.1	8.1	12.5	6.3	0.1	0.4	0.2
R28_BG	8.5	13.1	6.7	8.6	13.8	7.0	0.2	0.7	0.4

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R29_BG	8.3	12.6	6.4	8.4	12.9	6.6	0.1	0.4	0.2
R30_BG	9.0	12.7	6.4	9.0	13.0	6.6	<0.1	0.3	0.1
R31_BG	10.8	13.8	7.0	10.6	14.2	7.3	-0.2	0.4	0.2
R32_BG	9.2	13.7	7.0	9.3	14.2	7.2	0.1	0.4	0.2
R33_BG	8.7	12.9	6.6	8.8	13.3	6.7	<0.1	0.3	0.2
R34_BG	8.4	12.8	6.5	8.5	13.1	6.7	0.1	0.3	0.2
R35_BG	9.3	13.3	6.8	9.3	13.7	7.0	<0.1	0.4	0.2
R36_BG	8.5	13.0	6.6	8.5	13.2	6.7	0.1	0.2	0.1
R37_BG	8.5	13.0	6.6	8.6	13.3	6.8	0.1	0.3	0.2
R38_BG	8.9	13.4	6.8	9.0	13.8	7.0	0.1	0.4	0.2
R39_BG	8.4	12.7	6.4	8.4	12.8	6.5	<0.1	0.1	0.1
R40_BG	8.8	13.7	7.0	9.0	14.2	7.3	0.2	0.5	0.3
R41_BG	7.4	12.5	6.8	7.6	13.1	7.1	0.2	0.6	0.3
R42_BG	7.0	11.6	6.4	7.2	12.0	6.6	0.2	0.4	0.2
R43_BG	7.6	12.5	6.9	7.9	13.2	7.2	0.3	0.7	0.4
R44_BG	6.9	11.2	6.2	7.0	11.6	6.4	0.2	0.4	0.2
R45_BG	7.1	11.6	6.4	7.2	11.9	6.6	0.2	0.4	0.2
R46_BG	6.9	11.2	6.3	7.1	11.6	6.5	0.2	0.4	0.2
R47_BG	9.1	12.9	6.5	9.1	13.2	6.7	<0.1	0.3	0.2
P1_BG	N/A	N/A	N/A	9.1	14.2	7.2	N/A	N/A	N/A
P2_BG	N/A	N/A	N/A	6.4	10.6	5.8	N/A	N/A	N/A
P3_BG	N/A	N/A	N/A	7.9	13.0	7.2	N/A	N/A	N/A
P4_BG	N/A	N/A	N/A	7.9	13.1	7.2	N/A	N/A	N/A
P5_BG	N/A	N/A	N/A	7.8	15.8	7.8	N/A	N/A	N/A
P6_BG	N/A	N/A	N/A	6.3	12.4	6.0	N/A	N/A	N/A
P7_BG	N/A	N/A	N/A	7.2	14.4	7.0	N/A	N/A	N/A
R48_BG	6.4	10.7	5.9	6.5	10.9	5.9	0.1	0.2	0.1

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Table A-32: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3, Aylesford

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
P1_AY	N/A	N/A	N/A	8.6	14.1	6.7	N/A	N/A	N/A
P2_AY	N/A	N/A	N/A	8.5	13.8	6.5	N/A	N/A	N/A
P3_AY	N/A	N/A	N/A	9.1	15.8	7.5	N/A	N/A	N/A
P4_AY	N/A	N/A	N/A	8.6	14.6	6.9	N/A	N/A	N/A
P5_AY	N/A	N/A	N/A	8.8	14.8	7.0	N/A	N/A	N/A
R1_AY	9.0	15.6	8.2	9.1	16.0	8.5	0.1	0.5	0.2
R2_AY	8.5	13.4	7.2	8.4	13.2	7.1	-0.1	-0.2	-0.1

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Table A-33: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3, Bluebell Hill

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R3_BB	8.9	13.8	7.0	8.9	13.9	7.0	<0.1	0.1	<0.1
R4_BB	9.2	13.8	7.2	9.3	14.0	7.3	0.1	0.2	0.1
R5_BB	10.1	14.2	7.4	10.2	14.3	7.5	0.1	0.1	0.1
R6_BB	10.8	14.6	7.7	10.9	14.8	7.8	0.1	0.1	0.1
R7_BB	10.7	14.2	7.7	10.8	14.3	7.8	0.1	0.1	0.1
R8_BB	8.6	12.6	6.7	8.7	12.6	6.8	<0.1	<0.1	<0.1
R9_BB	9.5	13.4	7.2	9.5	13.4	7.2	0.1	0.1	0.0
R10_BB	7.9	12.1	6.4	7.9	12.1	6.4	<0.1	<0.1	<0.1
R11_BB	9.3	13.7	7.3	9.3	13.6	7.3	<0.1	-0.1	<0.1
R12_BB	9.1	13.4	7.1	9.1	13.3	7.1	<0.1	<0.1	<0.1
R13_BB	8.1	12.3	6.5	8.1	12.3	6.5	<0.1	<0.1	<0.1
R14_BB	9.0	13.3	7.1	9.1	13.3	7.1	<0.1	<0.1	<0.1
R15_BB	10.7	15.9	8.3	10.8	15.9	8.3	<0.1	<0.1	<0.1
R16_BB	10.6	16.0	8.3	10.7	16.1	8.3	0.1	0.1	0.1
R17_BB	9.7	15.2	7.8	9.7	15.2	7.8	0.1	0.1	0.0
R18_BB	8.8	14.0	7.1	8.9	14.1	7.2	<0.1	0.1	<0.1
R19_BB	9.0	14.1	7.2	9.1	14.1	7.2	<0.1	<0.1	<0.1
R20_BB	9.0	13.7	7.3	9.0	13.7	7.4	<0.1	0.1	<0.1
R21_BB	8.8	13.6	7.3	8.8	13.6	7.3	<0.1	<0.1	<0.1
R22_BB	8.4	13.3	7.1	8.5	13.4	7.2	<0.1	<0.1	<0.1
R23_BB	7.9	12.4	6.6	7.9	12.4	6.6	<0.1	<0.1	<0.1
R25_BB	9.2	14.6	7.5	9.2	14.7	7.5	<0.1	0.1	0.1

Table A-34: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3, Snodland

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
P1_SL	N/A	N/A	N/A	7.8	15.0	7.4	N/A	N/A	N/A
R2_SL	6.9	10.8	5.7	7.8	13.2	7.0	0.8	2.4	1.3
R3_SL	7.0	10.9	5.7	7.3	11.7	6.2	0.3	0.8	0.4
R4_SL	7.6	11.0	6.3	7.9	11.7	6.7	0.3	0.8	0.4
R5_SL	6.8	10.7	5.6	7.2	11.8	6.3	0.4	1.1	0.6
R6_SL	10.5	15.5	8.4	10.7	16.2	8.8	0.3	0.7	0.4
R7_SL	7.5	10.7	6.1	7.5	10.8	6.2	0.1	0.2	0.1
R8_SL	12.0	17.3	9.5	12.2	17.8	9.7	0.2	0.5	0.3
R9_SL	11.9	12.6	7.3	12.3	13.7	7.9	0.4	1.1	0.6

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Table A-35: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3, Trench Wood

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R3_TW	6.1	10.2	5.9	6.4	10.8	6.3	0.3	0.6	0.3

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
P1_TW	N/A	N/A	N/A	5.8	10.6	6.0	N/A	N/A	N/A
P3_TW	N/A	N/A	N/A	5.9	10.9	6.2	N/A	N/A	N/A
P4_TW	N/A	N/A	N/A	5.9	10.4	6.0	N/A	N/A	N/A
P5_TW	N/A	N/A	N/A	6.1	10.9	6.2	N/A	N/A	N/A
P6_TW	N/A	N/A	N/A	6.6	11.8	6.9	N/A	N/A	N/A
P7_TW	N/A	N/A	N/A	6.6	11.7	6.9	N/A	N/A	N/A
P8_TW	N/A	N/A	N/A	6.6	11.6	6.8	N/A	N/A	N/A
R12_TW	6.0	10.4	6.2	6.2	10.8	6.4	0.2	0.4	0.2
R23_TW	6.1	10.5	6.3	6.2	10.9	6.5	0.2	0.4	0.2
R34_TW	6.3	10.9	6.5	6.5	11.4	6.7	0.2	0.5	0.3
R38_TW	5.9	10.1	6.1	6.0	10.4	6.2	0.1	0.3	0.1
R39_TW	6.7	10.6	6.1	6.8	11.1	6.4	0.1	0.5	0.3
R25_TW	6.4	10.6	6.4	6.9	11.9	7.2	0.5	1.4	0.7
R40_TW	6.7	10.8	6.4	6.9	11.4	6.7	0.2	0.6	0.3
R41_TW	6.0	10.0	6.0	6.1	10.3	6.1	0.1	0.3	0.1
R4_TW	7.6	12.4	7.2	7.8	13.0	7.6	0.2	0.6	0.3
R5_TW	6.5	10.7	6.5	6.5	10.9	6.6	0.1	0.2	0.1
R6_TW	6.5	10.6	6.5	6.5	10.8	6.5	0.0	0.2	0.1
R7_TW	6.1	10.2	6.2	6.3	10.8	6.5	0.2	0.6	0.3
R8_TW	6.0	9.9	6.1	6.1	10.4	6.3	0.1	0.5	0.2
R9_TW	5.8	9.6	5.9	6.0	10.2	6.2	0.2	0.5	0.3
R10_TW	5.3	8.9	5.4	5.7	9.8	5.9	0.3	0.9	0.5
R11_TW	5.3	8.9	5.3	5.8	10.2	6.0	0.5	1.3	0.7
R13_TW	5.4	8.9	5.3	5.7	10.1	6.0	0.4	1.2	0.7
R14_TW	5.3	8.9	5.3	5.6	9.6	5.7	0.3	0.8	0.4
R15_TW	5.8	9.5	5.9	6.0	10.1	6.2	0.2	0.6	0.3
R16_TW	5.8	9.5	5.8	6.0	10.4	6.3	0.2	0.9	0.5
R36_TW	7.9	12.1	7.2	8.0	12.6	7.5	0.1	0.5	0.3
R35_TW	7.7	12.1	7.2	7.8	12.6	7.5	0.1	0.6	0.3
R33_TW	7.4	12.0	7.1	7.5	12.6	7.4	0.1	0.6	0.3
R32_TW	7.7	12.6	7.5	7.9	13.3	7.8	0.2	0.7	0.4
R31_TW	7.7	12.6	7.4	7.9	13.2	7.8	0.2	0.6	0.3
R30_TW	6.9	11.1	6.7	7.0	11.5	6.9	0.1	0.4	0.2
R29_TW	6.7	10.7	6.5	6.8	11.1	6.6	0.1	0.3	0.2
R28_TW	5.6	9.2	5.6	5.7	9.4	5.7	0.1	0.2	0.1
R27_TW	5.5	9.1	5.5	5.6	9.3	5.6	0.0	0.1	0.1
R26_TW	5.5	9.0	5.5	5.6	9.2	5.6	0.1	0.2	0.1
R24_TW	7.5	12.0	7.2	7.7	12.7	7.6	0.2	0.7	0.4
R22_TW	5.5	9.1	5.5	5.5	9.3	5.6	0.1	0.2	0.1
R21_TW	5.4	9.1	5.4	5.5	9.3	5.6	0.1	0.3	0.1
R20_TW	5.4	9.0	5.4	5.6	9.4	5.6	0.2	0.4	0.2

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R19_TW	6.0	9.9	6.1	6.5	11.4	6.9	0.5	1.5	0.8
R18_TW	5.8	9.6	5.9	6.1	10.3	6.3	0.2	0.7	0.4
R17_TW	5.8	9.6	5.9	6.1	10.4	6.3	0.3	0.7	0.4
P9_TW	N/A	N/A	N/A	6.0	11.0	6.5	N/A	N/A	N/A
P10_TW	N/A	N/A	N/A	5.4	9.0	5.4	N/A	N/A	N/A
P2_TW	N/A	N/A	N/A	5.5	9.1	5.5	N/A	N/A	N/A
R37_TW	6.7	11.0	6.6	6.8	11.3	6.8	0.1	0.3	0.2
R1_TW	7.0	11.4	6.9	7.1	11.9	7.1	0.1	0.5	0.3
R2_TW	6.9	11.3	6.8	7.1	11.7	7.0	0.1	0.5	0.2

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Table A-36: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3, East Peckham

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R1_EP	5.6	9.6	5.4	5.7	9.8	5.6	0.1	0.3	0.1
R2_EP	5.6	9.6	5.4	5.8	10.0	5.7	0.1	0.4	0.2
R3_EP	5.8	9.8	5.4	5.9	10.0	5.5	0.1	0.2	0.1
R4_EP	6.1	10.4	5.8	6.1	10.6	5.9	0.1	0.2	0.1
R5_EP	5.7	10.2	5.7	5.8	10.4	5.8	0.1	0.3	0.1
P1_EP	N/A	N/A	N/A	5.9	10.2	5.7	N/A	N/A	N/A
P2_EP	N/A	N/A	N/A	5.9	10.1	5.7	N/A	N/A	N/A
P3_EP	N/A	N/A	N/A	5.7	9.9	5.6	N/A	N/A	N/A
P4_EP	N/A	N/A	N/A	5.8	9.9	5.5	N/A	N/A	N/A
P5_EP	N/A	N/A	N/A	5.9	10.7	5.9	N/A	N/A	N/A
P6_EP	N/A	N/A	N/A	5.9	10.7	5.9	N/A	N/A	N/A

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Table A-37: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3, Hildenborough

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
R1_HB	6.3	11.2	6.5	6.4	11.9	6.9	0.2	0.7	0.3
R2_HB	6.3	11.2	6.5	6.5	11.7	6.8	0.2	0.6	0.3
R3_HB	5.2	9.0	5.3	5.3	9.1	5.4	0.0	0.1	0.1
P1_HB	N/A	N/A	N/A	7.1	13.4	7.7	N/A	N/A	N/A
P2_HB	N/A	N/A	N/A	7.5	13.9	8.0	N/A	N/A	N/A

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Table A-38: Annual Mean Air Quality Results for 2042 traffic flows in µg/m^3, Kings Hill

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
P1_KH	6.1	9.9	5.6	6.4	10.6	6.0	0.3	0.7	0.4

Receptor	Without Local Plan			With Local Plan			Change		
	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$	NO_2	PM_{10}	$PM_{2.5}$
P2_KH	N/A	N/A	N/A	6.8	11.1	6.3	N/A	N/A	N/A
P3_KH	N/A	N/A	N/A	6.3	10.4	5.9	N/A	N/A	N/A

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, no modelled concentration has been presented for the DM (without Local Plan) Scenario.

Significance

Table A-39: Air Quality Significance – Tonbridge Town Centre

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R1_TH	Negligible	Negligible	Negligible
R2_TH	Negligible	Negligible	Negligible
R3_TH	Negligible	Negligible	Negligible
R4_TH	Negligible	Negligible	Negligible
R5_TH	Negligible	Negligible	Negligible
R6_TH	Negligible	Negligible	Negligible
R7_TH	Negligible	Negligible	Negligible
R8_TH	Negligible	Negligible	Negligible
R9_TH	Negligible	Negligible	Negligible
R10_TH	Negligible	Negligible	Negligible
R11_TH	Negligible	Negligible	Negligible
R12_TH	Negligible	Negligible	Negligible
R13_TH	Negligible	Negligible	Negligible
P1_TH	N/A	N/A	N/A
P2_TH	N/A	N/A	N/A
P3_TH	N/A	N/A	N/A
R14_TH	Negligible	Negligible	Negligible
R15_TH	Negligible	Negligible	Negligible
R16_TH	Negligible	Negligible	Negligible
R17_TH	Negligible	Negligible	Negligible
R18_TH	Negligible	Negligible	Negligible
R19_TH	Negligible	Negligible	Negligible
R20_TH	Negligible	Negligible	Negligible
R21_TH	Negligible	Negligible	Negligible
R22_TH	Negligible	Negligible	Negligible
R23_TH	Negligible	Negligible	Negligible
R24_TH	Negligible	Negligible	Negligible

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

Table A-40: Air Quality Significance – Wateringbury

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R1_WB	Negligible	Negligible	Negligible
R2_WB	Negligible	Negligible	Negligible
R3_WB	Negligible	Negligible	Negligible
R4_WB	Negligible	Negligible	Negligible
R5_WB	Negligible	Negligible	Negligible
R6_WB	Negligible	Negligible	Negligible
R7_WB	Negligible	Negligible	Negligible
R8_WB	Negligible	Negligible	Negligible
R9_WB	Negligible	Negligible	Negligible
R10_WB	Negligible	Negligible	Negligible
R11_WB	Negligible	Negligible	Negligible
P1_WB	N/A	N/A	N/A
P2_WB	N/A	N/A	N/A
P3_WB	N/A	N/A	N/A
R12_WB	Negligible	Negligible	Negligible
R13_WB	Negligible	Negligible	Negligible
R14_WB	Negligible	Negligible	Negligible
R15_WB	Negligible	Negligible	Negligible
R16_WB	Negligible	Negligible	Negligible
R17_WB	Negligible	Negligible	Negligible

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

Table A-41: Air Quality Significance – Medway Gap

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R1_MG	Negligible	Negligible	Negligible
R2_MG	Negligible	Negligible	Negligible
R3_MG	Negligible	Negligible	Negligible
R4_MG	Negligible	Negligible	Negligible
R5_MG	Negligible	Negligible	Negligible
R6_MG	Negligible	Negligible	Negligible
R7_MG	Negligible	Negligible	Negligible
R8_MG	Negligible	Negligible	Negligible
R9_MG	Negligible	Negligible	Negligible
R10_MG	Negligible	Negligible	Negligible
R11_MG	Negligible	Negligible	Negligible
R12_MG	Negligible	Negligible	Negligible
R13_MG	Negligible	Negligible	Negligible
R14_MG	Negligible	Negligible	Negligible
R15_MG	Negligible	Negligible	Negligible

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R16_MG	Negligible	Negligible	Negligible
R17_MG	Negligible	Negligible	Negligible
R18_MG	Negligible	Negligible	Negligible
R19_MG	Negligible	Negligible	Negligible
R20_MG	Negligible	Negligible	Negligible
R21_MG	Negligible	Negligible	Negligible
R22_MG	Negligible	Negligible	Negligible
R23_MG	Negligible	Negligible	Negligible
R24_MG	Negligible	Negligible	Negligible
R25_MG	Negligible	Negligible	Negligible
R26_MG	Negligible	Negligible	Negligible
R27_MG	Negligible	Negligible	Negligible
R28_MG	Negligible	Negligible	Negligible
R29_MG	Negligible	Negligible	Negligible
R30_MG	Negligible	Negligible	Negligible
R31_MG	Negligible	Negligible	Negligible
R32_MG	Negligible	Negligible	Negligible
R33_MG	Negligible	Negligible	Negligible
R34_MG	Negligible	Slight Adverse	Slight Adverse
R35_MG	Negligible	Negligible	Negligible
R36_MG	Negligible	Negligible	Negligible
R37_MG	Negligible	Negligible	Negligible
R38_MG	Negligible	Negligible	Negligible
R39_MG	Negligible	Negligible	Negligible
R40_MG	Negligible	Negligible	Negligible
R41_MG	Negligible	Negligible	Negligible
R42_MG	Negligible	Negligible	Negligible
R43_MG	Negligible	Negligible	Negligible
R44_MG	Negligible	Negligible	Negligible
R45_MG	Negligible	Negligible	Negligible
R46_MG	Negligible	Negligible	Negligible
R47_MG	Negligible	Negligible	Negligible
R48_MG	Negligible	Negligible	Negligible
R49_MG	Negligible	Negligible	Negligible
R50_MG	Negligible	Negligible	Negligible
R51_MG	Negligible	Negligible	Negligible
R52_MG	Negligible	Negligible	Negligible
R53_MG	Negligible	Negligible	Negligible
R54_MG	Negligible	Negligible	Negligible
R55_MG	Negligible	Negligible	Negligible

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R56_MG	Negligible	Negligible	Negligible
R57_MG	Negligible	Negligible	Negligible
R58_MG	Negligible	Negligible	Negligible
P1_MG	N/A	N/A	N/A
P2_MG	N/A	N/A	N/A
R59_MG	Negligible	Negligible	Negligible

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

Table A-42: Air Quality Significance – Borough Green and Wrotham

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R1_BG	Negligible	Negligible	Negligible
R2_BG	Negligible	Negligible	Negligible
R3_BG	Negligible	Negligible	Negligible
R4_BG	Negligible	Negligible	Negligible
R5_BG	Negligible	Negligible	Negligible
R6_BG	Negligible	Negligible	Negligible
R7_BG	Negligible	Negligible	Negligible
R8_BG	Negligible	Negligible	Negligible
R9_BG	Negligible	Negligible	Negligible
R10_BG	Negligible	Negligible	Negligible
R11_BG	Negligible	Negligible	Negligible
R12_BG	Negligible	Negligible	Negligible
R13_BG	Negligible	Negligible	Negligible
R14_BG	Negligible	Negligible	Negligible
R15_BG	Negligible	Negligible	Negligible
R16_BG	Negligible	Negligible	Negligible
R17_BG	Negligible	Negligible	Negligible
R18_BG	Negligible	Negligible	Negligible
R19_BG	Negligible	Negligible	Negligible
R20_BG	Negligible	Negligible	Negligible
R21_BG	Negligible	Negligible	Negligible
R22_BG	Negligible	Negligible	Negligible
R23_BG	Negligible	Negligible	Negligible
R24_BG	Negligible	Negligible	Negligible
R25_BG	Negligible	Negligible	Negligible
R26_BG	Negligible	Negligible	Negligible
R27_BG	Negligible	Negligible	Negligible
R28_BG	Negligible	Negligible	Negligible
R29_BG	Negligible	Negligible	Negligible
R30_BG	Negligible	Negligible	Negligible

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R31_BG	Negligible	Negligible	Negligible
R32_BG	Negligible	Negligible	Negligible
R33_BG	Negligible	Negligible	Negligible
R34_BG	Negligible	Negligible	Negligible
R35_BG	Negligible	Negligible	Negligible
R36_BG	Negligible	Negligible	Negligible
R37_BG	Negligible	Negligible	Negligible
R38_BG	Negligible	Negligible	Negligible
R39_BG	Negligible	Negligible	Negligible
R40_BG	Negligible	Negligible	Negligible
R41_BG	Negligible	Negligible	Negligible
R42_BG	Negligible	Negligible	Negligible
R43_BG	Negligible	Negligible	Negligible
R44_BG	Negligible	Negligible	Negligible
R45_BG	Negligible	Negligible	Negligible
R46_BG	Negligible	Negligible	Negligible
R47_BG	Negligible	Negligible	Negligible
P1_BG	N/A	N/A	N/A
P2_BG	N/A	N/A	N/A
P3_BG	N/A	N/A	N/A
P4_BG	N/A	N/A	N/A
P5_BG	N/A	N/A	N/A
P6_BG	N/A	N/A	N/A
P7_BG	N/A	N/A	N/A
R48_BG	Negligible	Negligible	Negligible

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

Table A-43: Air Quality Significance – Aylesford

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
P1_AY	N/A	N/A	N/A
P2_AY	N/A	N/A	N/A
P3_AY	N/A	N/A	N/A
P4_AY	N/A	N/A	N/A
P5_AY	N/A	N/A	N/A
R1_AY	Negligible	Negligible	Negligible
R1_AY	Negligible	Negligible	Negligible

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

Table A-44: Air Quality Significance – Bluebell Hill

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R3_BB	Negligible	Negligible	Negligible
R4_BB	Negligible	Negligible	Negligible
R5_BB	Negligible	Negligible	Negligible
R6_BB	Negligible	Negligible	Negligible
R7_BB	Negligible	Negligible	Negligible
R8_BB	Negligible	Negligible	Negligible
R9_BB	Negligible	Negligible	Negligible
R10_BB	Negligible	Negligible	Negligible
R11_BB	Negligible	Negligible	Negligible
R12_BB	Negligible	Negligible	Negligible
R13_BB	Negligible	Negligible	Negligible
R14_BB	Negligible	Negligible	Negligible
R15_BB	Negligible	Negligible	Negligible
R16_BB	Negligible	Negligible	Negligible
R17_BB	Negligible	Negligible	Negligible
R18_BB	Negligible	Negligible	Negligible
R19_BB	Negligible	Negligible	Negligible
R20_BB	Negligible	Negligible	Negligible
R21_BB	Negligible	Negligible	Negligible
R22_BB	Negligible	Negligible	Negligible
R23_BB	Negligible	Negligible	Negligible
R25_BB	Negligible	Negligible	Negligible

Table A-45: Air Quality Significance – Snodland

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
P1_SL	N/A	N/A	N/A
R2_SL	Negligible	Slight Adverse	Slight Adverse
R3_SL	Negligible	Negligible	Negligible
R4_SL	Negligible	Negligible	Negligible
R5_SL	Negligible	Negligible	Negligible
R6_SL	Negligible	Negligible	Negligible
R7_SL	Negligible	Negligible	Negligible
R8_SL	Negligible	Negligible	Negligible
R9_SL	Negligible	Negligible	Negligible

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

Table A-46: Air Quality Significance – Trench Wood

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R3_TW	Negligible	Negligible	Negligible
P1_TW	N/A	N/A	N/A
P3_TW	N/A	N/A	N/A
P4_TW	N/A	N/A	N/A
P5_TW	N/A	N/A	N/A
P6_TW	N/A	N/A	N/A
P7_TW	N/A	N/A	N/A
P8_TW	N/A	N/A	N/A
R12_TW	Negligible	Negligible	Negligible
R23_TW	Negligible	Negligible	Negligible
R34_TW	Negligible	Negligible	Negligible
R38_TW	Negligible	Negligible	Negligible
R39_TW	Negligible	Negligible	Negligible
R25_TW	Negligible	Negligible	Negligible
R40_TW	Negligible	Negligible	Negligible
R41_TW	Negligible	Negligible	Negligible
R4_TW	Negligible	Negligible	Negligible
R5_TW	Negligible	Negligible	Negligible
R6_TW	Negligible	Negligible	Negligible
R7_TW	Negligible	Negligible	Negligible
R8_TW	Negligible	Negligible	Negligible
R9_TW	Negligible	Negligible	Negligible
R10_TW	Negligible	Negligible	Negligible
R11_TW	Negligible	Negligible	Negligible
R13_TW	Negligible	Negligible	Negligible
R14_TW	Negligible	Negligible	Negligible
R15_TW	Negligible	Negligible	Negligible
R16_TW	Negligible	Negligible	Negligible
R36_TW	Negligible	Negligible	Negligible
R35_TW	Negligible	Negligible	Negligible
R33_TW	Negligible	Negligible	Negligible
R32_TW	Negligible	Negligible	Negligible
R31_TW	Negligible	Negligible	Negligible
R30_TW	Negligible	Negligible	Negligible
R29_TW	Negligible	Negligible	Negligible
R28_TW	Negligible	Negligible	Negligible
R27_TW	Negligible	Negligible	Negligible
R26_TW	Negligible	Negligible	Negligible
R24_TW	Negligible	Negligible	Negligible
R22_TW	Negligible	Negligible	Negligible

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R21_TW	Negligible	Negligible	Negligible
R20_TW	Negligible	Negligible	Negligible
R19_TW	Negligible	Negligible	Negligible
R18_TW	Negligible	Negligible	Negligible
R17_TW	Negligible	Negligible	Negligible
P9_TW	N/A	N/A	N/A
P10_TW	N/A	N/A	N/A
P2_TW	N/A	N/A	N/A
R37_TW	Negligible	Negligible	Negligible
R1_TW	Negligible	Negligible	Negligible
R2_TW	Negligible	Negligible	Negligible

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

Table A-47: Air Quality Significance – East Peckham

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R1_EP	Negligible	Negligible	Negligible
R2_EP	Negligible	Negligible	Negligible
R3_EP	Negligible	Negligible	Negligible
R4_EP	Negligible	Negligible	Negligible
R5_EP	Negligible	Negligible	Negligible
P1_EP	N/A	N/A	N/A
P2_EP	N/A	N/A	N/A
P3_EP	N/A	N/A	N/A
P4_EP	N/A	N/A	N/A
P5_EP	N/A	N/A	N/A
P6_EP	N/A	N/A	N/A

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

Table A-48: Air Quality Significance – Hildenborough

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
R1_HB	Negligible	Negligible	Negligible
R2_HB	Negligible	Negligible	Negligible
R3_HB	Negligible	Negligible	Negligible
P1_HB	N/A	N/A	N/A
P2_HB	N/A	N/A	N/A

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

Table A-49: Air Quality Significance – Kings Hill

Receptor	IAQM Significance		
	NO_2	PM_{10}	$PM_{2.5}$
P1_KH	Negligible	Negligible	Negligible
P2_KH	N/A	N/A	N/A
P3_KH	N/A	N/A	N/A

Proposed receptors, denoted by "P.." only exist within the DS scenario. Therefore, significance criteria are not applicable in this instance.

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