

Hackney Stoke Newington Church Street Low Emission Neighbourhood

Air Quality Modelling Study

London Borough of Hackney

November 2022

Quality information

Prepared by

Jessica Heredge Air Quality Consultant

Liam McGurk Graduate Air Quality Consultant

Checked by

Charlotte Moore Principal Air Quality Consultant

Verified by

Anna Savage Technical Director Air Quality

Approved by

Anna Savage Technical Director Air Quality

Revision History

Revision	Revision date	Details	Authorized	Name	Position
0.1	20.09.2022	Draft for review	AS	Anna Savage	Associate Air Quality Director
0.2	04.11.2022	Second draft for review	AS	Anna Savage	Technical Director Air Quality
1.0	09.11.2022	Final	AS	Anna Savage	Technical Director Air Quality

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Prepared for:

London Borough of Hackney

Prepared by:

Jessica Heredge
Air Quality Consultant
E: jessica.heredge@aecom.com

AECOM Limited Midpoint, Alencon Link Basingstoke Hampshire RG21 7PP United Kingdom

T: +44(0)1256 310200 aecom.com

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1. Introduction

Overview

- 1.1 AECOM Limited (AECOM) has been appointed by the London Borough of Hackney (LBH) to support a detailed study into the borough's Stoke Newington Church Street Low Emission Neighbourhood (LEN). In particular, an assessment of the potential impact of traffic changes on local air quality has been undertaken.
- 1.2 A borough-wide air quality management area (AQMA) was declared in Hackney in June 2006 following exceedances of the annual and 1-hour mean objectives for nitrogen dioxide (NO₂) and the 24-hour mean objective for particulate matter (PM₁₀).
- 1.3 In 2021, AECOM conducted a baseline assessment of air quality in the borough based on a 2018 baseline year (AECOM, 2021). The main conclusions were:
 - Of the 1,785 selected receptors modelled, 251 locations had annual mean NO₂ concentrations greater than the 40 μg/m³ AQO. Of these, 15 had annual mean NO₂ concentrations in excess of 60 μg/m³, indicating a possible exceedance of the hourly mean objective.
 - Modelling results indicated exceedances of the annual mean objective for NO₂ in all eight of LBH's Air Quality Focus Areas (AQFAs), with 114 of the 251 modelled exceedances occurring within AQFAs. On average, the Dalston Lane AQFA (AQFA No. 66) had the highest annual mean NO₂ concentrations of any of the borough's AQFAs.
 - Modelled annual mean concentrations of particulate matter (PM₁₀ and PM_{2.5}) were not predicted to exceed the relevant AQOs at any sensitive receptor location. However, exceedances of World Health Organisation (WHO) guideline values for PM_{2.5} were predicted at all modelled receptor locations across the borough, and exceedances of WHO guideline values for PM₁₀ were predicted at 1,205 receptors (68% of the modelled locations).
 - Highest pollutant concentrations were found along the main A roads (e.g. A10 and A1207) as well as in street canyon environments with high traffic flows and low speeds including around Stoke Newington, Homerton High Street and City Road around Old Street roundabout.

Low Emission Neighbourhoods

- 1.4 LBH's Transport Strategy (London Borough of Hackney, 2015) commits to making Hackney's roads safer for everyone living, working and visiting the borough through creating an environment that will encourage more walking and cycling, subsequently improving air quality and reducing emissions throughout the borough.
- 1.5 As part of a shift towards a greener Hackney, LBH have committed to implementing changes that:
 - Protect communities from increases in traffic;
 - Support people to make healthier local journeys;
 - Prioritise public transport for those who need it; and
 - · Create cleaner, greener streets for everyone to enjoy.
- 1.6 Such changes include the implementation of LENs, Low Traffic Neighbourhoods (LTNs) and School Streets, all of which are important in discouraging through-traffic from using neighbourhood streets where there are fewer pedestrian crossings and roads are less able to handle high volumes of traffic:

- LENs are schemes aimed at improving air quality and promoting sustainable living in a particular area, achieved via a range of measures from building up the infrastructure for ultra-low emission vehicles to projects that make it easier for people to move around by bike or on foot (TfL, 2021).
- LTNs exist where a type of road closure, known as a traffic filter (usually planters or bollards on the
 road, which prevent motor vehicles from passing through), is introduced at several locations in a
 specified neighbourhood or area. LTNs aim to enable residents to walk and cycle to their destinations,
 in addition to protecting local residential streets from an increase in through traffic.
- School Streets are a type of road closure wherein motor traffic is banned from outside schools at opening and closing times. It is LBH's intention that these be introduced at almost every primary school in Hackney, as part of the Council's plan to aid social distancing, support walking and cycling and protect people from an increase in traffic as the national COVID-19 lockdown continues to ease.

Stoke Newington Church Street LEN

- 1.7 Residents of Stoke Newington have identified traffic and poor air quality as significant issues in the area (London Borough of Hackney, 2021). Following engagement with residents in Stoke Newington on ways to make the area cleaner, greener and safer, LBH introduced a Low Emission Neighbourhood (LEN) on 20th September 2021.
- 1.8 LBH have been granted funding by Transport for London (TfL) to close Stoke Newington Church Street to through-traffic (with exceptions) during the daytime. The filter located outside the Red Lion Public House on Stoke Newington Church Street will operate from 7am to 7pm, Monday to Sunday, and will permit buses, cyclists, pedestrians and exempted emergency vehicles to pass through. The restriction is timed to balance the need to reduce traffic with delivery and servicing requirements of businesses on Church Street.
- 1.9 Further measures, of which all will operational 24/7, comprise:
 - Proposed road closure on Yoakley Road at the junction with Church Street;
 - Proposed closure on Lordship Road, north of junction with Lordship Terrace. Road 'realignment' in this
 area achieved by changes to road markings and with diagonal filters with planters in place;
 - Proposed closure on Oldfield Road, between Sandbrook Road and Kynaston Road;
 - Proposed closure on Bouverie Road at the junction with Church Street; and
 - Proposed closure on Nevill Road between the junctions with Barbauld Road and Dynevor Road.
- 1.10 The proposals support the achievement of LBHs ambition to re-build a greener Hackney in the aftermath of the pandemic by improving air quality and encouraging people to walk, cycle and support local businesses as the borough emerges from coronavirus restrictions.
- 1.11 The plans intend to reduce traffic, improve air quality, and improve road safety on Stoke Newington Church Street and Albion Road, including at the three primary schools on these roads: St. Mary's C of E Primary School; Grasmere Primary School and William Patten Primary School.
- 1.12 The filter outside the Red Lion Public House will also be the first in the borough to allow Blue Badge holders with a registered permit to drive through at any time, after the Council recently revised its policy following feedback from local residents.

Study Objectives

1.13 This report presents the results of the detailed modelling undertaken with respect to the Stoke Newington Church Street LEN. The scope of this assessment is as follows:

- To identify any areas of improvement or worsening with respect to the baseline as a result of the LEN;
- To conduct a 'with-scheme' modelling exercise in line with the baseline model setup and processing methodology to capture the impacts of traffic displacement as a result of the LEN;
- To predict annual mean concentrations of NO₂ and PM₁₀ and PM_{2.5} at selected sensitive receptors;
- To compare modelled concentrations against long-term air quality objective values and WHO particulate guidelines; and
- Where new areas of exceedance are identified, to determine the contribution of emissions and pollutant concentrations by vehicle type (source apportionment).

2. Policy Context

Air Quality Objectives

- 2.1 The UK National Air Quality Strategy (AQS) was initially published in 2000, under the requirements of the Environment Act 1995 (HM Government, 1995). A further revision of the Strategy (Defra, 2007) sets objective values to help Local Authorities manage local air quality improvements in accordance with the EU Air Quality Framework Directive. Some of these objective values have been laid out within the Air Quality (England) Regulations 2000 (HM Government, 2000) and later amendments (HM Government, 2002).
- 2.2 The Environment Act 2021 (HM Government, 2021) amends the Environment Act 1995 (HM Government, 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. It includes provisions to establish a post-Brexit set of statutory environmental principles to ensure environmental governance through an environmental watchdog, the Office for Environmental Protection (OEP).
- 2.3 The Secretary of State must publish a review report every five years (as a minimum and with yearly updates to Parliament). The 25 Year Environment Plan will be adopted as the first Environmental Improvement Plan (EIP) of the Environment Act 2021, with long-term legally binding targets expected to be set in 2022.
- 2.4 The air quality objective values have been set down in regulation for the purposes of local air quality management (LAQM). Under the LAQM regime, local authorities have a duty to carry out regular assessments of air quality against the objective values and if it is unlikely that the objective values will be met in the given timescale, they must designate an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) with the aim of achieving the objective values. The boundary of an AQMA is set by the local authority to define the geographical area that is to be subject to the management measures to be set out in a subsequent action plan. It is not unusual for the boundary of an AQMA to include within it, relevant locations where air quality is not at risk of exceeding an air quality objective.
- 2.5 The UK's national air quality objective values for the pollutants of relevance to this assessment are displayed in Table 2-1.

Table 2-1: UK Air Quality Objectives

Pollutant	Averaging Period	Value	Maximum Permitted Exceedances	Target Date
Nitragan Diavida (NO.)	Annual Mean	40 μg/m³	None	31/12/2005
Nitrogen Dioxide (NO ₂)	Hourly Mean	200 μg/m ³	18 times per year	31/12/2005
Particulate Matter (PM ₁₀)	Annual Mean	40 μg/m³	None	31/12/2004
	24-hour	50 μg/m ³	35 times per year	31/12/2004
Fine Particulate Matter (PM _{2.5})	Annual Mean	20 μg/m³	None	01/01/2020

Clean Air Strategy

- 2.6 In 2019, the UK government released its Clean Air Strategy 2019 (Defra, 2019a), part of its 25 Year Environment Plan.
- 2.7 Local air quality management focus in recent years has primarily related to NO₂, 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 Organisation guideline level; lower than the current UK objective (World Health Organization, 2005).
- 2.8 The World Health Organisation (WHO) have developed their own guidelines for outdoor ambient air quality (World Health Organization, 2021). These guidelines differ from UK AQOs, notable with regard to particulate matter; the WHO guideline values for particulate matter are more ambitious than the objective values transcribed within national legislation.

2.9 WHO most recently updated these guidelines in September 2021; these are notably more stringent than those released in 2005. Both the original and updated WHO air quality guidelines are outlined in Table 2-2.

Table 2-2: World Health Organisation (WHO) Air Quality Guidelines

Pollutant	Averaging Period	2005 Guidelines	2021 Guidelines
	Annual Mean	40 μg/m³	10 μg/m³
Nitrogen Dioxide (NO ₂)	Hourly Mean	200 μg/m ³	-
	24-hour Mean	-	25 μg/m³
Double Metter (DM)	Annual Mean	20 μg/m³	15 μg/m³
Particulate Matter (PM ₁₀) —	24-hour Mean	50 μg/m³	45 μg/m³
Fig. Bodievlete Metter (DM.)	Annual Mean	10 μg/m³	5 μg/m³
Fine Particulate Matter (PM _{2.5})	24-hour Mean	-	15 µg/m³

The London Plan 2021

- 2.10 The London Plan 2021 is the Spatial Development Strategy for Greater London (Greater London Authority, 2021). It sets out a framework for how London will develop over the next 20-25 years and the Mayor's vision for Good Growth.
- 2.11 Air quality is a key theme throughout the document, and is a key consideration in the Plan's Good Growth Objectives, specifically objective 'GG3 Creating a healthy city'. This objective aims to:
 - "...seek to improve London's air quality, reduce public exposure to poor air quality and minimise inequalities in levels of exposure to air pollution..."

London Environment Strategy

- 2.12 The London Environment Strategy was published by the Mayor of London in May 2018 and sets out the Mayor's vision of London's environment to 2050 (Greater London Authority, 2018). The London Environment Strategy includes a number of policies and aspirations, with an accompanying implementation plan, setting out actions the Mayor is prioritising for the next five years to help implement the aims of this strategy.
- 2.13 Chapter 4 of this document relates to air quality. This chapter of the Strategy supersedes the 2010 Mayor's Air Quality Strategy and sets the ambitious target for London to have the best air quality of any major world city by 2050.

Mayor's Transport Strategy and Transport Action Plan

- 2.14 In 2017, TfL produced 'Healthy Streets for London' (TfL, 2017). The Action Plan recognises that poor air quality is an issue, particularly in inner London, and that road transport is a key source. A range of measures are outlined to improve air quality including bringing forward and expanding the Low Emission Zone, tightening of Low Emission Zone standards for heavy goods vehicles (HGVs), buses and coaches, use of hybrid buses and retiring the oldest and most polluting taxis.
- 2.15 The Mayor of London published a new Transport Strategy for London (Greater London Authority, 2018) in 2018. This strategy is based on a Healthy Streets Approach that prioritises human health by changing the mix of transport in London to encourage walking, cycling and public transport. The Mayor aims for 80% of Londoners' trips to be made by public transport, cycling or walking by 2041.

Air Quality Focus Areas

- 2.16 The Greater London Authority (GLA) has identified 183 Air Quality Focus Areas (AQFA) across London. These are regions which exceed the NO₂ annual mean target and have relevant human exposure. These areas try to address concerns raised by boroughs when implementing their air quality reviews and forecasts.
- 2.17 LBH has eight AQFAs within their jurisdiction as depicted in Figure 2-1 and two additional AQFAs traverse the borough boundary. Five AQFAs are within the assessed LEN study area as follows:
 - AQFA No. 63: Stamford Hill (A107) / Clapton Common (A10);
 - AQFA No. 66: Dalston Lane between Kingsland High Street and Queensbridge/Graham Road;

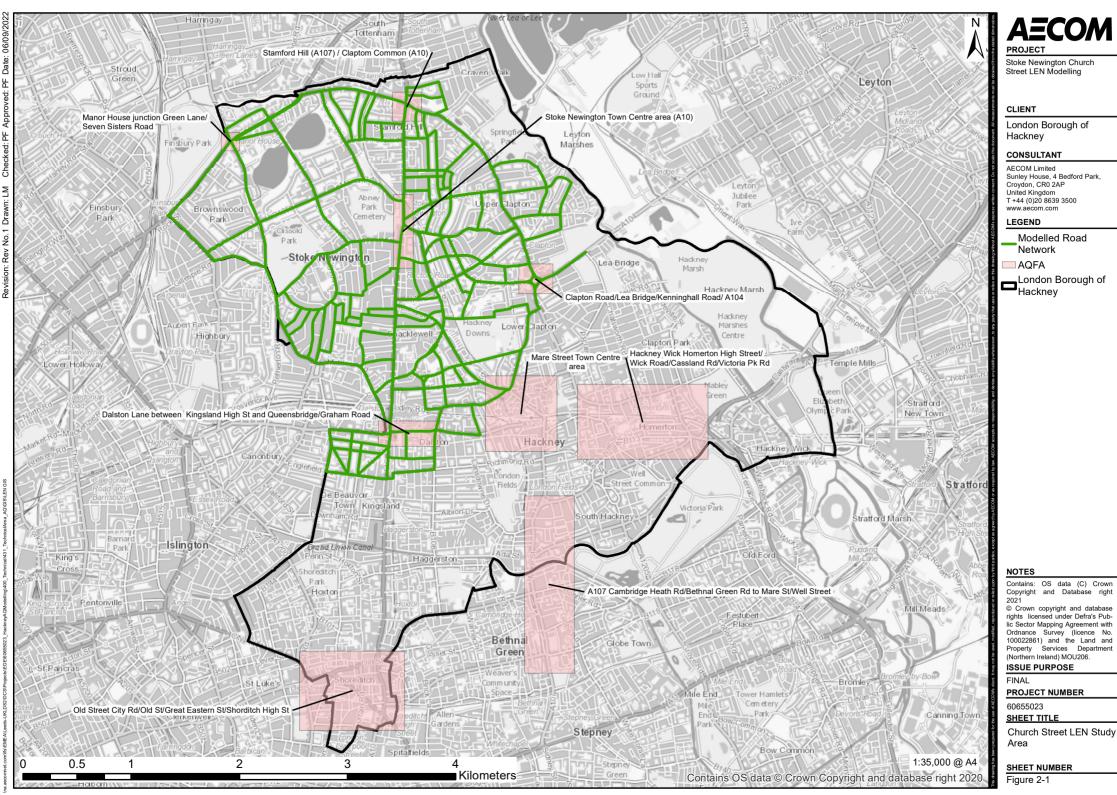
- AQFA No. 67: Manor House junction Green Lane/Seven Sisters Road;
- AQFA No. 69: Stoke Newington Town Centre area (A10); and
- AQFA No. 70: Clapton Road/Lea Bridge/Kenninghall Road/ A104.

London Local Air Quality Management (LLAQM)

- 2.18 In Greater London, AQMAs are declared for NO₂ and PM₁₀ in equal proportions, such that boroughs place equal emphasis on both pollutants. It is a statutory requirement for local authorities to regularly review and assess air quality in their area and take action to improve air quality when objectives set out in regulation cannot be met.
- 2.19 The London Local Air Quality Management (LLAQM) Technical Guidance (Greater London Authority, 2019) has been prepared to support London boroughs in carrying out their duties under the Environment Act 1995 and connected regulations.

Hackney's Air Quality Action Plan

- 2.20 LBH's AQAP spans the period 2021-2025 (London Borough of Hackney, 2021b), replacing the previous AQAP which ran from 2015-2019 (London Borough of Hackney, 2015).
- 2.21 The AQAP cites road transport as a key source of concern for emissions of NO_x and particulate matter (PM₁₀ and PM_{2.5}), identifying major roads as one of the borough's most dominant sources. The Plan emphasises the importance of tackling road-source emissions of NO_x and PM given the well-documented adverse health impacts of exposure. The cross-cutting benefits to society of reducing road-source pollution have been demonstrated throughout the Coronavirus (Covid-19) pandemic and associated local and national lockdowns, leading LBH to identify ways in which the borough can change to create a cleaner, greener and healthier future.
- 2.22 The Plan outlines 47 actions LBH have committed to taking in order to tackle poor air quality across the Borough. The actions are grouped into 9 policy-based categories in line with the LLAQM Air Quality Action Matrix (Greater London Authority, 2019):
- 2.23 Monitoring and other core statutory duties;
 - Emissions from buildings and development;
 - Public health and raising awareness;
 - Delivery, servicing and freight;
 - Borough fleet;
 - Localised solutions;
 - · Cleaner transport;
 - · Schools and communities; and
 - Lobbying.
- 2.24 In a step towards a cleaner future, LBH have already formally adopted the WHO Air Quality Guidelines as shown in Table 2-2 (World Health Organisation, 2005) for PM₁₀ and PM_{2.5} as of August 2021, committing to achievement of these guidelines by 2030. This forms part of Action 1 of the new AQAP, which additionally outlines the borough's milestone target for 2025 of compliance at 75% of locations where PM is monitored.
- 2.25 The aims and actions of the AQAP are supported by a number of corporate strategies which will allow the new AQAP to "not only build upon the achievements of past actions, but [establish] ambitious new targets that fit into the Borough's new corporate sustainability agenda". The council intend to address air quality issues not only in the new AQAP but also in their new Health & Wellbeing Strategy, Green Energy Strategy, Emergency Transport Plan, Parking Strategy, Green Infrastructure Strategy and Biodiversity Strategy, therefore adopting a holistic approach to environmental management.



3. Methodology

- 3.1 This section presents the methodology used to assess the impacts of the LEN Scheme.
- 3.2 The following sources of information and data have been used to form the basis of the air quality assessment:
 - Department for Environment, Food and Rural Affairs (Defra)'s Air Quality Background Concentration Maps based on a 2018 base year (Defra, 2020a);
 - Defra's Vehicle Emission Factors (Defra, 2021);
 - Air quality monitoring data for 2018-2021 (London Borough of Hackney, 2019); and
 - Traffic model data provided by TfL's most recent version of their ONE model for 2021.
- 3.3 The modelling assessment was conducted following methodology within the Department of Environment Food and Rural Affairs (Defra)'s LAQM.TG (22) technical guidance (Defra, 2022) and the Mayor of London's London-specific technical guidance, LLAQM.TG(16) (Greater London Authority, 2019).

Emissions Modelling

Road Traffic Emissions

3.4 The latest version of Defra's Emissions Factors Toolkit (EFT) (version 11) (Defra, 2021) was used to calculate NO_x, PM₁₀ and PM_{2.5} emissions by vehicle type for each road link for both the 2021 Baseline and the 2021 With Scheme scenarios.

Other Emission Sources

3.5 The assessment has only explicitly modelled emissions from road traffic sources in the study area as these are the key emitters of pollution across the borough. Emissions from other sources such as rail and industry directly within the study area, other roads and other sources from further afield were taken into account as part of the background contribution.

Prediction of Air Quality Impacts

- 3.6 The dispersion model software 'ADMS-Roads' (5.0.1.3) was used to quantify concentrations of NO₂, PM₁₀ and PM_{2.5} at selected receptors due to road traffic emissions (CERC, 2013). ADMS-Roads is a modern dispersion model that has an extensive published track record of use in the UK for the assessment of local air quality impacts, including model validation and verification studies.
- 3.7 The model outputs have been presented at individual receptor locations.

Dispersion Model Input Data and Model Conditions

3.8 Details of general model conditions set up in ADMS-Roads are provided in Table 3-1.

Table 3-1 General ADMS-Roads model conditions

Variables	ADMS-Roads Model Input: Road Traffic Model
Surface roughness at source	1.5
Minimum Monin-Obukhov length for stable conditions	100
Terrain types	Flat with elevated road sections
Street canyons	Yes where applicable
Receptor location	x, y coordinates determined by GIS, z = various.
Emissions	NO _x , PM ₁₀ , PM _{2.5}
Emission factors	EFT Version 11 emission factor dataset.
Meteorological data	year (2018) hourly sequential data from London City Airport meteorological station.
Receptors	Facades of selected receptors and gridded.

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Variables	ADMS-Roads Model Input: Road Traffic Model
Model output	Long-term (annual) mean NO _x concentrations.
	Long-term (annual) mean PM ₁₀ concentrations.
	Long-term (annual) mean PM _{2.5} concentrations.

Meteorological Data

3.9 One year (2018) of hourly sequential observation data from London City Airport meteorological station has been used in this assessment to correspond with the baseline year. The station is located approximately 9 km south east of the borough and experiences meteorological conditions that are representative of those experienced within the air quality study area., within wind speeds up to 8.2 m/s. A wind rose for the site is presented in Figure 3-1.

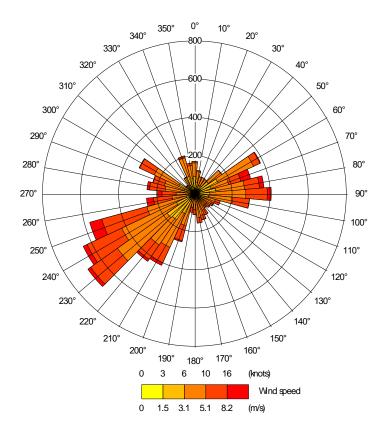


Figure 3-1 London City Airport 2018 Meteorological Data

3.10 It is recommended in LAQM.TG (22) that the meteorological data log file be checked, to confirm the number of missing and calm hours that cannot therefore be modelled (Defra, 2022). The meteorological data should only be used if the percentage of usable hours is greater than 75%, and preferably 90%. 2018 meteorological data from London City Airport includes 8473 lines of usable hourly data out of the total 8,760 for the year, i.e. 96.7% usable data. These data are therefore suitable for application to the assessment.

Background Pollutant Concentrations

3.11 Background pollution concentrations used in this assessment were sourced from Defra's 2018-based background maps (Defra, 2020a) for 2021. The data used in this assessment are presented and discussed section 3.14.

Traffic Flow and Speed Data

- 3.12 Outputs for all modelled roads within LBH for both AM (08:00-09:00) and PM (17:00-18:00) peak hours for two 2021 scenarios from TfL's ONE strategic VISUM model have been provided by the project's transport consultants:
 - 2021 baseline: predicted traffic flows in 2021 without the Stoke Newington Church Street LEN in place.
 - 2021 With Scheme: predicted traffic flows in 2021 with the Stoke Newington Church Street LEN in place.

- 3.13 The information was given in the form of a spatial shapefile with link type, number of lanes, bus lanes and link length, with flow and speed outputs for each link (in each direction) for the peak hours.
- 3.14 The peak hour data was converted by AECOM to 24-hour annual average daily traffic (AADT flows) broken down into light duty vehicles (LDVs) and heavy duty vehicles (HDVs), using a methodology largely similar to that applied to the baseline traffic data, as outlined in the Baseline Modelling Report (AECOM, 2021). The difference in methodology applied stems from an update to the TfL ONE model, from which data for the 2021 Baseline and 2021 With Scheme scenarios have been extracted. The outputs from the most recent version of the ONE model provides private hire vehicles (PHVs) as a separate count. For the purposes of this assessment, PHVs have been categorised with LDVs (instead of taxi's, which are considered less representative given the assumption in the EFT that Taxi's refer to 'Black Cabs' in London. Assumptions and Limitations
- 3.15 The study used the best information available at the time of the assessment. A number of assumptions were made and agreed with LBH to be able to consider the air quality effects of the Scheme.
- 3.16 The main assumptions and potential limitations to the methodology are summarised below:
 - NOx, PM₁₀ and PM_{2.5} vehicle emission factors and vehicle fleet for inner London assumed for 2021 as per information in Defra's latest Emissions Factor Toolkit v.11;
 - Use of modelled data has its inherent limitations however the use of the TfL ONE model output and
 modelled LEN Scheme data provided by the project transport consultant was considered the most
 representative source of 2021 data pre- and post-LEN Scheme implementation to be able to assess
 the predicted potential air quality impacts on all roads within the local vicinity of Church Street and
 across the wider impact area.
 - The dispersion modelling undertaken did not extend beyond the study area shown in Figure 2-1; it is recognised as a limitation of the assessment that impacts from the LEN may extend outside of the area however it is considered that the largest air quality impacts have been assessed and reported.
 - Background NOx, NO₂, PM₁₀ and PM_{2.5} concentrations were taken from Defra's background maps for 2021. An adjustment factor has been applied to Defra's 2018-based background pollutant concentration predictions across the study area for 2021. This adjustment factor has been calculated from 2021 monitoring data from the 'Islington Arsenal' automatic monitoring site, located close to the western edge of Hackney's borough boundary. The results from this assessment are therefore not comparable to the results of LTN studies carried out in 2021; these utilise the adjustment factor calculated for the Baseline Modelling Study, which uses background contributions adjusted by a factor calculated using 2018 monitoring data, due to the 2021 dataset being incomplete at the time of the assessment. Due to the absence of PM_{2.5} measured data, the same factor for PM₁₀ was utilised.
 - Receptors were assumed for ground floor (1.5m height) except where alternative information was known (for example where ground floor is commercial or where the road was elevated in relation to the receptor); and
 - Street canyons were assumed in a number of locations based on the road width and estimated building heights, as provided from Google Street view images or advice from LBH. The locations and geometry of street canyons has remained consistent with the Baseline Modelling Report (AECOM, 2021).

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¹ At the time of modelling, EFT version 10.1 was the most recently available. Defra have since released version 11.0 of the EFT in November 2021.

4. Baseline Air Quality

Monitoring Data

C:40

- 4.1 Under the requirements of Part IV of the Environment Act (1995), LBH carried out a review and assessment of local air quality historically. Of the pollutants listed under LLAQM, LBH currently monitor for NO₂, PM₁₀ and PM_{2.5} (London Borough of Hackney, 2021a).
- 4.2 LBH undertake automatic (continuous) monitoring of NO₂, PM₁₀ and PM_{2.5} at one roadside location within the borough. This site is located 4 km south of Stoke Newington Church Street. Data from this monitoring site are presented in Table 4-1.

Table 4-1: LBH Continuous Monitoring Data, 2015-2020

Site ID	Location	Туре	Pollutant Monitored Annual Mean NO ₂ Concentration (µg/m³)							
				2015	2016	2017	2018	2019	2020	2021
			NO ₂	<u>60</u>	57	57	50	47	37	33
HK6	Old Street	Roadside	PM ₁₀	25	20	23	24	22	19	20
			PM _{2.5}	12.1	12.1	11.7	10.2	9.1	7.9	7.8

<u>Note:</u> Exceedances of annual mean objectives are depicted in **bold**. Where an exceedance of the 1-hour NO_2 objective is considered likely, concentrations have been depicted in **bold underlined**.

4.3 The council also operates a large network of non-automatic (passive) NO₂ diffusion tubes across their jurisdiction, comprising 138 sites in 2021, including two triplicate co-locations. Of these, 72 are located within the LEN study area, of which 23 are situated in close proximity to the LEN. Data from these sites are presented in Table 4-2 for 2017 to 2021.

Table 4-2 Selected LBH NO₂ Diffusion Tube Monitoring Data, 2017-2021

Site ID	Location	Туре	Monitored Annual Mean NO ₂ Concentration (μg/m³)				
			2017	2018	2019	2020	2021
71	Temp Bus Stop	Kerbside	-	-	49	35	41
76	Stoke Newington High Street	Kerbside	<u>70</u>	<u>65</u>	<u>63</u>	53	48
77	Advantage properties	Kerbside	-	-	-	25	27
80	68 Brighton Road	Kerbside	-	-	-	21	19
86	LEN Lordship Park 1	Kerbside	-	-	-	27	25
87	LEN Lordship Road 1	Kerbside	-	-	-	23	20
89	LEN Allen Road	Kerbside	-	-	-	21	19
90	LEN Barbauld Road	Kerbside	-	-	-	23	23
92	LEN Manor Road	Kerbside	-	-	-	27	25
98	Stokey Vintage	Kerbside	-	-	-	27	29
99	H&B News	Kerbside	-	-	-	32	30
159	Albion 1	Kerbside	-	-	-	27	29
160	Albion 2	Kerbside	-	-	-	31	34
161	William Patten 1	Kerbside	29	29	26	22	21
162	William Patten 2	Kerbside	48	46	45	31	34
163	William Pattern 4	Background	-	27	30	20	21
169	St Mary 2	Roadside	-	28	26	20	20
171	St Marys 4	Roadside	-	39	34	24	23
172	Grasmere	Kerbside	47	43	41	36	38
176	Stoke Newington Nursery	Kerbside	-	-	-	24	22

Site ID	Location	Туре	Monitored Annual Mean NO ₂ Concentration (μg/m³)				
			2017	2018	2019	2020	2021
177	Rainbow Nursery	Kerbside	-	-	-	22	19
182	Grazebrook Primary School	Roadside	-	-	-	20	20
188	St Matthias School	Roadside	-	-	-	20	20

4.4 A decreasing trend is evident in borough-wide annual mean NO₂ concentrations at the majority of the council's long-term monitoring sites. The COVID-19 pandemic has induced a significant decline in pollutant concentrations (namely NO₂), largely attributable to reduced traffic flows following local and national lockdowns. Consequently, monitoring results for 2020 are unlikely to be a true indication of local air quality, and it is important that data be interpreted with caution.

Background Concentrations

- 4.5 Background data for the relevant 1 km x 1 km grid squares within which the Stoke Newington LEN is situated have been sourced from the latest version of the Defra Background Maps (Defra, 2020a).
- 4.6 As Defra's 2018-based background concentrations of NO₂, PM₁₀ and PM_{2.5} for 2021 were noticeably higher than monitored concentrations from nearby urban background monitoring sites for the same year, an adjustment factor was calculated for each pollutant using monitored concentrations from the 'Islington Arsenal' urban background monitoring site (close to Hackney's western edge) and Defra's mapped background concentrations for the grid square in which this monitoring site lies.
- 4.7 The corresponding adjustment factor was then applied to all grid squares across the study area, in order to obtain background pollutant concentrations more representative of monitored levels in the vicinity of the borough in 2021.

Table 4-3 Comparison of Monitored vs Modelled Background Pollutant Concentrations

Monitoring Site, X,Y & Grid Square	Pollutant	2021 Monitored Concentration (μg/m³)	2021 Defra Mapped Concentration (µg/m³)	Background Adjustment Factor
	NO _X	25.9	37.2	0.70
Islington (Arsenal)	NO ₂	19.7	24.7	0.80
531328, 186067 531500, 186500	PM ₁₀	18.7	19.2	0.97
	PM _{2.5}	-	12.2	0.97

Note: A factor specific to PM_{2.5} could not be calculated due to an absence of monitoring data from this site; the factor calculated for PM₁₀ was therefore applied to Defra's background PM_{2.5} concentrations.

4.8 A summary of the borough's background concentrations of NO₂, PM₁₀ and PM_{2.5} are presented in Table 4-4

Table 4-4 Comparison of Defra Background Pollutant Concentrations vs Adjusted Defra Background Concentrations, 2021

Grid Square (x y co-ordinates)	Defra Mappe	ed Background C (µg/m³)	Concentration	Adjusted Background Concentration (μg/m³)					
co-ordinates)	NO ₂	PM ₁₀	PM _{2.5}	NO ₂	PM ₁₀	PM _{2.5}			
531500_187500	21.5	17.9	11.6	17.2	17.4	11.3			
531500_186500	23.2	19.2	12.2	18.5	18.7	11.9			
532500_186500	22.8	18.0	11.7	18.2	17.5	11.4			
532500_187500	21.4	18.5	11.9	17.1	18.0	11.6			
532500_185500	24.0	18.5	11.9	19.1	18.1	11.6			
533500_186500	22.7	18.7	12.1	18.1	18.2	11.8			

Grid Square (x y co-ordinates)	Defra Mappe	ed Background C (µg/m³)	Concentration	Adjusted Background Concentration (μg/m³)					
co-ordinates)	NO ₂	PM ₁₀	PM _{2.5}	NO ₂	PM ₁₀	PM _{2.5}			
533500_185500	23.9	18.8	12.1	19.0	18.3	11.8			
533500_184500	25.5	19.5	12.4	20.3	19.0	12.1			
534500_185500	23.2	19.3	12.3	18.5	18.8	12.0			
533500_187500	22.0	18.7	12.1	17.5	18.3	11.8			
534500_187500	21.0	17.7	11.6	16.7	17.3	11.3			
534500_186500	22.5	18.6	12.0	17.9	18.1	11.7			
535500_187500	22.0	17.1	11.3	17.5	16.7	11.0			
535500_186500	21.6	17.8	11.6	17.2	17.4	11.3			
534500_184500	25.2	19.4	12.4	20.1	18.9	12.1			
532500_184500	25.6	19.3	12.3	20.4	18.8	12.0			
533500_188500	21.2	19.1	12.4	16.9	18.6	12.1			

^{4.9} Post-adjustment, the mapped background concentrations are below the relevant annual mean air quality objectives for all pollutants in all grids within the LEN study area.

5. 2021 Baseline & 2021 With-Scheme Modelled Pollutant Concentrations

- 5.1 A total of 919 receptors have been modelled for the purposes of assessing the Stoke Newington Church Street LEN, with 34 receptors additional to the 2018 baseline scenario. The receptors have been modelled under '2021 baseline' and '2021 With-Scheme' scenarios.
- 5.2 Model adjustment has been undertaken using the same zones (and therefore the same adjustment factors) as applied to the baseline modelling results, as reported in the Baseline Modelling Report (AECOM, 2021). For the Church Street LEN, results from all modelled receptors have been adjusted using the 'General' adjustment factor.
- 5.3 2021 pollutant concentrations were predicted at receptors within the Church Street LEN under two scenarios:
 - 2021 Baseline scenario, representing a 'do nothing' approach compared to the baseline year, predicting
 pollutant concentrations for the opening year without the Scheme in place; and
 - 2021 With-Scheme, under which all LEN Scheme proposals have been implemented.
- 5.4 The change in pollutant concentrations with respect to 2021 baseline concentrations has been described at receptors that are representative of exposure to impacts on local air quality within the study area. The absolute magnitude of pollutant concentrations in the '2021 Baseline' and '2021 With-Scheme' scenario are also described. This is used to consider the risk of the air quality limit values being exceeded in each scenario. For consideration of a change in annual mean concentration of a given magnitude, the EPUK and IAQM have published recommendations for describing the effects of such impacts at individual receptors (Moorcroft and Barrowcliffe et al, 2017). These criteria are outlined in Table 5-1 and Table 5-2 and have been utilised in this assessment. The air quality objectives presented in Table 2-1 have been used to determine significance.

Table 5-1 Effect Descriptors at Individual Receptors - Annual Mean NO2 and PM10

Long Term Average Concentration at Receptor	Change in Concentration Relative to Air Quality Assessment Level (AQAL) – NO $_2$ and $PM_{10}\ (\mu g/m^3)$									
in Assessment Year (µg/m³)	<0.2 (Imperceptible)	0.2 - <0.6 (Very Small)	0.6 - <2.2 (Small)	2.2 -<4.0 (Medium)	>4.0 (Large)					
<30.2	Negligible	Negligible	Negligible	Minor	Moderate					
30.2 - <37.8	Negligible	Negligible	Minor	Moderate	Moderate					
37.8 - <41.0	Negligible	Minor	Moderate	Moderate	Substantial					
41.0 - <43.8	Negligible	Moderate	Moderate	Substantial	Substantial					
≥43.8	Negligible	Moderate	Substantial	Substantial	Substantial					

Table 5-2 Effect Descriptors at Individual Receptors - Annual Mean PM_{2.5}

Long Term Average Concentration at Receptor	Change in Concer	Change in Concentration Relative to Air Quality Assessment Level (AQAL) – PM _{2.5} (μg/m³)									
in Assessment Year (µg/m³)	<0.1	0.1 - < 0.3	0.3 - <1.1	1.4 -<=2	>2						
	(Imperceptible)	(Very Small)	(Small)	(Medium)	(Large)						
<15.1	Negligible	Negligible	Negligible	Minor	Moderate						
15.1 - <18.9	Negligible	Negligible	Minor	Moderate	Moderate						
18.9 - <20.5	Negligible	Minor	Moderate	Moderate	Substantial						
20.5 - <21.9	Negligible	Moderate	Moderate	Substantial	Substantial						
≥21.9	Negligible	Moderate	Substantial	Substantial	Substantial						

Results Summary

- 5.5 The following provides a summary of the 2021 pollutant concentrations at selected receptors within the study area. For those receptors modelled under the 2018 Baseline scenario, receptor IDs have remained consistent for ease in cross-referencing with the Baseline Modelling Report (AECOM, 2021). 34 additional receptors modelled for the 2021 scenarios do not have corresponding baseline concentrations within the Baseline Monitoring Report.
- 5.6 Pollutant concentrations were modelled at a total of 919 receptor points within Church Street LEN, of which 778 are residential properties, 140 are educational establishments and 1 is a medical facility.
- 5.7 2021 concentrations at all modelled receptors have demonstrated a notable decline compared to concentrations modelled under the 2018 Baseline scenario. This is largely attributable to improvements in predicted background pollutant concentrations, the implementation of borough lead and London wide measures to improve air quality and an overall reduction in traffic flows across the study area between 2018 and 2021.
- 5.8 The predicted annual mean pollutant concentrations across all assessed receptors are shown in Table 5-3; the upper and lower limits of each pollutant concentrations are not predicted to change with the Scheme. Full results are included in Appendix A and presented as figures for annual mean NO₂ concentrations in Appendix B as Figures B1 to B4.

Table 5-3 Predicted Maximum and Minimum Annual Mean Pollutant Concentrations at all Assessed Receptors

Pollutant	2021 Baseline Concentration	2021 With Scheme Concentration
NO ₂	17.7 μg/m³ to 46.1 μg/m³	17.7 μg/m³ to 46.1 μg/m³
PM ₁₀	17.0 μg/m³ to 25.7 μg/m³	17.0 μg/m³ to 25.7 μg/m³
PM _{2.5}	11.2 μg/m³ to 16.0 μg/m³	

Nitrogen Dioxide

- 5.9 Implementation of the Church Street LEN is predicted to induce the following changes to modelled annual mean NO₂ concentrations compared to the 2021 Baseline' scenario:
 - A decrease in annual mean NO₂ concentrations at 283 receptors;
 - No change in annual mean NO2 concentrations at 334 receptors; and
 - An increase in annual mean NO₂ concentrations at 302 receptors.
- 5.10 The annual mean NO₂ concentrations impact as a result of the Scheme are presented in Appendix B as Figures B5 to B9.
- 5.11 In accordance with EPUK & IAQM criteria, impacts deemed 'Negligible' or 'Slight' are considered to be not significant. 'Moderate' and 'Substantial' impacts are considered to be significant. The following impacts have been determined for annual mean NO₂:

- A 'Moderate Beneficial' impact at 14 receptors;
- A 'Slight Beneficial' impact at 12 receptors;
- A 'Negligible' impact at 876 receptors;
- A 'Slight Adverse' impact at 11 receptors;
- A 'Moderate Adverse' impact at 5 receptors; and
- A 'Substantial Adverse' impact at 1 receptor.
- 5.12 The 43 receptors which have an impact other than 'Negligible' are presented in Table 5-4 and their locations displayed in Figure 5-1, with the full set of results presented in Table A.1 in Appendix A.
- 5.13 As a result of the LEN Scheme implementation, a maximum increase in annual mean NO₂ concentration of 3.0 μg/m³ is anticipated to occur at receptor R132, located on the western side of the A10 Stoke Newington Road, north of the junction with Crossway.
- 5.14 A maximum decrease in annual mean NO₂ concentrations of -8.2 μg/m³ is predicted at R276, located on Stoke Newington Church Street at the junction with Summerhouse Road, under the '2021 With-Scheme scenario.
- 5.15 An average reduction in annual mean NO₂ of -0.1 μg/m³ across all assessed receptors has been modelled across the study area, suggesting an overall benefit of the Stoke Newington LEN to local air quality.
- 5.16 Six receptors are predicted to experience annual mean NO₂ concentrations in breach of the annual mean objective in 2021 in the 'Without Scheme' scenario (R283, R1443, R1444, R1445, R1446 and R1555). In the 'With Scheme' scenario, five receptors are predicted to experience annual mean NO₂ concentrations in breach of the annual mean objective in 2021 (R283, R1443, R1444, R1445 and R1446). As a result of the LEN, the annual mean NO₂ concentrations at R1555 located at a dwelling on the first floor on A10 Stoke Newington High Street, immediately south of the junction with Church Street are predicted to reduce by 2.2 μg/m³ from 41.4 μg/m³ exceeding the 40 μg/m³ objective, to 39.3 μg/m³ and falling slightly below the objective. There were no assessed receptors with annual mean NO₂ concentrations predicted to be in excess of 60 μg/m³, indicating no possible exceedance of the hourly mean objective.

Particulate Matter

- 5.17 Concentrations of particulate matter are anticipated to be well below the representative AQOs under the '2021 Baseline' and '2021 With-Scheme' scenarios, with no exceedances predicted. However, exceedances of WHO guideline values for PM₁₀ and PM_{2.5} are predicted at all modelled receptor locations within the LEN.
- 5.18 Implementation of the Stoke Newington Church Street LEN is predicted to induce the following changes to annual mean particulate matter concentrations compared to the '2021 Baseline' scenario:
 - A decrease in annual mean PM₁₀ concentrations at 115 receptors;
 - No change in annual mean PM₁₀ concentrations at 698 receptors;
 - An increase in annual mean PM₁₀ concentrations at 106 receptors;
 - A decrease in annual mean PM_{2.5} concentrations at 74 receptors;
 - No change in annual mean PM_{2.5} concentrations at 788 receptors; and
 - An increase in annual mean PM_{2.5} concentrations 57 receptors.
- 5.19 The modelled impacts on annual mean PM₁₀ concentrations as a result of the Scheme have been deemed 'Negligible', whereas PM_{2.5} modelled impacts have been deemed 'Negligible' at all modelled receptors with the exception of two which show a 'Slight Beneficial' impact. Effects of this magnitude are considered to be not significant.
- 5.20 The maximum modelled annual mean PM₁₀ and PM_{2.5} concentrations shown in Table 5-3 were predicted at R1444, Kingsland Road whilst the minimum modelled annual mean PM₁₀ and PM_{2.5} concentrations were predicted at R546 (Bakers Hill) and R547 (Leaside Road).

Table 5-4 2021 Modelled Pollutant Concentrations, 2021 Baseline and 2021 With-Scheme Scenarios

Notes: 2021-B: 2021 Baseline; 2021-WS: 2021 With-Scheme; MoC: Magnitude of Change. Receptor type: R = Residential; M = Medical/Healthcare; E = Educational.

Pocentor					Ann	Annual Mean NO ₂ Concentration (μg/m³)			Annual Mean PM ₁₀ Concentration (μg/m³)				³) Annual Mean PM _{2.5} Concentration (μg/m³)			
Receptor ID	X	Υ	Modelled Height (m)	Type	2021- B	2021- WS	MoC	Impact Descriptor	2021-B	2021-WS	MoC	Impact Descriptor	2021-B	2021- WS	MoC	Impact Descriptor
R1	531741	187046	1.5	R	27.6	24.8	-2.8	Slight Beneficial	19.6	19.6	-0.1	Negligible	12.6	12.6	-0.1	Negligible
R19	532348	186693	1.5	R	29.3	31.9	2.6	Moderate Adverse	20.0	20.6	0.5	Negligible	12.8	13.1	0.3	Negligible
R78	532990	186440	4.0	R	23.7	20.3	-3.3	Slight Beneficial	18.8	18.1	-0.7	Negligible	12.1	11.7	-0.4	Negligible
R85	533045	186480	1.5	R	26.2	20.6	-5.6	Moderate Beneficial	20.1	18.8	-1.2	Negligible	12.9	12.1	-0.7	Negligible
R90	533071	186483	1.5	R	25.8	20.3	-5.6	Moderate Beneficial	20.0	18.8	-1.2	Negligible	12.8	12.1	-0.7	Negligible
R95	533077	186620	1.5	R	22.4	19.2	-3.2	Slight Beneficial	19.2	18.5	-0.7	Negligible	12.4	11.9	-0.4	Negligible
R99	533101	186516	1.5	R	26.9	20.4	-6.5	Moderate Beneficial	20.2	18.8	-1.4	Negligible	13.0	12.1	-0.8	Negligible
R103	533115	186558	1.5	R	23.0	19.5	-3.4	Slight Beneficial	19.3	18.5	-0.8	Negligible	12.4	12.0	-0.5	Negligible
R105	533123	186568	1.5	R	23.9	19.5	-4.4	Moderate Beneficial	19.5	18.5	-1.0	Negligible	12.6	12.0	-0.6	Negligible
R126	533469	185212	1.5	R	30.5	31.1	0.7	Slight Adverse	20.7	20.8	0.1	Negligible	13.2	13.2	0.1	Negligible
R132	533545	185311	4.0	R	34.7	37.7	3.0	Moderate Adverse	22.1	22.4	0.3	Negligible	14.0	14.2	0.2	Negligible
R134	533549	185388	4.0	R	34.9	36.1	1.2	Slight Adverse	22.2	22.5	0.3	Negligible	14.0	14.2	0.2	Negligible
R137	533571	185402	4.0	R	33.4	34.5	1.1	Slight Adverse	21.8	22.1	0.2	Negligible	13.8	13.9	0.1	Negligible
R138	533566	185311	4.0	R	34.9	37.7	2.8	Moderate Adverse	22.1	22.4	0.3	Negligible	14.0	14.2	0.2	Negligible
R259	533159	186540	1.5	R	25.1	21.6	-3.5	Slight Beneficial	19.8	18.8	-1.0	Negligible	12.7	12.1	-0.6	Negligible
R260	533167	186560	1.5	R	23.0	20.6	-2.3	Slight Beneficial	19.3	18.7	-0.7	Negligible	12.4	12.0	-0.4	Negligible
R267	533322	186576	1.5	R	23.5	20.9	-2.6	Slight Beneficial	19.5	18.9	-0.6	Negligible	12.5	12.2	-0.3	Negligible
R275	533466	186570	1.5	R	31.8	24.4	-7.5	Moderate Beneficial	21.6	19.8	-1.7	Negligible	13.7	12.7	-1.0	Negligible
R276	533475	186557	1.5	R	33.1	24.9	-8.2	Moderate Beneficial	21.9	20.0	-1.9	Negligible	13.9	12.8	-1.1	Slight Beneficial
R283	533570	185903	4.0	R	44.5	46.1	1.6	Substantial Adverse	24.9	25.4	0.5	Negligible	15.6	15.9	0.3	Negligible
R289	533594	185897	4.0	R	33.9	34.9	0.9	Slight Adverse	21.9	22.1	0.2	Negligible	13.9	14.0	0.1	Negligible

Receptor					Ann	Annual Mean NO₂ Concentration (μg/m³)			Annual Mean PM ₁₀ Concentration (μg/m³)				Annual Mean PM _{2.5} Concentration (μg/m³)			
ID	Х	Υ	Modelled Height (m)	Type	2021- B	2021- WS	MoC	Impact Descriptor	2021-B	2021-WS	MoC	Impact Descriptor	2021-B	2021- WS	MoC	Impact Descriptor
R291	533610	186467	4.0	R	38.7	36.9	-1.8	Moderate Beneficial	23.9	23.5	-0.4	Negligible	15.0	14.8	-0.2	Negligible
R292	533605	186540	4.0	R	32.9	26.5	-6.4	Moderate Beneficial	21.9	20.4	-1.5	Negligible	13.9	13.0	-0.9	Negligible
R294	533592	186554	4.0	R	31.7	25.4	-6.4	Moderate Beneficial	21.6	20.1	-1.5	Negligible	13.7	12.9	-0.9	Negligible
R300	533623	186458	1.5	R	37.9	36.2	-1.7	Moderate Beneficial	23.6	23.3	-0.4	Negligible	14.9	14.7	-0.2	Negligible
R350	533902	186036	1.5	R	31.2	31.8	0.6	Slight Adverse	21.7	21.9	0.1	Negligible	13.8	13.9	0.1	Negligible
R351	533899	186017	1.5	R	31.5	32.2	0.6	Slight Adverse	21.8	22.0	0.1	Negligible	13.9	14.0	0.1	Negligible
R413	533953	186082	4.0	R	35.9	37.0	1.1	Slight Adverse	23.3	23.7	0.3	Negligible	14.7	14.9	0.2	Negligible
R419	533969	186081	1.5	R	34.9	35.9	1.0	Slight Adverse	23.0	23.3	0.3	Negligible	14.5	14.7	0.2	Negligible
R509	534726	186663	4.0	R	30.3	31.2	0.9	Slight Adverse	21.4	21.5	0.0	Negligible	13.6	13.6	0.0	Negligible
R515	534769	186459	1.5	R	31.0	30.4	-0.6	Slight Beneficial	21.0	21.0	0.0	Negligible	13.4	13.4	0.0	Negligible
R525	534807	186433	1.5	R	35.1	34.4	-0.8	Slight Beneficial	22.0	22.0	0.0	Negligible	14.0	14.0	0.0	Negligible
R530	534867	186006	4.0	R	27.9	30.2	2.3	Moderate Adverse	20.8	20.8	0.1	Negligible	13.2	13.3	0.1	Negligible
R643	534482	185220	1.5	R	31.6	30.2	-1.4	Slight Beneficial	21.3	21.3	-0.1	Negligible	13.5	13.5	0.0	Negligible
R800	533752	184791	4.0	R	29.8	31.1	1.4	Slight Adverse	21.3	21.3	0.1	Negligible	13.4	13.5	0.0	Negligible
R801	533764	184812	1.5	R	31.6	33.1	1.5	Slight Adverse	21.7	21.8	0.1	Negligible	13.7	13.7	0.1	Negligible
R1440	533315	186556	1.5	R	23.1	20.7	-2.3	Slight Beneficial	19.4	18.9	-0.5	Negligible	12.5	12.2	-0.3	Negligible
R1441	533227	186546	4.0	R	30.3	25.3	-5.0	Moderate Beneficial	21.2	19.3	-1.9	Negligible	13.5	12.4	-1.1	Negligible
R1442	533248	186564	1.5	R	24.5	21.8	-2.7	Slight Beneficial	19.7	18.9	-0.8	Negligible	12.7	12.2	-0.5	Negligible
S65	533562	185248	1.5	Е	38.0	39.5	1.5	Moderate Adverse	22.9	23.1	0.2	Negligible	14.4	14.5	0.1	Negligible
S128	533208	186558	1.5	Е	29.9	25.0	-4.9	Moderate Beneficial	21.1	19.2	-1.9	Negligible	13.4	12.4	-1.1	Negligible
R1550	533433	186571	4.0	R	30.8	23.9	-6.9	Moderate Beneficial	21.3	19.7	-1.6	Negligible	13.6	12.6	-0.9	Negligible
R1555	533615	186522	4.0	R	41.4	39.3	-2.2	Moderate Beneficial	24.8	24.2	-0.5	Negligible	15.5	15.2	-0.3	Slight Beneficial

Note: Exceedances of the Annual Mean AQO for NO₂ (40 μ g/m³), and the WHO Guideline Values for PM₁₀ (15 μ g/m³) and PM_{2.5} (5 μ g/m³) are depicted in **bold**.



Stoke Newington Church Street LEN Modelling

London Borough of

AECOM Limited Sunley House, 4 Bedford Park, Croydon, CR0 2AP United Kingdom T +44 (0)20 8639 3500

Impact Descriptors

- Moderate Beneficial
- Moderate Adverse
- Substantial Adverse
- London Borough of Hackney

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ISSUE PURPOSE

PROJECT NUMBER

Air Quality Impact Significance

Key Impacts

5.21 This section provides a discussion on the main LEN Scheme impacts on annual mean NO₂, including a source apportionment exercise to enhance discussion using anticipated vehicle type source contributions to total road NOx emissions. Where source apportionment is presented, these are averages taken from the two way road, where applicable.

A10 Stoke Newington Road - between Beatty Road and Walford Road

- 5.22 A portion of the A10 Stoke Newington Road between Beatty Road and Walford Road is anticipated to have an increase in traffic flows of around 600 AADT. Modelled receptor concentration at a dwelling at first floor level (R283) at this location is expected to result in an 'Substantial Adverse' impact in accordance with EPUK and IAQM criteria (Moorcroft and Barrowcliffe et al, 2017). Annual mean NO₂ concentrations increase by 1.6 μg/m³ as a result of the increased AADT flows and are predicted to be 46.1 μg/m³ in the 2021 'With Scheme' scenario.
- 5.23 This is one of two locations which are predicted to experience the highest annual mean NO₂ concentrations predicted in the study area of 46.1 μg/m³; the second location with this concentration is predicted at receptor R1444 on A10 Kingsland Road, however there are zero impacts from the Scheme predicted at that location.

B104 Stoke Newington Church Street

- 5.24 Large decreases in AADT of greater than 5,000 vehicles are anticipated on two-way Church Street, which forms a large portion of the LEN. The largest decreases in annual mean NO₂ concentrations are anticipated at assessed sensitive receptors on this road, largely attributable to re-routing of traffic as a result of motor vehicle restrictions introduced as part of the Scheme. The anticipated source contributions to total road NOx emissions on Stoke Newington Church Street between Bouverie Road and the A10 are depicted in Figure 5-2.
- 5.25 In the 'With-Scheme' scenario, the percentage contribution of NOx emissions from HDVs (artic and rigid HGV and buses/coaches) increased compared to the '2021 Baseline' scenario (26.3% compared to 53.8%). Petrol and diesel cars, light goods vehicles (LGVs) and taxis are predicted to decrease with the Scheme.
- 5.26 The 16 receptors modelled on Church Street between the Red Lion Public House (Lordship Road) and the A10 Stoke Newington High Street are anticipated to experience decreased annual mean NO₂ concentrations under a 'With-Scheme' scenario. Predicted decreases range from 1.4 μg/m³ to 8.2 μg/m³ on this road link at these receptors with the maximum absolute annual mean NO₂ concentration of these 16 receptors dropping from 33.1 μg/m³ to 26.5 μg/m³. In accordance with EPUK and IAQM guidance (Moorcroft and Barrowcliffe et al, 2017) criteria, five receptors are considered to have a 'Slight Beneficial', seven receptors have a 'Moderate Beneficial' impact and four receptors are considered to have a 'Negligible' impact.

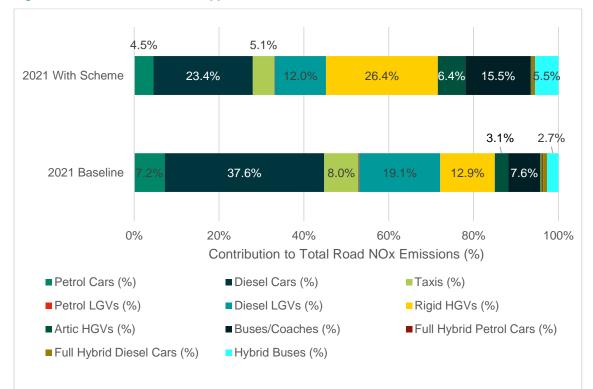


Figure 5-2 Church Street Source Apportionment, 2021 Baseline and 2021 With-Scheme

A10 Stoke Newington High Street - south of junction with Church Street

- 5.27 The A10 Stoke Newington High Street immediately south of Church Street forms part of the boundary of the eastern portion of the Stoke Newington Church Street LEN. Decreases in traffic flows of around 1,400 AADT are anticipated on this link, potentially due to the re-routing of traffic as a result of motor vehicle restrictions introduced as part of the Scheme.
- 5.28 Assessed receptors on this road link are R200, R291 and R1555. The modelling predicts decreases in annual mean NO_2 concentrations at these sensitive receptors of up to 2.1 μ g/m³, bringing a predicted 'Moderate Beneficial' impact in accordance with EPUK and IAQM criteria. The maximum predicted annual mean NO_2 concentration of these three receptors is at R1555 which reduces from 41.4 μ g/m³ to 39.9 μ g/m³.
- 5.29 The anticipated source contributions to total road NO_x emissions on this road link are depicted in Figure 5-3. The percentage of emissions which can be attributed to each vehicle class remains similar between the two scenarios, however, the reduction in AADT may explain the reductions in annual mean NO_2 concentrations on this road link. Diesel cars and LGVs form approximately 64% contribution to road NO_x emissions on this road link.

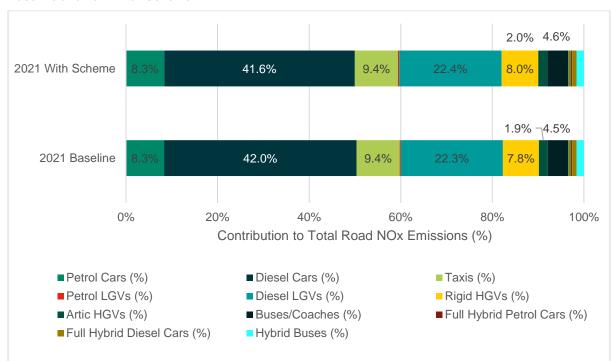


Figure 5-3 A10 Stoke Newington High Street - south of Church Street Source Apportionment, 2021 Baseline and 2021 With-Scheme

A10 Stoke Newington Road – north of junction with Crossways

- 5.30 Increases in AADT of up to 1,200 vehicles are anticipated on the portion of A10 Stoke Newington Road immediately north of junction with Crossways. The largest increases in annual mean NO₂ concentrations are anticipated on this road. The anticipated source contributions to total road NO_x emissions are depicted in Figure 5-4. As was the case for the A10 Stoke Newington High Street portion south of the junction with Church Street, the percentage of emissions which can be attributed to each vehicle class remains similar between the two scenarios, however, the increased traffic flows as a result of likely re-routing of traffic may explain the increases in annual mean NO₂ concentrations at receptors on this road link. The diesel car and LGV proportion of road NOx emissions on this link is slightly less than further north (approximately 60%) with HDVs having a larger contribution.
- Assessed receptors on this road link are dwellings at first floor level (R132 and R138). Both receptors are predicted to experience increased annual mean NO₂ concentrations under a 'With-Scheme' scenario. Predicted increases are 2.9 μg/m³ at R132 and 2.8 μg/m³ at R138. In accordance with EPUK and IAQM criteria, both receptors on this link are considered to have a 'Moderate Adverse' impact.

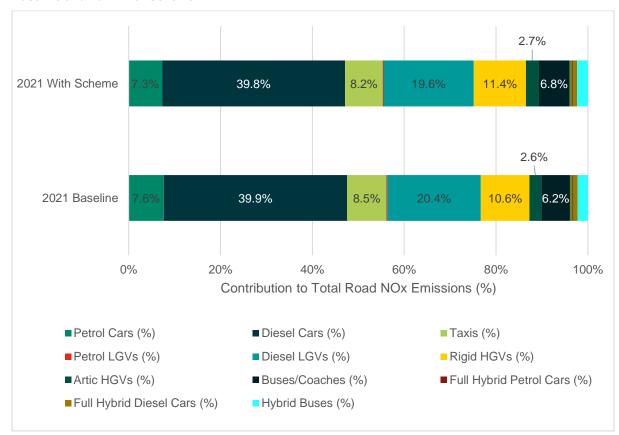


Figure 5-4 A10 Stoke Newington Road – north of junction with Crossways Source Apportionment, 2021 Baseline and 2021 With Scheme

Green Lanes

5.32 An assessed residential use sensitive receptor (R19) on Green Lanes, south of Manor Road has a Moderate Adverse impact predicted with reference to the EPUK IAQM significance criteria due to increases in AADT and therefore an impact to annual mean NO₂ of +2.6 μg/m³ as a result of the Scheme. The 'With Scheme' scenario absolute concentrations are however predicted to be 31.9 μg/m³, below the annual mean NO₂ objective.

A107 Lower Clapton Road

5.33 An assessed residential use sensitive receptor (R530) on A107 Lower Clapton Road, south of Lea Bridge Roundabout has a Moderate Adverse impact predicted with reference to the EPUK IAQM significance criteria due to small increases in AADT and HDV percentage and a larger reduction in speed resulting in an impact to annual mean NO₂ of +2.3 μg/m³ as a result of the Scheme. The 'With Scheme' scenario absolute concentrations are however predicted to be 30.2 μg/m³, below the annual mean NO₂ objective.

Air Quality Focus Areas

- 5.34 As described in Paragraph 2.17, the modelled network for the Stoke Newington Church Street LEN traverses five designated AQFAs: Stoke Newington Town Centre Area AQFA (AQFA No. 70), Stamford Hill / Clapton Common (A10) (AQFA No. 69), Clapton Road / Lea Bridge / Kenninghall Road / A104 AQFA (AQFA No. 63), Dalston Lane between Kingsland High Street and Queensbridge/Graham Road (AQFA No. 64) and to a smaller extent Mare Street Town Centre Area (AQFA No. 65).
- 5.35 Of the five AQFAs, with reference to Figure 2-1 and Figure 5-1, two AQFAs have a larger than 'Negligible' air quality impact as a result of the LEN Scheme: Stoke Newington Town Centre Area AQFA (AQFA No. 70) and Dalston Lane between Kingsland High Street and Queensbridge/Graham Road (AQFA No. 64).
- 5.36 Five assessed receptors (R291, R292, R294, R300 and R1555) within the Stoke Newington Town Centre Area AQFA (AQFA No. 70) are predicted to experience a reduction in annual mean NO₂ concentrations of between -1.7 to -6.4 μg/m³ and in accordance with EPUK and IAQM criteria, a 'Moderate Beneficial' air

- quality impact as a result of the Scheme. Receptor R1555 is predicted to experience annual mean NO₂ above the objective in the 2021 Baseline and falling below the objective as a result of the Scheme.
- 5.37 Two assessed receptors (R800, R801) within the 'Dalston Lane between Kingsland High Street and Queensbridge/Graham Road' AQFA are predicted to experience an increase in annual mean NO₂ concentrations as a result of the Scheme of between 1.4 and 1.5 μg/m³. In accordance with EPUK and IAQM criteria this is a 'Slight Adverse' air quality impact. However, with reference to the EPUK and IAQM criteria, Moderate' and 'Substantial' impacts are considered to be significant.
- 5.38 The impact on the AQFA's demonstrates both significant beneficial air quality impacts and not significant adverse air quality impacts to annual mean NO₂ concentrations in the 'With-Scheme' scenario at assessed receptors, compared to the '2021 Baseline' scenario.

6. Conclusions

- 6.1 Pollutant concentrations were modelled at a total of 919 receptor points within Church Street LEN, of which 778 are residential properties, 140 are educational establishments and 1 is a medical facility. The magnitude of change predicted at each receptor was assessed against EPUK & IAQM significance criteria. Impacts deemed 'Negligible' or 'Slight' are considered to be not significant whilst 'Moderate' and 'Substantial' impacts are considered to be significant with reference to the EPUK and IAQM significance criteria.
- 6.2 Annual mean NO₂ concentrations across the study area exceed the AQO at six receptors in the '2021 Baseline' scenario whereas in the '2021 With-Scheme' scenario five receptors exceed the AQO.
- 6.3 The Stoke Newington Church Street LEN is predicted to induce the following changes to annual mean NO₂ concentrations across the study area:
 - A decrease in annual mean NO₂ concentrations at 283 receptors;
 - No change in annual mean NO₂ concentrations at 334 receptors; and
 - An increase in annual mean NO₂ concentrations at 302 receptors.
- 6.4 The magnitude of change predicted at each receptor was assessed against EPUK & IAQM significance criteria, which anticipates:
 - A 'Moderate Beneficial' impact at 14 receptors;
 - A 'Slight Beneficial' impact at 12 receptors;
 - A 'Negligible' impact at 876 receptors;
 - A 'Slight Adverse' impact at 11 receptors;
 - A 'Moderate Adverse' impact at 5 receptors; and
 - A 'Substantial Adverse' impact at 1 receptor.
- 6.5 Significant beneficial impacts to annual mean NO₂ concentrations are therefore anticipated at 14 receptors, and significant adverse effects predicted at six receptors as a result of the Scheme.
- 6.6 The significant beneficial impacts are predicted on Church Street, Lordship Road and A10 Stoke Newington High Street within the Stoke Newington Town Centre Area AQFA (AQFA No. 70) as a result of decreased AADT and re-routing of traffic on these roads due to the Scheme. The source apportionment exercise showed that on Church Street in the 'With-Scheme' scenario, the percentage contribution of NOx emissions from HDVs (artic and rigid HGV and buses/coaches) increased compared to the '2021 Baseline' scenario (26.3% compared to 53.8%) and that petrol and diesel cars, LGVs and taxis are predicted to decrease with the Scheme. However the portion of the A10 to the south of the junction with Church Street does not appear to have a similar change in vehicles contributing to the total road NOx emissions as a result of the Scheme, despite having lower traffic flows predicted.
- 6.7 The significant adverse impacts are in the most part predicted to be experienced on A10 Stoke Newington High Street/Road. The source apportionment of these roads showed that the Scheme did not change the vehicle types contributing to the road NOx emissions significantly. One assessed receptor on Green Lanes and one on A107 Lower Clapton Road are also considered significant however both of these fall below more than 20% of the annual mean NO₂ objective.
- 6.8 Concentrations of particulate matter are anticipated to be well below the respective AQOs under the '2021 Baseline' and '2021 With-Scheme' scenarios, with no exceedances predicted in 2021. However, exceedances of WHO guideline values for PM₁₀ and PM_{2.5} are predicted at all modelled receptor locations within the Study Area.
- 6.9 The modelled impacts on annual mean PM₁₀ concentrations as a result of the Scheme have been deemed 'Negligible', whereas PM_{2.5} modelled impacts have been deemed 'Negligible' at all modelled receptors with the exception of two which show a 'Slight Beneficial' impact. Effects of this magnitude are however considered to be not significant with reference to the EPUK and IAQM significance criteria.

6.10 There are more significant beneficial impacts predicted than significant disbenefits to annual mean NO₂ and it may therefore be considered that the overall impact is more beneficial than not. However, due to the significant disbenefits predicted at various locations along the A10 due to likely re-routing of traffic, mitigation measures may be considered appropriate and further consideration given to the impacts on the A10 as a result of the LEN Scheme.

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Appendix A Full Modelled Results

Table A.1: Modelled Pollutant Concentrations, 2021

Notes: Concentrations depicted in **bold** indicate an exceedance of the relevant air quality objective. NO_2 concentrations depicted in **bold underlined** indicate that exceedance of the short-term mean objective is likely.

	2021 Baseline 2021 With Scheme								
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (µg/m³)
R1	1.5	27.6	19.6	3	12.6	24.8	19.6	3	12.6
R2	1.5	29.1	21.2	5	13.4	29.0	21.2	4	13.3
R3	1.5	26.9	20.6	4	13.0	27.0	20.6	4	13.1
R4	1.5	29.6	21.3	5	13.4	29.4	21.2	5	13.4
R5	1.5	25.0	20.2	3	12.8	25.1	20.2	3	12.8
R6	1.5	25.3	20.3	3	12.8	25.4	20.3	3	12.8
R7	1.5	26.6	20.0	3	12.8	26.6	20.1	3	12.8
R8	1.5	23.9	18.8	2	12.1	23.3	18.7	2	12.0
R9	1.5	23.0	18.6	2	12.0	23.1	18.7	2	12.0
R10	1.5	22.1	19.1	2	12.2	22.4	19.2	2	12.2
R11	1.5	21.7	19.0	2	12.2	22.0	19.0	2	12.2
R12	1.5	21.6	18.3	1	11.8	21.8	18.3	1	11.8
R13	1.5	22.5	18.5	1	11.9	22.1	18.4	1	11.9
R14	1.5	23.2	18.7	2	12.0	23.4	18.7	2	12.1
R15	1.5	21.5	18.3	1	11.8	21.7	18.3	1	11.8
R16	1.5	24.8	19.0	2	12.2	25.4	19.1	2	12.3
R17	1.5	23.8	18.8	2	12.1	24.4	18.9	2	12.2
R18	1.5	24.7	19.0	2	12.2	26.2	19.3	2	12.4
R19	1.5	29.3	20.0	3	12.8	31.9	20.6	4	13.1
R20	1.5	22.3	18.5	1	11.9	23.1	18.7	2	12.0
R21	1.5	21.9	18.4	1	11.9	22.7	18.6	2	12.0
R22	1.5	25.8	19.6	3	12.5	26.1	19.6	3	12.5
R23	1.5	26.3	19.7	3	12.6	26.7	19.8	3	12.6
R24	1.5	27.4	20.0	3	12.7	27.9	20.1	3	12.8
R25	1.5	20.2	18.0	1	11.6	20.1	18.0	1	11.6
R26	1.5	21.7	18.6	2	12.0	21.7	18.6	2	12.0
R27	1.5	21.8	18.7	2	12.0	21.8	18.7	2	12.0
R28	1.5	20.0	18.0	1	11.6	19.9	17.9	1	11.6
R29	1.5	22.0	18.4	1	11.9	22.8	18.6	2	12.0
R30	1.5	23.1	18.9	2	12.1	23.1	19.0	2	12.1
R31	1.5	24.2	19.2	2	12.3	24.4	19.3	2	12.3
R32	1.5	20.6	18.4	1	11.8	20.6	18.4	1	11.8
R33	1.5	23.8	19.1	2	12.3	23.9	19.2	2	12.3
R34	1.5	21.7	18.4	1	11.8	22.4	18.5	1	11.9
R35	1.5	22.7	18.9	2	12.1	22.7	18.9	2	12.1
R36	1.5	20.8	18.4	1	11.8	20.7	18.4	1	11.8
R37	1.5	20.5	18.4	1	11.8	20.5	18.4	1	11.8

2021 Baseline

2021 With Scheme

	Madallad		2021 E	Baseline		2021 With Scheme					
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)		
R38	1.5	20.8	18.5	1	11.9	20.7	18.4	1	11.8		
R39	1.5	22.3	18.8	2	12.0	22.2	18.8	2	12.0		
R40	1.5	19.6	18.6	2	11.9	19.2	18.5	1	11.9		
R41	1.5	19.8	18.6	2	11.9	19.4	18.5	2	11.9		
R42	1.5	20.6	18.4	1	11.8	20.5	18.4	1	11.8		
R43	1.5	22.2	18.5	1	11.9	23.0	18.6	2	12.0		
R44	1.5	21.4	18.3	1	11.8	20.9	18.2	1	11.7		
R45	1.5	22.1	18.7	2	12.0	22.1	18.7	2	12.0		
R46	1.5	20.6	18.4	1	11.8	20.5	18.4	1	11.8		
R47	1.5	21.4	18.6	2	11.9	21.4	18.6	2	11.9		
R48	1.5	20.7	18.4	1	11.8	20.6	18.4	1	11.8		
R49	1.5	21.1	18.5	2	11.9	21.0	18.5	1	11.9		
R50	1.5	21.9	18.4	1	11.9	22.5	18.5	2	11.9		
R51	1.5	19.6	18.6	2	11.9	19.3	18.5	1	11.9		
R52	1.5	20.7	18.4	1	11.8	20.6	18.4	1	11.8		
R53	1.5	20.7	18.4	1	11.8	20.6	18.4	1	11.8		
R54	1.5	20.2	18.7	2	12.0	19.9	18.6	2	11.9		
R55	1.5	20.6	18.1	1	11.7	20.0	18.0	1	11.6		
R56	1.5	20.8	18.4	1	11.9	20.6	18.4	1	11.8		
R57	1.5	20.9	18.5	1	11.9	20.7	18.4	1	11.8		
R58	1.5	21.2	18.5	2	11.9	20.9	18.5	1	11.9		
R59	1.5	21.1	18.5	2	11.9	20.8	18.5	1	11.9		
R60	1.5	20.5	18.1	1	11.7	19.6	17.9	1	11.6		
R61	1.5	21.0	18.5	2	11.9	20.8	18.4	1	11.9		
R62	1.5	23.8	19.2	2	12.3	23.1	19.0	2	12.2		
R63	1.5	23.5	19.1	2	12.2	22.8	18.9	2	12.1		
R64	1.5	23.5	19.1	2	12.2	22.8	18.9	2	12.1		
R65	1.5	21.1	18.2	1	11.8	19.9	17.9	1	11.6		
R66	1.5	23.7	19.1	2	12.2	22.9	18.9	2	12.1		
R67	1.5	24.4	19.3	2	12.3	23.5	19.1	2	12.2		
R68	1.5	20.6	18.1	1	11.7	19.5	17.8	1	11.5		
R69	1.5	23.4	19.1	2	12.2	22.7	18.9	2	12.1		
R70	1.5	23.3	19.0	2	12.2	22.6	18.9	2	12.1		
R71	4.0	20.5	18.1	1	11.7	19.5	17.9	1	11.6		
R72	1.5	22.3	18.5	2	11.9	20.4	18.1	1	11.7		
R73	1.5	23.5	19.1	2	12.2	22.7	18.9	2	12.1		
R74	1.5	25.1	19.4	2	12.4	23.5	19.1	2	12.2		
R75	1.5	22.4	18.5	2	11.9	20.4	18.1	1	11.7		
R76	1.5	20.8	18.1	1	11.7	19.8	17.9	1	11.6		
R77	1.5	20.7	18.4	1	11.8	20.5	18.4	1	11.8		
R78	4.0	23.7	18.8	2	12.1	20.3	18.1	1 -	11.7		
R79	1.5	22.9	19.3	2	12.4	21.6	19.0	2	12.3		
R80	1.5	21.1	18.9	2	12.2	19.9	18.6	2	12.0		

2021 Baseline

2021 With Scheme

	2021 Baseline 2021 With Scheme								
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)
R81	1.5	20.7	18.7	2	12.0	20.5	18.6	2	12.0
R82	1.5	20.6	18.6	2	12.0	20.4	18.6	2	11.9
R83	1.5	20.6	18.6	2	12.0	20.3	18.6	2	11.9
R84	4.0	20.6	18.6	2	12.0	20.4	18.6	2	11.9
R85	1.5	26.2	20.1	3	12.9	20.6	18.8	2	12.1
R86	1.5	20.8	18.8	2	12.2	19.9	18.6	2	12.0
R87	1.5	20.9	18.7	2	12.0	20.6	18.6	2	12.0
R88	1.5	21.2	18.9	2	12.2	19.2	18.5	1	11.9
R89	1.5	20.7	18.7	2	12.0	20.4	18.6	2	11.9
R90	1.5	25.8	20.0	3	12.8	20.3	18.8	2	12.1
R91	1.5	20.4	18.6	2	11.9	20.3	18.6	2	11.9
R92	4.0	20.4	18.6	2	11.9	20.2	18.6	2	11.9
R93	1.5	20.4	18.6	2	11.9	20.2	18.6	2	11.9
R94	1.5	20.5	18.6	2	12.0	20.3	18.6	2	11.9
R95	1.5	22.4	19.2	2	12.4	19.2	18.5	1	11.9
R96	1.5	21.7	19.0	2	12.3	21.3	18.9	2	12.2
R97	1.5	22.4	19.0	2	12.2	22.5	19.1	2	12.2
R98	1.5	21.9	19.1	2	12.3	21.6	19.0	2	12.2
R99	1.5	26.9	20.2	3	13.0	20.4	18.8	2	12.1
R100	1.5	20.4	18.6	2	11.9	20.2	18.5	2	11.9
R101	4.0	20.4	18.6	2	11.9	20.3	18.6	2	11.9
R102	1.5	20.4	18.6	2	11.9	20.2	18.5	2	11.9
R103	1.5	23.0	19.3	2	12.4	19.5	18.5	2	12.0
R104	1.5	20.4	18.6	2	11.9	20.2	18.5	2	11.9
R105	1.5	23.9	19.5	2	12.6	19.5	18.5	2	12.0
R106	1.5	20.3	18.6	2	11.9	20.2	18.5	2	11.9
R107	1.5	20.3	18.6	2	11.9	20.2	18.5	2	11.9
R108	1.5	21.0	18.9	2	12.2	20.7	18.8	2	12.1
R109	1.5	21.5	19.0	2	12.2	21.2	18.9	2	12.2
R110	1.5	20.3	18.6	2	11.9	20.2	18.5	2	11.9
R111	1.5	20.3	18.6	2	11.9	20.2	18.5	2	11.9
R112	1.5	19.6	18.6	2	12.0	19.4	18.5	2	12.0
R113	1.5	21.5	18.8	2	12.1	21.6	18.9	2	12.1
R114	1.5	19.5	18.5	2	12.0	19.4	18.5	2	12.0
R115	1.5	20.3	18.6	2	11.9	20.3	18.6	2	11.9
R116	1.5	20.3	18.6	2	11.9	20.3	18.6	2	11.9
R117	1.5	20.8	18.7	2	12.0	20.8	18.7	2	12.0
R118	1.5	21.8	18.9	2	12.1	22.0	18.9	2	12.1
R119	1.5	21.6	18.9	2	12.1	21.7	18.9	2	12.1
R120	1.5	21.5	18.8	2	12.1	21.3	18.8	2	12.1
R121	1.5	22.8	19.1	2	12.3	23.1	19.2	2	12.3
R122	4.0	22.5	19.1	2	12.2	22.7	19.1	2	12.2
R123	1.5	22.6	19.1	2	12.2	22.3	19.0	2	12.2

2021 Baseline

2021 With Scheme

	Madallad		2021 E	Baseline			2021 With Scheme				
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (µg/m³)		
R124	1.5	22.5	19.0	2	12.2	22.2	19.0	2	12.2		
R125	1.5	26.4	19.8	3	12.7	26.8	19.9	3	12.7		
R126	1.5	30.5	20.7	4	13.2	31.1	20.8	4	13.2		
R127	1.5	21.8	18.9	2	12.1	21.8	18.9	2	12.1		
R128	4.0	21.7	18.9	2	12.1	21.7	18.9	2	12.1		
R129	1.5	23.5	19.3	2	12.3	23.8	19.4	2	12.4		
R130	1.5	23.5	19.3	2	12.3	23.8	19.4	2	12.4		
R131	4.0	34.2	22.0	6	13.9	34.3	22.1	6	14.0		
R132	4.0	34.7	22.1	6	14.0	37.7	22.4	6	14.2		
R133	1.5	25.7	19.8	3	12.7	26.3	20.0	3	12.7		
R134	4.0	34.9	22.2	6	14.0	36.1	22.5	7	14.2		
R135	4.0	24.6	19.6	3	12.5	25.1	19.7	3	12.6		
R136	1.5	33.9	22.0	6	13.9	34.0	22.0	6	13.9		
R137	4.0	33.4	21.8	5	13.8	34.5	22.1	6	13.9		
R138	4.0	34.9	22.1	6	14.0	37.7	22.4	6	14.2		
R139	1.5	26.9	20.1	3	12.8	27.6	20.3	3	12.9		
R140	4.0	26.1	20.0	3	12.7	26.8	20.1	3	12.8		
R141	1.5	24.6	19.5	2	12.5	24.9	19.6	3	12.5		
R142	1.5	24.8	19.6	3	12.5	25.1	19.6	3	12.5		
R143	1.5	26.0	19.8	3	12.7	25.6	19.8	3	12.6		
R144	1.5	24.3	19.5	2	12.5	24.6	19.5	2	12.5		
R145	1.5	27.1	20.1	3	12.8	26.6	20.0	3	12.8		
R146	1.5	24.6	19.5	2	12.5	24.3	19.5	2	12.5		
R147	1.5	23.4	19.3	2	12.3	23.4	19.3	2	12.3		
R148	1.5	23.1	19.2	2	12.3	23.1	19.2	2	12.3		
R149	1.5	24.2	19.4	2	12.4	24.0	19.4	2	12.4		
R150	1.5	25.3	19.7	3	12.6	25.0	19.6	3	12.5		
R151	1.5	23.1	19.2	2	12.3	23.0	19.2	2	12.3		
R152	1.5	24.1	19.4	2	12.4	24.0	19.4	2	12.4		
R153	1.5	25.7	20.2	3	12.8	25.7	20.2	3	12.8		
R154	1.5	26.4	20.0	3	12.7	26.4	20.0	3	12.7		
R155	1.5	25.4	19.7	3	12.6	25.3	19.7	3	12.6		
R156	1.5	26.2	20.5	4	13.0	26.3	20.5	4	13.0		
R157	1.5	27.8	20.9	4	13.2	27.8	20.9	4	13.2		
R158	1.5	26.4	20.5	4	13.0	26.4	20.5	4	13.0		
R159	1.5	27.1	20.7	4	13.1	27.2	20.7	4	13.1		
R160	1.5	23.7	19.3	2	12.4	23.9	19.4	2	12.4		
R161	1.5	22.7	19.1	2	12.2	22.9	19.1	2	12.3		
R162	1.5	24.8	20.0	3	12.7	25.0	20.1	3	12.7		
R163	4.0	36.0	22.9	7	14.4	36.2	22.9	7	14.4		
R164	1.5	28.9	21.1	4	13.3	29.0	21.1	4	13.3		
R165	1.5	36.6	23.0	8	14.4	36.7	23.1	8	14.5		
R166	4.0	36.6	23.1	8	14.5	36.8	23.2	8	14.5		

	Madallad		2021 B	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (µg/m³)
R167	1.5	23.8	19.6	3	12.5	24.1	19.7	3	12.5
R168	1.5	22.9	19.3	2	12.4	23.3	19.4	2	12.4
R169	1.5	25.9	20.0	3	12.7	26.6	20.1	3	12.8
R170	1.5	21.9	19.2	2	12.3	21.9	19.3	2	12.3
R171	1.5	21.9	19.0	2	12.2	22.2	19.1	2	12.2
R172	1.5	22.7	18.5	2	11.9	23.0	18.6	2	12.0
R173	1.5	19.6	18.6	2	11.9	19.6	18.6	2	11.9
R174	1.5	22.9	18.6	2	12.0	23.3	18.7	2	12.0
R175	1.5	20.3	18.8	2	12.1	20.3	18.8	2	12.1
R176	1.5	20.8	19.0	2	12.1	20.7	18.9	2	12.1
R177	1.5	20.5	18.8	2	12.0	20.0	18.7	2	12.0
R178	1.5	23.4	19.7	3	12.5	23.3	19.7	3	12.5
R179	1.5	20.3	18.7	2	12.0	19.8	18.6	2	11.9
R180	1.5	20.9	18.8	2	12.1	21.1	18.9	2	12.1
R181	1.5	18.6	18.3	1	11.8	18.5	18.3	1	11.8
R182	1.5	21.8	18.4	1	11.9	22.0	18.4	1	11.9
R183	1.5	18.8	18.4	1	11.8	18.8	18.4	1	11.8
R184	1.5	19.1	18.5	1	11.8	19.2	18.5	1	11.9
R185	1.5	19.8	18.8	2	12.1	19.8	18.8	2	12.1
R186	1.5	19.0	18.6	2	12.0	19.0	18.6	2	12.0
R187	1.5	19.2	18.6	2	12.0	19.2	18.6	2	12.0
R188	1.5	19.0	18.6	2	12.0	19.0	18.6	2	12.0
R189	1.5	19.4	18.7	2	12.0	19.3	18.7	2	12.0
R190	1.5	20.8	19.0	2	12.2	20.9	19.1	2	12.2
R191	1.5	21.0	19.0	2	12.2	21.3	19.1	2	12.3
R192	1.5	19.0	18.6	2	12.0	19.0	18.6	2	12.0
R193	4.0	20.7	19.0	2	12.2	20.9	19.0	2	12.2
R194	1.5	19.4	18.7	2	12.0	19.3	18.7	2	12.0
R195	1.5	19.0	18.6	2	12.0	19.0	18.6	2	12.0
R196	1.5	20.2	18.9	2	12.1	20.0	18.8	2	12.1
R197	1.5	19.0	18.6	2	12.0	19.0	18.6	2	12.0
R198	1.5	19.2	18.6	2	12.0	19.1	18.6	2	12.0
R199	1.5	20.6	19.0	2	12.2	20.4	18.9	2	12.1
R200	1.5	18.8	18.6	2	11.9	18.8	18.6	2	11.9
R201	1.5	19.3	18.7	2	12.0	19.2	18.6	2	12.0
R202	1.5	20.2	18.9	2	12.1	20.1	18.8	2	12.1
R203	1.5	18.8	18.6	2	11.9	18.8	18.6	2	11.9
R204	1.5	19.1	18.6	2	12.0	19.1	18.6	2	12.0
R205	1.5	20.0	18.8	2	12.1	20.1	18.9	2	12.1
R206	1.5	20.6	19.0	2	12.2	20.8	19.0	2	12.2
R207	1.5	20.1	18.9	2	12.1	19.9	18.8	2	12.1
R208	1.5	20.5	18.9	2	12.2	20.3	18.9	2	12.1
R209	1.5	19.9	18.8	2	12.1	19.7	18.8	2	12.0

	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)
R210	4.0	19.2	18.6	2	12.0	19.1	18.6	2	12.0
R211	1.5	19.5	18.7	2	12.0	19.4	18.7	2	12.0
R212	1.5	19.1	18.6	2	12.0	19.1	18.6	2	12.0
R213	1.5	21.4	19.1	2	12.3	21.7	19.2	2	12.3
R214	1.5	19.2	18.7	2	12.0	19.2	18.6	2	12.0
R215	4.0	21.0	19.0	2	12.2	21.2	19.1	2	12.2
R216	1.5	21.2	19.1	2	12.2	21.1	19.1	2	12.2
R217	1.5	19.7	18.8	2	12.1	19.5	18.7	2	12.0
R218	1.5	21.6	19.2	2	12.3	22.2	19.3	2	12.4
R219	1.5	21.1	19.1	2	12.2	21.2	19.1	2	12.3
R220	1.5	19.9	18.8	2	12.1	19.7	18.8	2	12.1
R221	1.5	22.3	19.4	2	12.4	23.0	19.5	2	12.5
R222	1.5	21.0	19.1	2	12.2	21.1	19.1	2	12.2
R223	1.5	19.2	18.6	2	12.0	19.2	18.6	2	12.0
R224	1.5	19.9	18.8	2	12.1	19.9	18.8	2	12.1
R225	1.5	20.0	18.8	2	12.1	20.0	18.8	2	12.1
R226	1.5	19.2	18.7	2	12.0	19.3	18.7	2	12.0
R227	1.5	22.2	19.3	2	12.4	22.9	19.5	2	12.5
R228	1.5	21.6	19.2	2	12.3	22.2	19.3	2	12.4
R229	1.5	19.4	18.7	2	12.0	19.5	18.7	2	12.0
R230	1.5	19.7	18.8	2	12.1	19.8	18.8	2	12.1
R231	1.5	21.2	19.1	2	12.3	21.3	19.1	2	12.3
R232	1.5	20.7	19.0	2	12.2	20.7	19.0	2	12.2
R233	1.5	20.5	19.0	2	12.2	20.5	19.0	2	12.2
R234	1.5	19.5	18.7	2	12.0	19.6	18.8	2	12.1
R235	1.5	19.5	18.8	2	12.0	19.6	18.8	2	12.1
R236	1.5	21.8	19.3	2	12.4	21.9	19.4	2	12.4
R237	1.5	20.2	18.9	2	12.1	20.2	18.9	2	12.2
R238	1.5	20.4	19.0	2	12.2	20.5	19.0	2	12.2
R239	1.5	22.6	19.6	3	12.5	22.6	19.6	3	12.5
R240	1.5	22.4	19.5	2	12.5	22.4	19.5	2	12.5
R241	1.5	22.5	19.6	3	12.5	22.6	19.6	3	12.5
R242	1.5	22.0	19.4	2	12.4	22.1	19.4	2	12.4
R243	1.5	23.2	19.8	3	12.6	23.3	19.8	3	12.6
R244	1.5	23.2	19.8	3	12.6	23.3	19.8	3	12.6
R245	1.5	21.0	19.1	2	12.3	21.0	19.1	2	12.3
R246	1.5	21.2	19.2	2	12.3	21.2	19.2	2	12.3
R247	1.5	20.0	18.9	2	12.1	20.0	18.9	2	12.1
R248	1.5	20.0	18.9	2	12.1	20.0	18.9	2	12.1
R249	1.5	20.4	18.9	2	12.2	20.4	18.9	2	12.1
R250	1.5	20.0	18.9	2	12.1	20.1	18.9	2	12.1
R251	1.5	20.1	18.9	2	12.1	20.1	18.9	2	12.1
R252	4.0	19.9	18.8	2	12.1	19.9	18.8	2	12.1

	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m³	Annual Mean PM _{2.5} (μg/m³)
R253	1.5	20.2	18.9	2	12.1	20.3	18.9	2	12.1
R254	1.5	20.2	18.9	2	12.1	20.2	18.9	2	12.1
R255	1.5	20.3	18.9	2	12.1	20.3	18.9	2	12.1
R256	1.5	20.7	19.0	2	12.2	20.6	19.0	2	12.2
R257	1.5	20.6	18.1	1	11.7	19.2	17.8	1	11.5
R258	1.5	21.1	18.2	1	11.8	19.2	17.8	1	11.5
R259	1.5	25.1	19.8	3	12.7	21.6	18.8	2	12.1
R260	1.5	23.0	19.3	2	12.4	20.6	18.7	2	12.0
R261	1.5	20.0	18.6	2	12.0	19.7	18.6	2	12.0
R262	1.5	20.1	18.7	2	12.1	19.9	18.6	2	12.0
R263	1.5	19.7	18.6	2	12.0	19.5	18.5	2	12.0
R264	1.5	19.6	18.5	2	12.0	19.3	18.5	1	12.0
R265	4.0	19.7	18.6	2	12.0	19.4	18.5	2	12.0
R266	1.5	19.6	18.6	2	12.0	19.3	18.5	1	12.0
R267	1.5	23.5	19.5	2	12.5	20.9	18.9	2	12.2
R268	1.5	20.6	18.6	2	12.0	20.6	18.6	2	12.0
R269	1.5	20.6	18.6	2	12.0	20.6	18.6	2	12.0
R270	1.5	21.2	18.8	2	12.0	21.2	18.8	2	12.0
R271	1.5	21.3	18.8	2	12.1	21.2	18.8	2	12.1
R272	1.5	19.6	18.6	2	12.0	19.5	18.5	2	12.0
R273	1.5	19.6	18.6	2	12.0	19.5	18.5	2	12.0
R274	1.5	21.7	19.3	2	12.4	22.3	19.4	2	12.4
R275	1.5	31.8	21.6	5	13.7	24.4	19.8	3	12.7
R276	1.5	33.1	21.9	6	13.9	24.9	20.0	3	12.8
R277	1.5	22.2	19.0	2	12.2	22.2	19.0	2	12.2
R278	1.5	22.6	19.5	2	12.5	23.3	19.6	3	12.5
R279	1.5	22.0	19.0	2	12.2	22.0	19.0	2	12.2
R280	1.5	21.4	18.8	2	12.1	21.5	18.8	2	12.1
R281	1.5	21.5	18.8	2	12.1	21.6	18.9	2	12.1
R282	1.5	27.5	20.3	3	12.9	28.3	20.5	4	13.0
R283	4.0	44.5	24.9	11	15.6	46.1	25.4	12	15.9
R284	4.0	27.4	20.7	4	13.2	27.3	20.7	4	13.2
R285	1.5	21.6	19.1	2	12.3	21.8	19.1	2	12.3
R286	1.5	29.4	21.4	5	13.6	29.3	21.3	5	13.6
R287	1.5	24.2	19.8	3	12.7	24.9	20.0	3	12.8
R288	4.0	29.9	21.5	5	13.6	29.5	21.4	5	13.6
R289	4.0	33.9	21.9	6	13.9	34.9	22.1	6	14.0
R290	1.5	24.1	19.5	2	12.4	24.6	19.6	3	12.5
R291	4.0	38.7	23.9	9	15.0	36.9	23.5	8	14.8
R292	4.0	32.9	21.9	6	13.9	26.5	20.4	4	13.0
R293	1.5	27.6	20.8	4	13.3	27.5	20.8	4	13.3
R294	4.0	31.7	21.6	5	13.7	25.4	20.1	3	12.9
R295	4.0	28.4	21.1	4	13.4	28.4	21.1	4	13.4

	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m³	Annual Mean PM _{2.5} (µg/m³)
R296	1.5	29.5	21.3	5	13.6	29.1	21.3	5	13.5
R297	1.5	23.7	19.7	3	12.6	23.9	19.7	3	12.7
R298	1.5	24.0	19.8	3	12.7	24.2	19.8	3	12.7
R299	4.0	35.2	23.3	8	14.7	35.1	23.2	8	14.6
R300	1.5	37.9	23.6	9	14.9	36.2	23.3	8	14.7
R301	1.5	23.6	19.4	2	12.4	23.6	19.4	2	12.4
R302	4.0	34.9	23.2	8	14.6	34.8	23.1	8	14.6
R303	1.5	23.8	19.4	2	12.4	23.8	19.4	2	12.4
R304	1.5	21.9	18.9	2	12.1	22.2	19.0	2	12.2
R305	1.5	21.7	18.9	2	12.1	22.1	19.0	2	12.2
R306	4.0	27.8	20.8	4	13.3	28.3	21.0	4	13.4
R307	4.0	23.3	19.6	3	12.6	23.3	19.6	3	12.6
R308	1.5	22.6	19.1	2	12.2	22.6	19.1	2	12.2
R309	1.5	22.6	19.1	2	12.2	22.6	19.1	2	12.2
R310	4.0	22.1	19.4	2	12.4	22.2	19.4	2	12.4
R311	1.5	23.4	19.6	3	12.6	23.3	19.6	3	12.6
R312	1.5	22.1	19.4	2	12.4	22.3	19.4	2	12.4
R313	1.5	21.7	19.1	2	12.3	21.7	19.1	2	12.3
R314	1.5	22.7	19.1	2	12.3	22.7	19.1	2	12.3
R315	1.5	21.7	19.1	2	12.3	21.8	19.1	2	12.3
R316	1.5	20.6	19.0	2	12.2	20.6	19.0	2	12.2
R317	1.5	26.4	20.7	4	13.1	26.6	20.7	4	13.2
R318	1.5	23.0	19.2	2	12.3	22.9	19.2	2	12.3
R319	1.5	22.1	19.2	2	12.3	22.1	19.2	2	12.3
R320	1.5	20.1	18.9	2	12.1	20.1	18.9	2	12.1
R321	1.5	22.2	19.2	2	12.4	21.7	19.1	2	12.3
R322	1.5	22.3	19.2	2	12.4	22.3	19.2	2	12.4
R323	1.5	20.4	19.0	2	12.2	20.5	19.0	2	12.2
R324	1.5	22.5	19.4	2	12.5	21.9	19.2	2	12.4
R325	4.0	19.9	18.9	2	12.1	19.9	18.9	2	12.1
R326	1.5	20.7	19.0	2	12.2	20.8	19.0	2	12.2
R327	1.5	21.0	19.1	2	12.2	21.1	19.1	2	12.3
R328	1.5	21.5	19.0	2	12.3	21.4	19.0	2	12.3
R329	1.5	21.0	19.1	2	12.3	21.1	19.1	2	12.3
R330	1.5	22.7	19.1	2	12.2	22.6	19.1	2	12.2
R331	1.5	22.8	19.1	2	12.3	22.8	19.1	2	12.3
R332	1.5	22.6	19.1	2	12.2	22.5	19.1	2	12.2
R333	1.5	23.0	19.2	2	12.3	23.1	19.2	2	12.3
R334	1.5	20.2	18.9	2	12.1	20.2	18.9	2	12.1
R335	1.5	24.7	20.2	3	12.8	24.9	20.2	3	12.9
R336	1.5	22.1	19.2	2	12.4	22.3	19.2	2	12.4
R337	1.5	21.5	18.8	2	12.1	21.7	18.9	2	12.1
R338	1.5	20.3	19.0	2	12.2	20.3	19.0	2	12.2

LUL I DUSCIIIIC	2021	Basel	line
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	2021 Baseline						2021 With Scheme				
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (µg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (µg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)		
R339	1.5	22.9	19.4	2	12.5	23.1	19.4	2	12.5		
R340	1.5	21.3	19.2	2	12.3	21.3	19.2	2	12.3		
R341	1.5	21.4	18.8	2	12.1	21.6	18.9	2	12.1		
R342	1.5	30.0	21.5	5	13.7	30.3	21.6	5	13.7		
R343	1.5	21.5	19.0	2	12.3	21.4	19.0	2	12.2		
R344	1.5	25.0	20.2	3	12.8	25.3	20.2	3	12.9		
R345	1.5	20.0	18.8	2	12.1	20.0	18.9	2	12.1		
R346	1.5	21.6	19.0	2	12.3	21.7	19.0	2	12.3		
R347	1.5	20.3	18.9	2	12.2	20.3	18.9	2	12.2		
R348	1.5	29.0	21.2	5	13.5	29.4	21.3	5	13.6		
R349	1.5	29.4	21.3	5	13.6	29.7	21.4	5	13.6		
R350	1.5	31.2	21.7	5	13.8	31.8	21.9	6	13.9		
R351	1.5	31.5	21.8	5	13.9	32.2	22.0	6	14.0		
R352	1.5	20.1	18.9	2	12.1	20.1	18.9	2	12.1		
R353	1.5	22.6	19.3	2	12.4	22.7	19.3	2	12.4		
R354	1.5	22.0	19.0	2	12.2	22.3	19.0	2	12.2		
R355	1.5	28.5	21.1	4	13.4	28.9	21.2	5	13.5		
R356	1.5	22.2	19.0	2	12.2	22.4	19.0	2	12.2		
R357	1.5	19.4	18.7	2	12.0	19.4	18.7	2	12.0		
R358	1.5	19.5	18.7	2	12.0	19.5	18.7	2	12.0		
R359	1.5	20.5	18.9	2	12.2	20.5	18.9	2	12.2		
R360	1.5	19.3	18.7	2	12.0	19.3	18.7	2	12.0		
R361 R362	1.5 1.5	20.1	18.9 19.1	2	12.1 12.2	20.1	18.9 19.1	2	12.1		
R363	1.5	20.4	18.9	2	12.2	20.4	18.9	2	12.2		
R364	1.5	19.5	18.7	2	12.1	19.5	18.7	2	12.0		
R365	1.5	19.5	18.6	2	12.0	19.5	18.6	2	12.0		
R366	4.0	23.6	19.3	2	12.4	23.7	19.3	2	12.4		
R367	1.5	22.5	19.1	2	12.2	22.6	19.1	2	12.2		
R368	1.5	19.3	18.7	2	12.0	19.3	18.7	2	12.0		
R369	1.5	19.3	18.7	2	12.0	19.3	18.7	2	12.0		
R370	1.5	25.5	20.0	3	12.8	25.8	20.0	3	12.8		
R371	1.5	20.0	18.8	2	12.1	19.9	18.8	2	12.1		
R372	1.5	20.1	18.9	2	12.1	20.0	18.8	2	12.1		
R373	1.5	23.9	19.8	3	12.7	24.1	19.8	3	12.7		
R374	1.5	19.4	18.7	2	12.0	19.4	18.7	2	12.0		
R375	1.5	25.4	19.7	3	12.6	25.5	19.7	3	12.6		
R376	1.5	26.7	20.6	4	13.1	27.0	20.7	4	13.1		
R377	1.5	18.8	17.8	1	11.5	18.8	17.8	1	11.5		
R378	1.5	18.9	17.8	1	11.6	18.9	17.8	1	11.5		
R379	1.5	19.2	17.8	1	11.6	19.1	17.8	1	11.6		
R380	1.5	18.2	17.6	1	11.5	18.2	17.6	1	11.5		
R381	1.5	18.9	17.8	1	11.6	18.9	17.8	1	11.6		

			2021 B	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)
R382	1.5	23.2	19.4	2	12.4	23.4	19.4	2	12.5
R383	1.5	19.1	17.8	1	11.6	19.0	17.8	1	11.6
R384	1.5	18.7	17.7	1	11.5	18.7	17.7	1	11.5
R385	1.5	18.5	17.7	1	11.5	18.5	17.7	1	11.5
R386	1.5	18.9	17.8	1	11.5	18.8	17.8	1	11.5
R387	1.5	19.0	17.8	1	11.6	18.9	17.8	1	11.6
R388	1.5	23.0	19.8	3	12.6	23.1	19.8	3	12.6
R389	4.0	18.5	17.7	1	11.5	18.5	17.7	1	11.5
R390	1.5	19.7	18.0	1	11.7	19.8	18.0	1	11.7
R391	1.5	18.7	17.7	1	11.5	18.7	17.7	1	11.5
R392	1.5	18.7	17.7	1	11.5	18.7	17.7	1	11.5
R393	1.5	18.6	17.7	1	11.5	18.5	17.7	1	11.5
R394	4.0	18.9	17.8	1	11.6	18.8	17.8	1	11.6
R395	1.5	19.3	17.9	1	11.6	19.1	17.9	1	11.6
R396	1.5	23.1	18.8	2	12.1	23.3	18.8	2	12.2
R397	1.5	19.5	17.9	1	11.6	19.4	17.9	1	11.6
R398	1.5	20.8	18.2	1	11.8	20.9	18.3	1	11.8
R399	1.5	19.3	17.9	1	11.6	19.3	17.9	1	11.6
R400	1.5	21.9	18.5	2	12.0	22.0	18.5	2	12.0
R401	1.5	20.7	18.2	1	11.8	20.8	18.2	1	11.8
R402	1.5	23.7	19.0	2	12.2	23.9	19.0	2	12.3
R403	1.5	22.9	18.8	2	12.1	23.1	18.8	2	12.1
R404 R405	1.5 1.5	21.9 22.6	19.1 19.3	2	12.3 12.4	21.8 22.5	19.1 19.3	2	12.3
R406	1.5	21.1	18.9	2	12.4	21.1	18.9	2	12.4
R407	1.5	21.0	18.9	2	12.2	21.0	18.9	2	12.2
R408	1.5	22.2	19.2	2	12.4	21.8	19.1	2	12.3
R409	1.5	21.2	19.0	2	12.2	21.2	18.9	2	12.2
R410	1.5	23.1	19.5	2	12.5	23.3	19.5	2	12.6
R411	1.5	21.1	18.9	2	12.2	21.1	18.9	2	12.2
R412	1.5	20.8	18.9	2	12.2	20.7	18.9	2	12.2
R413	4.0	35.9	23.3	8	14.7	37.0	23.7	9	14.9
R414	1.5	21.8	19.1	2	12.3	21.7	19.0	2	12.3
R415	1.5	20.6	18.8	2	12.1	20.6	18.8	2	12.1
R416	1.5	23.9	19.7	3	12.6	24.3	19.8	3	12.7
R417	1.5	22.5	19.3	2	12.4	22.4	19.2	2	12.4
R418	1.5	24.0	19.7	3	12.7	24.4	19.8	3	12.7
R419	1.5	34.9	23.0	8	14.5	35.9	23.3	8	14.7
R420	1.5	22.3	19.2	2	12.4	22.0	19.1	2	12.3
R421	1.5	19.9	18.6	2	12.0	19.9	18.6	2	12.0
R422	1.5	21.1	18.9	2	12.2	21.3	19.0	2	12.2
R423	1.5	23.2	19.4	2	12.4	23.0	19.3	2	12.4
R424	1.5	20.4	18.7	2	12.1	20.5	18.8	2	12.1

	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m³	Annual Mean PM _{2.5} (μg/m³)
R425	1.5	20.4	18.7	2	12.1	20.5	18.8	2	12.1
R426	1.5	21.0	18.9	2	12.2	21.3	19.0	2	12.2
R427	1.5	19.9	18.6	2	12.0	19.9	18.6	2	12.0
R428	1.5	22.4	19.2	2	12.3	22.2	19.1	2	12.3
R429	1.5	19.7	18.6	2	12.0	19.7	18.6	2	12.0
R430	1.5	21.4	18.9	2	12.2	21.3	18.9	2	12.2
R431	1.5	22.1	19.6	3	12.5	22.1	19.6	3	12.5
R432	1.5	20.8	18.8	2	12.1	20.7	18.8	2	12.1
R433	1.5	21.9	19.5	2	12.4	22.0	19.5	2	12.4
R434	1.5	19.7	18.6	2	12.0	19.7	18.6	2	12.0
R435	1.5	20.7	18.8	2	12.1	20.9	18.9	2	12.1
R436	1.5	20.0	18.6	2	12.0	20.0	18.6	2	12.0
R437	1.5	20.1	18.6	2	12.0	20.0	18.6	2	12.0
R438	1.5	20.0	18.6	2	12.0	20.0	18.6	2	12.0
R439	1.5	20.6	18.8	2	12.1	20.9	18.8	2	12.1
R440	1.5	24.3	19.6	3	12.6	23.9	19.5	2	12.5
R441	1.5	20.1	18.7	2	12.0	20.2	18.7	2	12.0
R442	1.5	20.0	18.6	2	12.0	20.1	18.7	2	12.0
R443	1.5	24.3	19.6	3	12.6	24.0	19.5	2	12.5
R444	1.5	19.7	18.6	2	12.0	19.7	18.6	2	12.0
R445	1.5	19.7	18.6	2	12.0	19.7	18.6	2	12.0
R446	1.5	25.2	19.8	3	12.7	24.8	19.7	3	12.6
R447	1.5	20.8	18.8	2	12.1	20.7	18.8	2	12.1
R448	1.5	24.0	20.0	3	12.7	24.0	20.0	3	12.7
R449	1.5	23.2	19.8	3	12.6	23.3	19.8	3	12.6
R450	1.5	23.7	19.9	3	12.7	23.7	19.9	3	12.7
R451	1.5	24.1	19.6	2	12.5	23.8	19.5	2	12.5
R452	1.5	19.7	18.6	2	12.0	19.8	18.6	2	12.0
R453	1.5	23.7	19.4	2	12.5	23.7	19.4	2	12.5
R454	1.5	19.6	18.5	2	12.0	19.6	18.5	2	12.0
R455	1.5	24.9	19.7	3	12.6	24.9	19.7	3	12.6
R456	1.5	24.1	19.6	3	12.5	23.8	19.5	2	12.5
R457	1.5	19.8	18.6	2	12.0	19.8	18.6	2	12.0
R458	4.0	19.6	18.5	2	11.9	19.6	18.5	2	12.0
R459	1.5	20.5	18.1	1	11.8	20.4	18.1	1	11.7
R460	4.0	19.6	18.5	2	11.9	19.6	18.5	2	12.0
R461	1.5	19.7	18.5	2	12.0	19.7	18.6	2	12.0
R462	1.5	24.1	19.5	2	12.5	23.8	19.5	2	12.5
R463	1.5	19.8	18.6	2	12.0	19.8	18.6	2	12.0
R464	1.5	19.7	18.5	2	12.0	19.7	18.5	2	12.0
R465	1.5	23.8	19.5	2	12.5	23.8	19.5	2	12.5
R466	1.5	24.6	19.6	3	12.6	24.6	19.7	3	12.6
R467	1.5	21.9	19.0	2	12.2	21.8	19.0	2	12.2

	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m³	Annual Mean PM _{2.5} (μg/m³)
R468	1.5	22.9	19.3	2	12.4	22.7	19.2	2	12.4
R469	1.5	21.5	18.9	2	12.2	21.5	19.0	2	12.2
R470	1.5	21.4	18.9	2	12.2	21.5	19.0	2	12.2
R471	1.5	22.0	19.1	2	12.3	21.9	19.1	2	12.3
R472	1.5	21.8	19.0	2	12.2	21.9	19.0	2	12.2
R473	1.5	21.8	19.0	2	12.2	21.9	19.0	2	12.2
R474	1.5	19.7	18.6	2	12.0	19.7	18.6	2	12.0
R475	1.5	26.2	20.1	3	12.8	25.9	20.0	3	12.8
R476	4.0	22.1	19.1	2	12.3	22.0	19.1	2	12.3
R477	1.5	21.0	18.3	1	11.8	20.9	18.2	1	11.8
R478	1.5	23.3	19.4	2	12.4	23.3	19.4	2	12.4
R479	1.5	19.8	18.6	2	12.0	19.8	18.6	2	12.0
R480	1.5	22.8	19.7	3	12.6	22.9	19.7	3	12.6
R481	1.5	20.8	18.2	1	11.8	20.7	18.2	1	11.8
R482	1.5	21.4	18.4	1	11.9	21.3	18.3	1	11.9
R483	1.5	20.4	18.7	2	12.0	20.4	18.7	2	12.0
R484	1.5	20.2	18.7	2	12.0	20.2	18.7	2	12.0
R485	1.5	21.1	18.3	1	11.9	21.2	18.3	1	11.9
R486	1.5	20.0	18.6	2	12.0	20.0	18.6	2	12.0
R487	1.5	20.5	19.2	2	12.2	20.5	19.2	2	12.2
R488	1.5	23.8	19.5	2	12.5	23.8	19.5	2	12.5
R489	1.5	20.4	19.2	2	12.2	20.5	19.2	2	12.2
R490	1.5	19.8	18.0	1	11.7	19.8	18.0	1	11.7
R491	4.0	25.4	20.0	3	12.8	25.5	20.0	3	12.8
R492	1.5	24.6	19.1	2	12.3	24.6	19.2	2	12.3
R493	1.5	22.8	19.3	2	12.4	22.8	19.3	2	12.4
R494	1.5	22.1	19.1	2	12.3	22.1	19.1	2	12.3
R495	1.5	22.1	19.1	2	12.3	22.1	19.1	2	12.3
R496	1.5	28.6	20.8	4	13.2	28.7	20.8	4	13.3
R497	1.5	21.1	18.9	2	12.1	21.1	18.9	2	12.1
R498	1.5	22.2	19.1	2	12.3	22.2	19.1	2	12.3
R499	1.5	22.6	19.7	3	12.5	22.6	19.7	3	12.5
R500	4.0	21.0	18.8	2	12.1	21.0	18.8	2	12.1
R501	1.5	21.8	19.0	2	12.2	21.8	19.0	2	12.2
R502	1.5	28.4	20.7	4	13.2	28.5	20.8	4	13.2
R503	1.5	22.1	19.6	3	12.5	22.1	19.6	3	12.5
R504	1.5	24.6	19.7	3	12.6	24.6	19.7	3	12.6
R505	4.0	25.9	20.1	3	12.9	26.0	20.1	3	12.9
R506	1.5	23.1	19.3	2	12.4	23.1	19.3	2	12.4
R507	1.5	22.6	19.3	2	12.4	22.6	19.3	2	12.4
R508	4.0	22.9	19.3	2	12.4	23.0	19.3	2	12.4
R509	4.0	30.3	21.4	5	13.6	31.2	21.5	5	13.6
R510	1.5	18.0	17.6	1	11.4	18.0	17.6	1	11.4

	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m³	Annual Mean PM _{2.5} (μg/m³)
R511	1.5	19.3	17.9	1	11.6	19.3	17.9	1	11.6
R512	1.5	21.1	19.4	2	12.3	21.3	19.4	2	12.3
R513	1.5	21.0	19.4	2	12.3	21.2	19.4	2	12.3
R514	1.5	19.2	17.8	1	11.6	19.2	17.8	1	11.6
R515	1.5	31.0	21.0	4	13.4	30.4	21.0	4	13.4
R516	1.5	17.9	17.6	1	11.4	17.9	17.6	1	11.4
R517	1.5	26.4	20.6	4	13.0	26.4	20.6	4	13.0
R518	1.5	25.8	20.5	4	13.0	25.9	20.5	4	13.0
R519	1.5	21.6	19.5	2	12.4	21.9	19.5	2	12.4
R520	1.5	22.5	19.3	2	12.4	22.6	19.3	2	12.4
R521	1.5	22.5	19.2	2	12.4	22.6	19.3	2	12.4
R522	1.5	30.9	21.3	5	13.5	30.9	21.3	5	13.5
R523	1.5	27.2	20.8	4	13.2	27.3	20.8	4	13.2
R524	1.5	27.4	20.8	4	13.2	27.5	20.9	4	13.2
R525	1.5	35.1	22.0	6	14.0	34.4	22.0	6	14.0
R526	4.0	21.9	19.6	3	12.5	22.3	19.6	3	12.5
R527	1.5	17.9	17.5	1	11.4	17.9	17.5	1	11.4
R528	1.5	22.4	19.1	2	12.3	22.2	19.1	2	12.3
R529	1.5	35.2	22.4	6	14.2	35.1	22.4	6	14.2
R530	4.0	27.9	20.8	4	13.2	30.2	20.8	4	13.3
R531	1.5	17.8	17.5	1	11.4	17.8	17.5	1	11.4
R532	1.5	21.5	18.9	2	12.2	21.6	19.0	2	12.2
R533	1.5	21.3	18.9	2	12.2	21.4	18.9	2	12.2
R534	1.5	20.8	18.8	2	12.1	20.9	18.8	2	12.1
R535	1.5	18.8	17.7	1	11.5	18.8	17.7	1	11.5
R536	1.5	20.4	18.7	2	12.0	20.4	18.7	2	12.0
R537	1.5	25.1	20.0	3	12.8	26.5	20.0	3	12.8
R538	1.5	19.1	17.8	1	11.6	19.2	17.8	1	11.6
R539	1.5	20.8	18.8	2	12.1	20.8	18.8	2	12.1
R540	1.5	18.2	17.6	1	11.5	18.2	17.6	1	11.5
R541	1.5	20.4	18.7	2	12.1	20.5	18.7	2	12.1
R542	1.5	18.2	17.6	1	11.5	18.2	17.6	1	11.5
R543	1.5	20.3	18.7	2	12.0	20.3	18.7	2	12.0
R544	1.5	20.2	18.7	2	12.0	20.2	18.7	2	12.0
R545	1.5	18.7	17.7	1	11.5	18.7	17.7	1	11.5
R546	1.5	19.0	17.0	1	11.2	19.0	17.0	1	11.2
R547	1.5	19.1	17.0	1	11.2	19.1	17.0	1	11.2
R548	1.5	19.2	17.8	1	11.6	19.2	17.8	1	11.6
R549	1.5	19.3	17.8	1	11.6	19.3	17.8	1	11.6
R550	1.5	19.5	17.9	1	11.6	19.5	17.9	1	11.6
R551	1.5	19.1	17.8	1	11.6	19.1	17.8	1	11.6
R552	1.5	19.0	17.8	1	11.6	19.0	17.8	1	11.6
R553	1.5	18.6	17.7	1	11.5	18.6	17.7	1	11.5

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	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m³	Annual Mean PM _{2.5} (µg/m³)
R554	1.5	22.7	19.1	2	12.2	22.8	19.1	2	12.3
R555	1.5	22.4	19.0	2	12.2	22.5	19.1	2	12.2
R556	1.5	22.0	18.9	2	12.1	22.3	19.0	2	12.2
R557	1.5	22.2	19.0	2	12.2	22.5	19.0	2	12.2
R558	4.0	22.2	19.0	2	12.2	22.5	19.0	2	12.2
R559	1.5	23.6	19.3	2	12.4	23.5	19.3	2	12.3
R560	1.5	25.1	20.0	3	12.7	25.2	20.1	3	12.7
R561	1.5	25.1	20.0	3	12.7	25.2	20.1	3	12.7
R562	1.5	25.9	20.3	3	12.8	26.1	20.3	3	12.9
R563	1.5	24.1	19.4	2	12.4	24.0	19.4	2	12.4
R564	1.5	24.1	19.4	2	12.4	24.2	19.4	2	12.4
R565	1.5	28.4	20.8	4	13.2	28.6	20.8	4	13.2
R566	1.5	25.6	19.7	3	12.6	25.6	19.7	3	12.6
R567	1.5	28.3	20.8	4	13.2	28.5	20.8	4	13.2
R568	1.5	27.0	20.5	4	13.0	27.1	20.5	4	13.0
R569	1.5	24.4	19.5	2	12.4	24.5	19.5	2	12.5
R570	1.5	23.6	19.3	2	12.4	23.5	19.3	2	12.3
R573	1.5	26.6	20.0	3	12.7	26.8	20.0	3	12.8
R574	1.5	25.1	19.6	3	12.5	25.3	19.7	3	12.6
R575	1.5	23.4	19.9	3	12.6	23.3	19.8	3	12.6
R576	1.5	27.9	20.9	4	13.2	28.1	20.9	4	13.2
R577	1.5	23.8	19.9	3	12.7	23.7	19.9	3	12.7
R578	1.5	25.5	20.3	3	12.9	25.4	20.3	3	12.9
R579	1.5	24.2	20.0	3	12.7	24.2	20.0	3	12.7
R580	1.5	33.8	22.3	6	14.1	34.0	22.4	6	14.1
R581	4.0	24.2	20.0	3	12.7	24.3	20.0	3	12.7
R582	1.5	23.3	19.8	3	12.6	23.3	19.8	3	12.6
R583	1.5	33.4	22.2	6	14.0	33.5	22.3	6	14.0
R584	1.5	24.3	20.0	3	12.7	24.3	20.0	3	12.7
R585	1.5	22.4	19.6	3	12.5	22.3	19.6	3	12.5
R586	1.5	24.1	20.0	3	12.7	24.1	20.0	3	12.7
R587	1.5	34.4	22.5	7	14.2	34.4	22.5	7	14.2
R588	1.5	29.3	21.3	5	13.4	29.3	21.3	5	13.4
R589	1.5	23.9	20.0	3	12.7	23.9	20.0	3	12.7
R590	1.5	23.6	19.9	3	12.6	23.6	19.9	3	12.6
R591	1.5	23.7	19.9	3	12.7	23.7	19.9	3	12.7
R592	1.5	32.5	22.0	6	13.9	32.7	22.0	6	13.9
R593	1.5	32.1	21.9	6	13.8	32.3	21.9	6	13.8
R594	1.5	23.7	19.9	3	12.7	23.6	19.9	3	12.6
R595	1.5	24.5	20.1	3	12.8	24.5	20.1	3	12.8
R596	1.5	22.5	19.6	3	12.5	22.5	19.6	3	12.5
R597	1.5	22.2	19.6	3	12.5	22.2	19.6	3	12.5
R598	1.5	24.8	20.2	3	12.8	24.9	20.2	3	12.8

	Medallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)
R599	1.5	24.0	20.0	3	12.7	23.9	19.9	3	12.7
R602	1.5	23.3	19.8	3	12.6	23.3	19.8	3	12.6
R603	1.5	22.6	19.7	3	12.5	22.5	19.7	3	12.5
R604	1.5	22.1	19.6	3	12.5	22.1	19.6	3	12.5
R605	1.5	24.1	20.0	3	12.7	24.1	20.0	3	12.7
R606	1.5	25.7	20.4	3	12.9	25.6	20.4	3	12.9
R607	1.5	23.9	20.0	3	12.7	23.9	20.0	3	12.7
R608	1.5	31.9	21.9	6	13.8	32.1	21.9	6	13.8
R609	1.5	31.5	21.7	5	13.7	31.6	21.8	5	13.7
R610	1.5	24.5	20.1	3	12.8	24.5	20.1	3	12.8
R611	1.5	24.4	20.1	3	12.8	24.4	20.1	3	12.8
R612	1.5	30.0	21.4	5	13.5	29.9	21.4	5	13.5
R613	1.5	23.4	19.8	3	12.6	23.4	19.8	3	12.6
R614	1.5	26.3	20.5	4	13.0	26.3	20.5	4	13.0
R615	1.5	31.2	21.7	5	13.7	31.3	21.7	5	13.7
R616	1.5	25.0	20.2	3	12.8	24.9	20.2	3	12.8
R617	1.5	23.7	19.9	3	12.7	23.7	19.9	3	12.7
R618	1.5	29.5	21.3	5	13.5	29.5	21.3	5	13.5
R619	1.5	31.8	21.8	5	13.8	31.9	21.8	6	13.8
R620	1.5	24.7	20.1	3	12.8	24.6	20.1	3	12.8
R621	1.5	23.2	19.6	3	12.5	23.2	19.6	3	12.5
R624	1.5	24.6	20.1	3	12.8	24.5	20.1	3	12.8
R625	1.5	22.4	19.4	2	12.4	22.4	19.4	2	12.4
R626	1.5	23.3	19.6	3	12.5	23.3	19.6	3	12.5
R627	1.5	22.7	19.5	2	12.5	22.7	19.5	2	12.5
R628	1.5	24.3	20.0	3	12.7	24.2	20.0	3	12.7
R629	1.5	22.4	19.4	2	12.4	22.4	19.4	2	12.4
R630	1.5	25.6	20.2	3	12.9	25.7	20.2	3	12.9
R631	1.5	30.7	21.5	5	13.6	30.8	21.6	5	13.6
R632	1.5	22.6	19.5	2	12.4	22.6	19.5	2	12.4
R636	1.5	27.6	20.5	4	13.0	26.7	20.5	4	13.0
R639	1.5	28.3	20.7	4	13.1	27.2	20.6	4	13.1
R642	1.5	28.4	20.7	4	13.1	27.5	20.7	4	13.1
R643	1.5	31.6	21.3	5	13.5	30.2	21.3	5	13.5
R712	1.5	25.5	20.0	3	12.7	25.4	20.0	3	12.7
R713	1.5	25.6	20.0	3	12.7	25.4	20.0	3	12.7
R714	1.5	27.9	20.5	4	13.0	27.6	20.5	4	13.0
R716	1.5	23.0	19.6	3	12.5	22.9	19.6	3	12.4
R718	1.5	23.8	19.8	3	12.6	23.8	19.8	3	12.6
R721	1.5	22.7	19.5	2	12.4	22.6	19.5	2	12.4
R722	1.5	24.4	19.9	3	12.7	24.4	19.9	3	12.6
R723	1.5	22.2	19.4	2	12.4	22.1	19.4	2	12.3
R728	1.5	22.1	19.4	2	12.3	22.0	19.4	2	12.3

	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m³	Annual Mean PM _{2.5} (µg/m³)
R729	1.5	22.7	19.5	2	12.4	22.7	19.5	2	12.4
R730	1.5	22.5	19.5	2	12.4	22.5	19.5	2	12.4
R733	1.5	22.1	19.4	2	12.3	22.1	19.4	2	12.3
R734	1.5	22.0	19.4	2	12.3	22.0	19.4	2	12.3
R738	1.5	23.9	19.8	3	12.6	23.9	19.8	3	12.6
R741	1.5	22.1	19.4	2	12.3	22.1	19.4	2	12.3
R742	1.5	24.4	19.9	3	12.7	24.4	19.9	3	12.7
R744	1.5	22.1	19.4	2	12.3	22.1	19.4	2	12.3
R751	1.5	23.2	19.6	3	12.5	23.1	19.6	3	12.5
R753	1.5	23.2	19.6	3	12.5	23.2	19.6	3	12.5
R754	1.5	23.0	19.6	3	12.5	23.0	19.6	3	12.5
R758	1.5	23.7	19.8	3	12.6	23.7	19.8	3	12.6
R759	1.5	29.0	21.1	4	13.3	29.0	21.1	4	13.3
R760	1.5	23.4	19.7	3	12.5	23.4	19.7	3	12.5
R761	1.5	23.9	19.8	3	12.6	23.9	19.8	3	12.6
R764	1.5	23.6	19.7	3	12.5	23.6	19.7	3	12.5
R765	1.5	23.5	19.7	3	12.5	23.6	19.7	3	12.5
R766	1.5	25.0	20.1	3	12.7	25.2	20.1	3	12.8
R767	1.5	23.1	19.6	3	12.5	23.1	19.6	3	12.5
R770	1.5	23.8	19.8	3	12.6	23.8	19.8	3	12.6
R772	1.5	23.2	19.6	3	12.5	23.2	19.6	3	12.5
R773	1.5	23.7	19.8	3	12.6	23.7	19.8	3	12.6
R775	1.5	23.7	19.8	3	12.6	23.7	19.8	3	12.6
R776	1.5	23.9	19.8	3	12.6	23.9	19.8	3	12.6
R777	1.5	24.9	20.1	3	12.7	25.0	20.1	3	12.7
R778	1.5	23.5	19.7	3	12.5	23.6	19.7	3	12.5
R779	4.0	28.2	20.9	4	13.2	28.1	20.9	4	13.2
R787	1.5	26.6	20.7	4	13.1	26.7	20.7	4	13.1
R788	1.5	26.4	20.5	4	13.0	26.4	20.5	4	13.0
R791	1.5	37.6	23.3	8	14.6	37.6	23.3	8	14.6
R797	1.5	27.8	21.0	4	13.3	27.8	21.0	4	13.3
R798	1.5	28.7	21.2	5	13.4	28.7	21.2	5	13.4
R799	1.5	38.3	23.5	8	14.7	38.3	23.5	8	14.7
R800	4.0	29.8	21.3	5	13.4	31.1	21.3	5	13.5
R801	1.5	31.6	21.7	5	13.7	33.1	21.8	5	13.7
R802	1.5	31.5	21.7	5	13.7	31.8	21.8	5	13.7
R803	1.5	28.6	21.0	4	13.3	28.8	21.0	4	13.3
R973	1.5	23.4	19.7	3	12.5	23.5	19.7	3	12.5
R974	1.5	27.6	20.7	4	13.1	27.7	20.7	4	13.1
R975	1.5	22.5	19.5	2	12.4	22.5	19.5	2	12.4
R976	4.0	23.3	19.7	3	12.5	23.3	19.7	3	12.5
R977	1.5	34.2	22.4	6	14.1	34.0	22.3	6	14.0
R978	1.5	23.2	19.7	3	12.5	23.2	19.7	3	12.5

	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m³	Annual Mean PM _{2.5} (μg/m³)
R979	1.5	22.0	19.4	2	12.3	22.0	19.4	2	12.3
R980	1.5	22.9	19.6	3	12.5	22.9	19.6	3	12.5
R981	4.0	34.2	22.3	6	14.0	33.9	22.3	6	14.0
R982	1.5	24.2	19.9	3	12.6	24.1	19.9	3	12.6
R983	1.5	26.1	20.3	3	12.9	26.1	20.3	3	12.9
R984	1.5	21.7	19.3	2	12.3	21.7	19.3	2	12.3
R985	1.5	25.2	20.1	3	12.8	25.1	20.1	3	12.7
R986	1.5	25.3	20.1	3	12.8	25.4	20.1	3	12.8
R987	1.5	21.5	19.3	2	12.3	21.5	19.3	2	12.3
R988	1.5	23.7	19.8	3	12.6	23.7	19.7	3	12.6
R989	1.5	23.7	19.8	3	12.6	23.7	19.7	3	12.5
R990	1.5	23.6	19.7	3	12.5	23.5	19.7	3	12.5
R991	1.5	24.0	19.8	3	12.6	24.0	19.8	3	12.6
R992	1.5	21.7	19.3	2	12.3	21.7	19.3	2	12.3
R993	1.5	21.6	19.3	2	12.3	21.6	19.3	2	12.3
R994	1.5	24.0	19.8	3	12.6	23.9	19.8	3	12.6
R995	1.5	24.1	19.8	3	12.6	24.1	19.8	3	12.6
R996	1.5	25.0	20.0	3	12.7	25.1	20.1	3	12.7
R997	1.5	26.1	20.3	3	12.9	26.2	20.3	3	12.9
R998	1.5	25.1	20.1	3	12.7	25.2	20.1	3	12.7
R999	4.0	25.1	20.1	3	12.7	25.2	20.1	3	12.7
R1002	1.5	28.0	20.9	4	13.3	28.0	20.9	4	13.3
R1004	1.5	28.5	21.1	4	13.3	28.6	21.1	4	13.3
R1011	1.5	24.5	20.1	3	12.8	24.6	20.1	3	12.8
R1012	1.5	26.5	20.6	4	13.0	26.6	20.6	4	13.0
R1013	1.5	29.2	21.2	4	13.4	29.3	21.2	5	13.4
R1014	1.5	24.4	20.1	3	12.7	24.4	20.1	3	12.8
R1015	1.5	24.3	20.1	3	12.7	24.4	20.1	3	12.7
R1017	1.5	22.5	19.7	3	12.5	22.5	19.7	3	12.5
R1018	1.5	26.4	20.5	4	13.0	26.4	20.6	4	13.0
R1020	1.5	23.5	19.9	3	12.6	23.6	19.9	3	12.7
R1029	1.5	23.1	19.9	3	12.6	23.6	19.9	3	12.7
R1038	1.5	34.2	22.2	6	14.1	34.3	22.2	6	14.1
R1042	1.5	30.4	21.2	5	13.5	30.5	21.2	5	13.5
R1058	1.5	30.4	20.5	4	13.1	30.4	20.5	4	13.1
R1407	1.5	26.3	19.9	3	12.7	25.9	19.9	3	12.7
R1408	1.5	20.5	18.9	2	12.1	20.4	18.9	2	12.1
R1422	1.5	21.6	19.0	2	12.2	22.2	19.1	2	12.3
R1423	1.5	21.5	19.0	2	12.2	22.0	19.1	2	12.3
R1424	1.5	21.6	19.0	2	12.2	22.1	19.1	2	12.3
R1425	4.0	21.3	18.9	2	12.2	21.8	19.0	2	12.2
R1426	1.5	21.6	19.0	2	12.2	22.2	19.1	2	12.3
R1427	1.5	20.8	18.8	2	12.1	21.1	18.9	2	12.1

2021 Baseline	è
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	Madallad		2021 E	Baseline		2021 With Scheme					
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)		
R1428	1.5	19.8	18.6	2	12.0	19.9	18.6	2	12.0		
R1429	1.5	19.8	18.6	2	12.0	19.9	18.6	2	12.0		
R1430	1.5	19.8	18.6	2	12.0	19.9	18.6	2	12.0		
R1431	1.5	19.7	18.6	2	12.0	19.8	18.6	2	12.0		
R1432	1.5	19.7	18.6	2	12.0	19.8	18.6	2	12.0		
R1433	1.5	19.8	18.6	2	12.0	19.9	18.6	2	12.0		
R1434	4.0	19.7	18.6	2	12.0	19.8	18.6	2	12.0		
R1435	1.5	22.3	19.1	2	12.3	22.3	19.1	2	12.3		
R1436	1.5	22.4	19.2	2	12.3	22.4	19.2	2	12.3		
R1437	1.5	22.5	19.2	2	12.3	22.6	19.2	2	12.3		
R1438	1.5	24.1	19.6	3	12.5	24.1	19.6	3	12.5		
R1439	1.5	20.0	18.6	2	12.0	20.0	18.6	2	12.0		
R1440	1.5	23.1	19.4	2	12.5	20.7	18.9	2	12.2		
R1441	4.0	30.3	21.2	5	13.5	25.3	19.3	2	12.4		
R1442	1.5	24.5	19.7	3	12.7	21.8	18.9	2	12.2		
R1443	6.5	42.3	24.6	11	15.3	42.4	24.6	11	15.3		
R1444	1.5	46.1	25.7	13	16.0	46.1	25.7	13	16.0		
R1445	4.0	42.2	24.5	11	15.3	42.2	24.5	11	15.3		
R1446	1.5	42.3	24.6	11	15.3	42.3	24.6	11	15.3		
M12	1.5	20.4	19.1	2	12.2	20.1	19.1	2	12.2		
S21	1.5	21.0	18.8	2	12.1	21.0	18.8	2	12.1		
S22	1.5	34.0	22.6	7	14.3	34.1	22.6	7	14.3		
S23	1.5	24.5	19.6	3	12.6	24.5	19.6	3	12.6		
S24	1.5	23.0	19.3	2	12.4	23.1	19.3	2	12.4		
S25	1.5	26.5	20.8	4	13.2	26.9	20.9	4	13.2		
S26	1.5	21.0	18.9	2	12.1	21.2	18.9	2	12.1		
S27	1.5	21.7	19.5	2	12.4	21.7	19.5	2	12.4		
S28	1.5	21.5	19.4	2	12.4	21.5	19.4	2	12.4		
S29	1.5	20.3	19.2	2	12.2	20.4	19.2	2	12.2		
S30	1.5	21.9	19.5	2	12.4	21.8	19.5	2	12.4		
S31	1.5	20.6	19.2	2	12.3	20.6	19.2	2	12.3		
S32	1.5	22.0	19.1	2	12.3	22.0	19.1	2	12.3		
S33	1.5	21.9	19.0	2	12.2	21.9	19.0	2	12.2		
S34	1.5	21.6	19.0	2	12.2	21.4	18.9	2	12.2		
S35	1.5	20.4	18.2	1	11.8	20.3	18.1	1	11.8		
S36	1.5	23.1	18.8	2	12.1	23.3	18.8	2	12.2		
S37	1.5	25.0	20.2	3	12.9	25.3	20.3	3	12.9		
S38	1.5	19.0	17.8	1	11.6	19.0	17.8	1	11.6		
S39	1.5	25.4	19.4	2	12.5	25.6	19.4	2	12.5		
S40	1.5	18.4	17.7	1	11.5	18.4	17.7	1	11.5		
S41	1.5	17.9	17.5	1	11.4	17.9	17.5	1	11.4		
S42	1.5	17.7	17.5	1	11.4	17.7	17.5	1	11.4		
S43	1.5	19.3	17.9	1	11.6	19.3	17.9	1	11.6		

			2021 E	Baseline		2021 With Scheme				
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	
S44	1.5	18.0	17.6	1	11.4	18.0	17.6	1	11.4	
S45	1.5	27.3	20.3	3	13.0	27.6	20.3	3	13.0	
S46	1.5	28.2	20.7	4	13.2	28.3	20.7	4	13.2	
S47	1.5	19.0	17.8	1	11.6	18.9	17.8	1	11.6	
S48	1.5	19.0	17.8	1	11.6	19.0	17.8	1	11.6	
S49	1.5	19.9	18.0	1	11.7	19.9	18.0	1	11.7	
S50	1.5	21.6	18.9	2	12.2	21.6	18.9	2	12.2	
S51	1.5	34.1	22.2	6	14.1	34.2	22.2	6	14.1	
S52	1.5	19.4	17.9	1	11.6	19.4	17.9	1	11.6	
S53	1.5	26.9	20.7	4	13.1	27.0	20.7	4	13.1	
S54	1.5	27.1	20.7	4	13.1	27.1	20.7	4	13.1	
S56	1.5	22.4	19.0	2	12.2	22.6	19.1	2	12.2	
S57	1.5	21.2	18.8	2	12.0	21.3	18.8	2	12.0	
S58	1.5	22.3	19.0	2	12.2	22.7	19.1	2	12.2	
S59	1.5	22.3	19.0	2	12.2	22.6	19.1	2	12.2	
S60	1.5	22.3	19.0	2	12.2	22.3	19.0	2	12.2	
S61	1.5	23.3	19.8	3	12.6	23.3	19.8	3	12.6	
S62	1.5	24.4	19.5	2	12.5	24.5	19.5	2	12.5	
S63	1.5	25.8	19.8	3	12.6	25.7	19.8	3	12.6	
S64	1.5	22.1	19.0	2	12.2	22.1	19.0	2	12.2	
S65	1.5	38.0	22.9	7	14.4	39.5	23.1	8	14.5	
S66	1.5	25.4	20.1	3	12.8	25.2	20.1	3	12.8	
S67	1.5	23.5	19.7	3	12.5	23.4	19.7	3	12.5	
S68	1.5	24.5	19.9	3	12.7	24.4	19.9	3	12.6	
S70	1.5	25.1	20.1	3	12.7	25.0	20.0	3	12.7	
S107	1.5	22.9	19.6	3	12.5	22.9	19.6	3	12.5	
S108 S109	1.5 1.5	30.8 22.3	21.5 19.4	5 2	13.6 12.4	30.7 22.3	21.5 19.4	5 2	13.6 12.4	
S109 S127	1.5	19.5	18.5	2	12.4	19.2	18.5	1	11.9	
S128	1.5	29.9	21.1	4	13.4	25.0	19.2	2	12.4	
S129	1.5	22.5	19.3	2	12.4	21.2	19.0	2	12.2	
S130	1.5	21.6	19.0	2	12.2	19.6	18.6	2	12.0	
S131	1.5	19.7	17.9	1	11.6	19.5	17.8	1	11.5	
S132	1.5	20.7	18.1	1	11.7	19.5	17.8	1	11.5	
S133	1.5	20.4	18.7	2	12.1	19.4	18.5	2	12.0	
S134	1.5	22.6	19.4	2	12.4	22.7	19.5	2	12.5	
S135	1.5	20.1	18.9	2	12.1	20.3	18.9	2	12.1	
S136	1.5	20.7	19.0	2	12.2	20.8	19.0	2	12.2	
S137	1.5	20.7	19.0	2	12.2	20.8	19.0	2	12.2	
S138a	1.5	20.9	19.0	2	12.2	21.0	19.1	2	12.2	
S138b	1.5	20.9	19.1	2	12.2	21.0	19.1	2	12.2	
S139	1.5	21.0	19.1	2	12.2	21.1	19.1	2	12.2	
S140a	1.5	19.2	18.6	2	12.0	19.1	18.6	2	12.0	

	Modelled		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Height (m)	Annual Mean NO₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)
S140b	1.5	19.2	18.6	2	12.0	19.2	18.6	2	12.0
S141a	1.5	19.1	18.6	2	12.0	19.0	18.6	2	12.0
S141b	1.5	18.4	18.3	1	11.7	18.3	18.3	1	11.7
S141c	1.5	18.7	18.5	2	11.9	18.7	18.5	2	11.9
S142	1.5	18.4	18.3	1	11.7	18.3	18.3	1	11.7
S143a	1.5	19.8	18.6	2	11.9	19.4	18.5	2	11.9
S143b	1.5	19.8	18.6	2	11.9	19.4	18.5	2	11.9
S144	1.5	18.7	18.4	1	11.8	18.6	18.3	1	11.8
S145	1.5	20.2	18.7	2	12.0	20.2	18.7	2	12.0
S146	1.5	18.9	18.6	2	11.9	18.9	18.6	2	11.9
S147	1.5	19.4	18.7	2	12.0	19.5	18.7	2	12.0
S148	1.5	19.5	18.7	2	12.0	19.6	18.8	2	12.0
S149	1.5	19.0	18.6	2	12.0	19.0	18.6	2	12.0
S150	1.5	19.4	18.7	2	12.0	19.4	18.7	2	12.0
S151	1.5	19.9	18.9	2	12.1	19.9	18.9	2	12.1
S152	1.5	22.8	19.6	3	12.6	22.8	19.6	3	12.6
S153	1.5	23.0	19.7	3	12.6	23.1	19.7	3	12.6
S154	1.5	21.6	19.3	2	12.4	21.7	19.4	2	12.4
S155	1.5	23.7	19.7	3	12.6	23.9	19.7	3	12.7
S156	1.5	22.3	18.5	1	11.9	22.9	18.6	2	12.0
S157a	1.5	22.2	19.2	2	12.3	22.1	19.1	2	12.3
S157b	1.5	22.0	19.1	2	12.3	21.9	19.1	2	12.3
S158	1.5	21.3	18.9	2	12.2	21.2	18.9	2	12.2
S159	1.5	20.7	18.2	1	11.8	20.5	18.1	1	11.8
S160	1.5	21.9	19.1	2	12.2	21.8	19.0	2	12.2
S161	1.5	19.9	18.9	2	12.1	20.0	18.9	2	12.1
S162	1.5	22.8	18.7	2	12.1	23.0	18.8	2	12.1
S163	1.5	18.8	17.8	1	11.5	18.8	17.8	1	11.5
S164	1.5	21.1	18.9	2	12.1	21.0	18.9	2	12.1
S165	1.5	21.9	19.2	2	12.3	21.8	19.2	2	12.3
S166	1.5	25.5	20.2	3	12.9	25.6	20.2	3	12.9
S167	1.5	22.2	19.2	2	12.3	22.1	19.1	2	12.3
S168	1.5	23.3	19.8	3	12.6	23.3	19.8	3	12.6
S169	1.5	23.0	19.7	3	12.6	23.0	19.7	3	12.6
S170	1.5	19.1	18.6	2	12.0	19.1	18.6	2	12.0
S171	1.5	18.4	19.0	2	12.3	18.4	19.0	2	12.3
S172	1.5	18.3	19.0	2	12.3	18.4	19.0	2	12.3
S173	1.5	20.8	19.1	2	12.2	20.8	19.1	2	12.2
S174	1.5	19.7	18.8	2	12.1	19.7	18.8	2	12.1
S175	1.5	22.0	19.4	2	12.4	22.0	19.4	2	12.4
S176	1.5	19.4	17.9	1	11.6	19.3	17.9	1	11.6
S177	1.5	20.3	18.9	2	12.2	20.3	18.9	2	12.1
S178	1.5	19.9	18.8	2	12.1	19.9	18.8	2	12.1

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	Madallad		2021 E	Baseline			2021 Wit	h Scheme	
Receptor ID	Modelled Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m³	Annual Mean PM _{2.5} (µg/m³)
S179	1.5	18.8	17.8	1	11.5	18.7	17.7	1	11.5
S180	1.5	19.0	17.8	1	11.6	18.9	17.8	1	11.6
S181	1.5	20.4	18.7	2	12.1	20.5	18.7	2	12.1
S182	1.5	19.8	18.6	2	12.0	19.7	18.6	2	12.0
S183	1.5	19.9	18.6	2	12.0	19.9	18.6	2	12.0
S184	1.5	21.4	18.9	2	12.2	21.3	18.9	2	12.2
S185	1.5	24.9	19.8	3	12.7	23.9	19.6	3	12.6
S186	1.5	23.5	19.6	3	12.6	23.3	19.6	3	12.6
S187	1.5	29.3	21.3	5	13.6	29.7	21.4	5	13.6
S188	1.5	27.3	20.2	3	12.9	28.1	20.4	3	13.0
S189	1.5	22.9	19.2	2	12.3	23.0	19.2	2	12.3
S190	1.5	21.6	18.9	2	12.1	21.7	18.9	2	12.1
S191	1.5	21.8	18.9	2	12.1	21.9	18.9	2	12.1
S192	1.5	21.8	18.9	2	12.1	21.7	18.9	2	12.1
S193	1.5	20.7	18.4	1	11.8	20.5	18.4	1	11.8
S194	1.5	20.5	18.6	2	11.9	20.3	18.6	2	11.9
S195	1.5	20.3	18.6	2	11.9	20.2	18.5	2	11.9
S196	1.5	20.4	18.6	2	11.9	20.3	18.6	2	11.9
S197	1.5	27.5	20.0	3	12.8	27.8	20.1	3	12.8
S198	1.5	19.5	17.8	1	11.5	19.3	17.8	1	11.5
S199	1.5	19.8	17.9	1	11.6	19.4	17.8	1	11.5
S200	1.5	19.5	17.8	1	11.5	19.3	17.8	1	11.5
S201	1.5	22.4	18.8	2	12.1	22.4	18.8	2	12.1
S202	1.5	23.4	19.1	2	12.2	22.7	18.9	2	12.1
S203	1.5	22.0	18.7	2	12.0	21.6	18.6	2	12.0
S204	1.5	19.2	18.5	2	11.9	19.2	18.5	2	11.9
S205	1.5	19.9	18.7	2	12.0	19.8	18.7	2	12.0
S206	1.5	19.4	18.0	1	11.6	19.2	18.0	1	11.6
S207	1.5	26.8	20.6	4	13.1	26.8	20.7	4	13.1
S208	1.5	22.1	19.1	2	12.2	22.5	19.2	2	12.3
S209	1.5	20.7	18.9	2	12.1	20.6	18.9	2	12.1
R1538	1.5	22.4	19.4	2	12.4	22.5	19.5	2	12.5
R1539	1.5	23.5	19.7	3	12.5	23.4	19.7	3	12.5
R1540	1.5	25.6	20.3	3	12.9	25.4	20.3	3	12.9
R1541	4.0	35.6	23.4	8	14.7	35.3	23.3	8	14.7
R1542	1.5	21.8	18.4	1	11.9	20.2	18.0	1	11.7
R1543	4.0	23.1	19.4	2	12.5	21.1	19.0	2	12.2
R1544	1.5	21.0	18.9	2	12.2	20.4	18.7	2	12.1
R1545	1.5	23.2	19.7	3	12.5	23.1	19.6	3	12.5
R1546	1.5	23.1	19.6	3	12.5	23.1	19.6	3	12.5
R1547	1.5	20.0	18.8	2	12.1	20.0	18.8	2	12.1
R1548	1.5	31.6	21.7	5	13.7	31.8	21.8	5	13.7
R1549	1.5	29.2	21.5	5	13.6	29.5	21.6	5	13.7

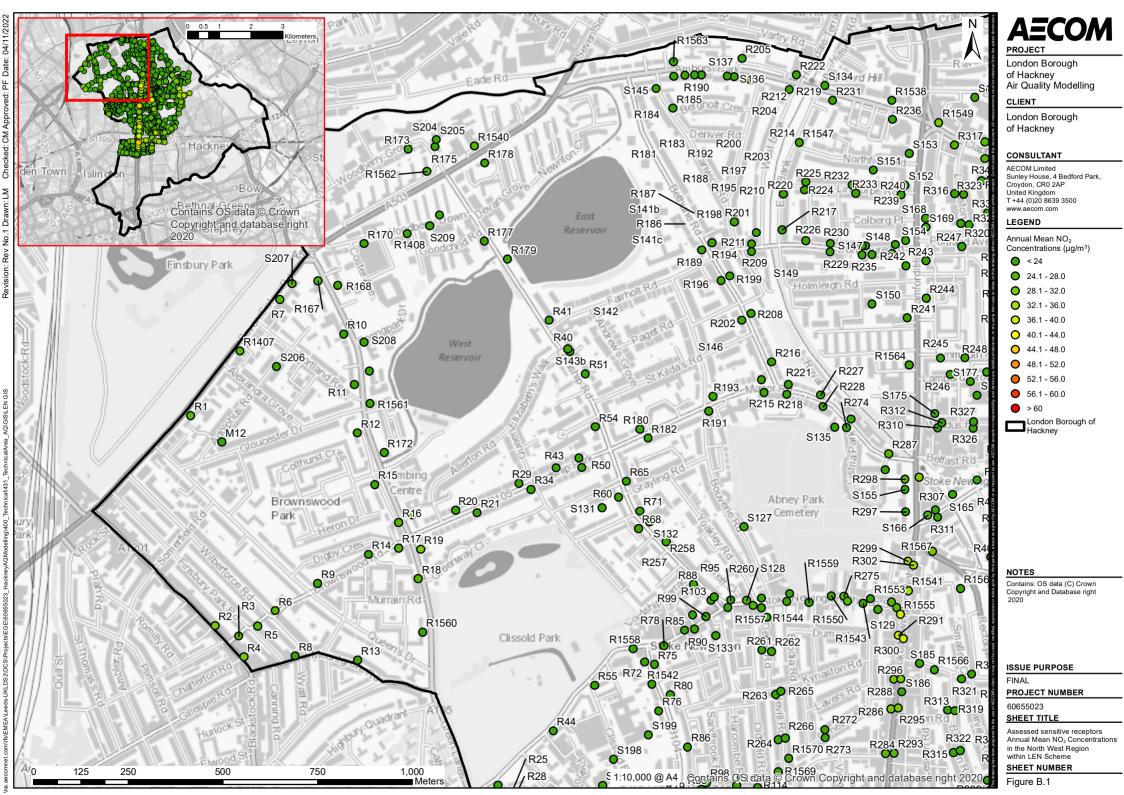
2021 Baseline	2021 With	Scheme

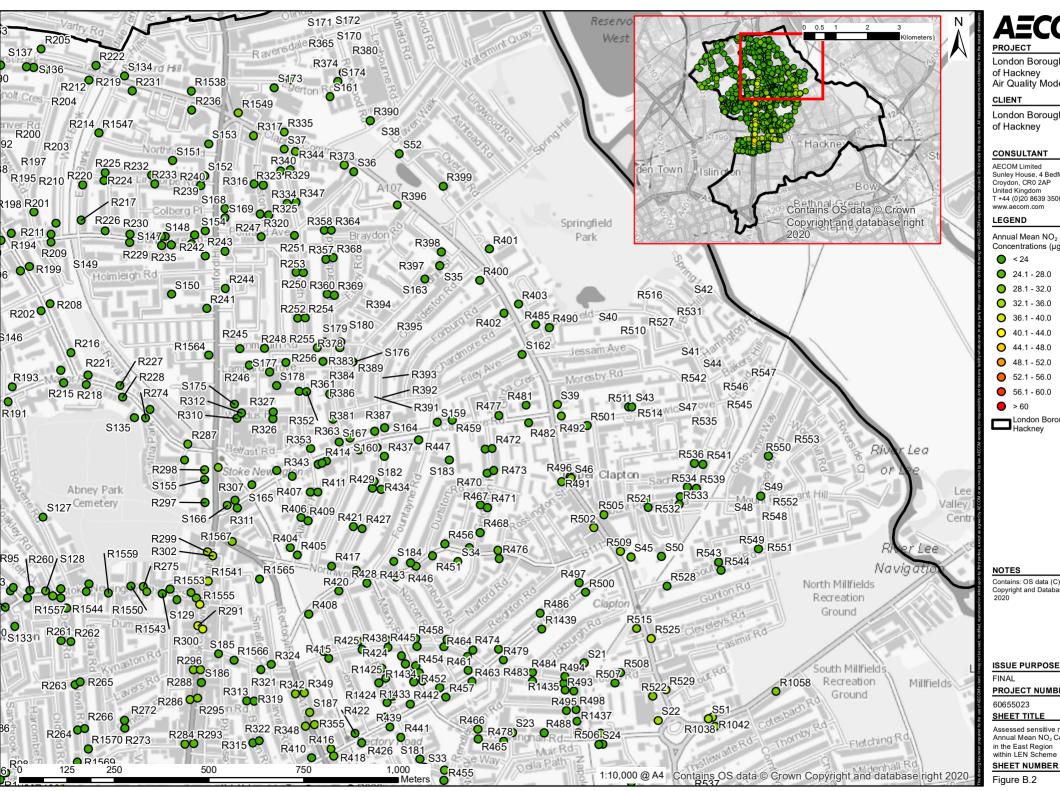
	Modelled								
Receptor ID	Height (m)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (μg/m³)	Annual Mean NO ₂ (μg/m³)	Annual Mean PM ₁₀ (μg/m³)	No. of Days PM ₁₀ >50 μg/m ³	Annual Mean PM _{2.5} (µg/m³)
R1550	4.0	30.8	21.3	5	13.6	23.9	19.7	3	12.6
R1551	1.5	24.9	19.4	2	12.4	25.0	19.4	2	12.4
R1552	1.5	31.7	21.7	5	13.7	32.0	21.8	5	13.7
R1553	4.0	23.5	19.5	2	12.5	21.4	19.0	2	12.3
R1554	1.5	21.6	18.3	1	11.8	21.3	18.2	1	11.8
R1555	4.0	41.4	24.8	11	15.5	39.3	24.2	10	15.2
R1556	1.5	27.7	19.7	3	12.6	27.5	19.6	3	12.6
R1557	1.5	22.2	19.2	2	12.3	20.9	18.8	2	12.1
R1558	1.5	22.2	18.5	1	11.9	20.4	18.1	1	11.7
R1559	4.0	21.6	19.0	2	12.3	20.2	18.7	2	12.1
R1560	1.5	22.2	18.4	1	11.9	23.0	18.6	2	12.0
R1561	1.5	22.5	19.2	2	12.3	22.9	19.2	2	12.3
R1562	1.5	24.2	19.9	3	12.7	24.2	19.9	3	12.7
R1563	1.5	21.1	19.1	2	12.2	21.2	19.1	2	12.3
R1564	1.5	23.5	19.8	3	12.7	23.6	19.9	3	12.7
R1565	1.5	22.4	19.3	2	12.4	22.3	19.3	2	12.4
R1566	1.5	23.0	19.3	2	12.4	22.4	19.2	2	12.4
R1567	1.5	28.9	21.3	5	13.5	29.0	21.3	5	13.6
R1568	1.5	22.2	19.0	2	12.2	22.4	19.0	2	12.2
R1569	1.5	19.5	18.5	2	12.0	19.3	18.5	1	12.0
R1570	1.5	19.6	18.5	2	12.0	19.3	18.5	1	12.0
R1571	1.5	25.0	20.0	3	12.8	25.2	20.1	3	12.9

Appendix B Receptor Mapping

Table B.1: Appendix B Table of Figures

Figure	Description
B.1	Sensitive Receptors in the North West of the Study Area – Annual mean NO ₂ Concentrations in the With Scheme Scenario
B.2	Sensitive Receptors in the East of the Study Area – Annual mean NO ₂ Concentrations in the With Scheme Scenario
B.3	Sensitive Receptors in the Central Study Area – Annual mean NO ₂ Concentrations in the With Scheme Scenario
B.4	Sensitive Receptors in the South of the Study Area – Annual mean NO ₂ Concentrations in the With Scheme Scenario
B.5	Sensitive Receptors in the North West of the Study Area – Annual mean NO ₂ Concentration Changes as a Result of the Scheme
B.6	Sensitive Receptors in the East of the Study Area – Annual mean NO₂ Concentration Changes as a Result of the Scheme
B.7	Sensitive Receptors in the Central Study Area – Annual mean NO₂ Concentration Changes as a Result of the Scheme
B.8	Sensitive Receptors in the South of the Study Area – Annual mean NO₂ Concentration Changes as a Result of the Scheme





London Borough

CONSULTANT

Sunley House, 4 Bedford Park Crovdon, CR0 2AP United Kingdom T+44 (0)20 8639 3500

Annual Mean NO2 Concentrations (µg/m3)

- 24.1 28.0
- 28.1 32.0
- 32.1 36.0
- 36.1 40.0

- 48.1 52.0
- 52.1 56.0
- 56.1 60.0

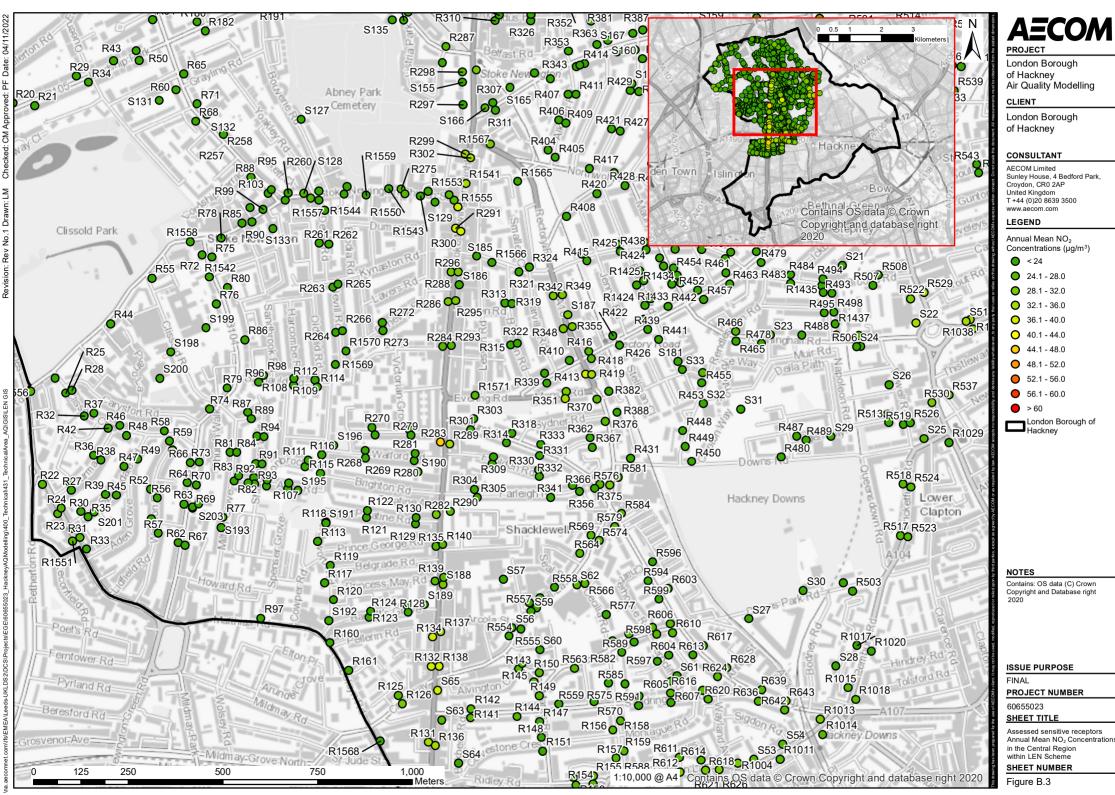
London Borough of Hackney

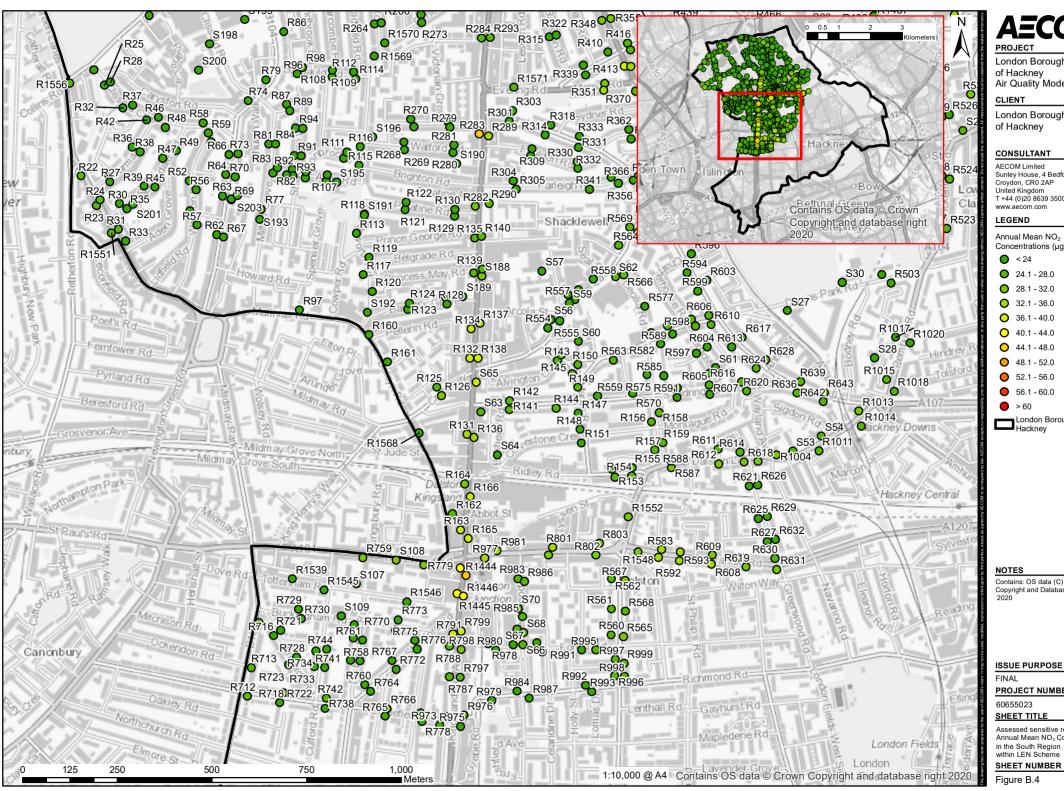
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ISSUE PURPOSE

PROJECT NUMBER

Assessed sensitive receptors Annual Mean NO2 Concentrations in the East Region within LEN Scheme





I ondon Borough

CONSULTANT

Sunley House, 4 Bedford Park Crovdon, CR0 2AP United Kinadom T+44 (0)20 8639 3500

Annual Mean NO₂ Concentrations (µg/m³)

- 24.1 28.0
- 28.1 32.0
- 32.1 36.0
- 36.1 40.0
- 40.1 44.0

- 52.1 56.0
- London Borough of Hackney

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PROJECT NUMBER

Assessed sensitive receptors Annual Mean NO2 Concentrations in the South Region within LEN Scheme



London Borough

AECOM Limited Sunley House, 4 Bedford Park Crovdon, CR0 2AP United Kingdom T +44 (0)20 8639 3500

Change in Annual Mean

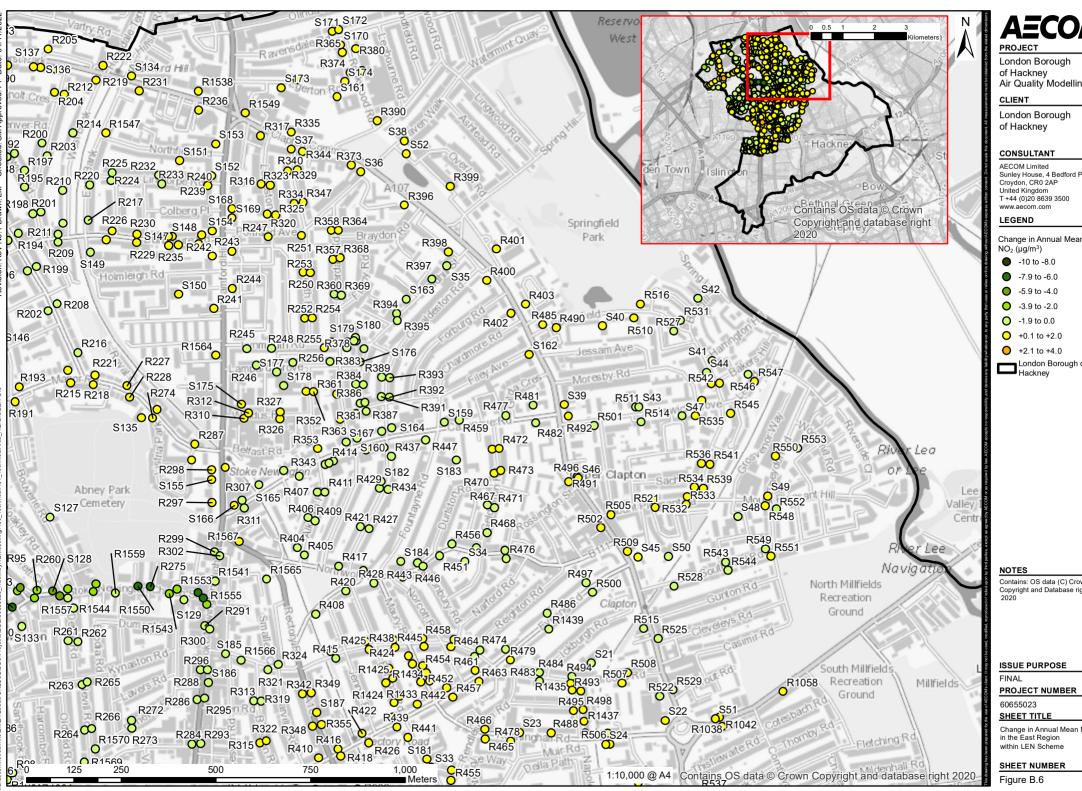
- -10 to -8.0
- -7.9 to -6.0
- -5.9 to -4.0
- -3.9 to -2.0
- -1.9 to 0.0
- +0.1 to +2.0
- +2.1 to +4.0
- London Borough of

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ISSUE PURPOSE

PROJECT NUMBER

Change in Annual Mean NO2 Concentrations in the North West Region within LEN Scheme



London Borough

CONSULTANT

Sunley House, 4 Bedford Park Croydon, CR0 2AP United Kinadom T+44 (0)20 8639 3500

NO₂ (µg/m³)

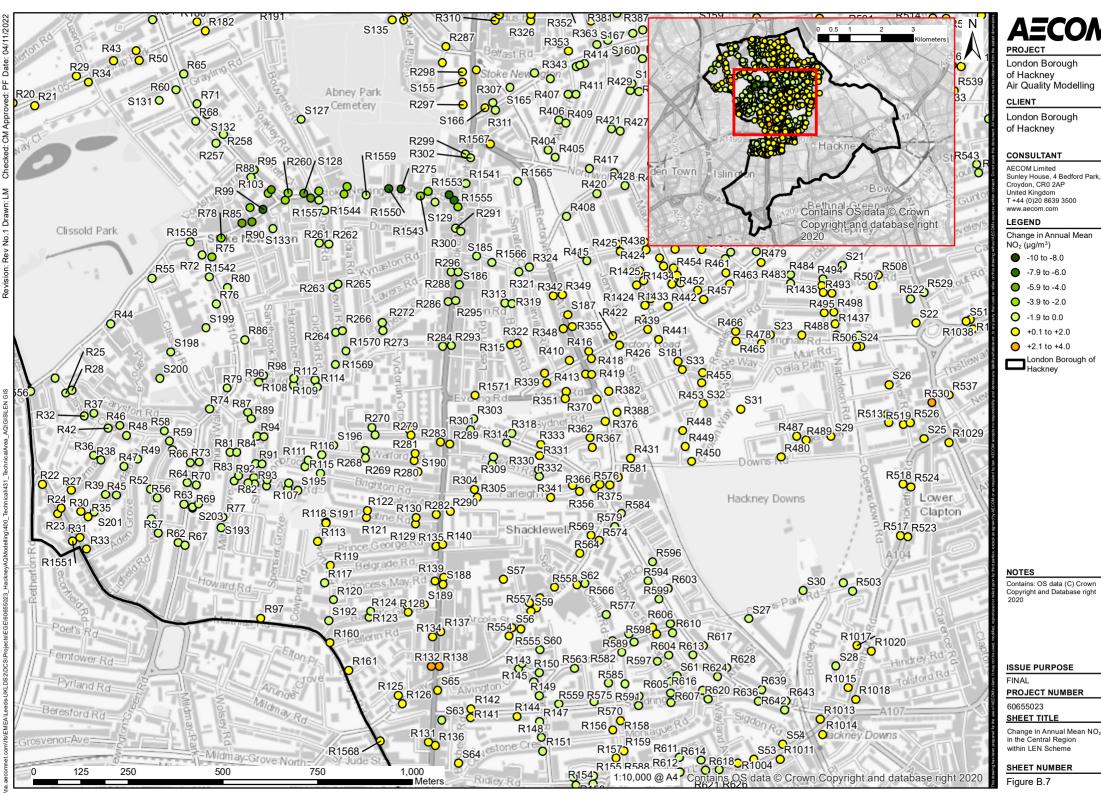
- -10 to -8.0
- -7.9 to -6.0
- -5.9 to -4.0
- -3.9 to -2.0
- -1.9 to 0.0
- +0.1 to +2.0
- +2.1 to +4.0
- London Borough of

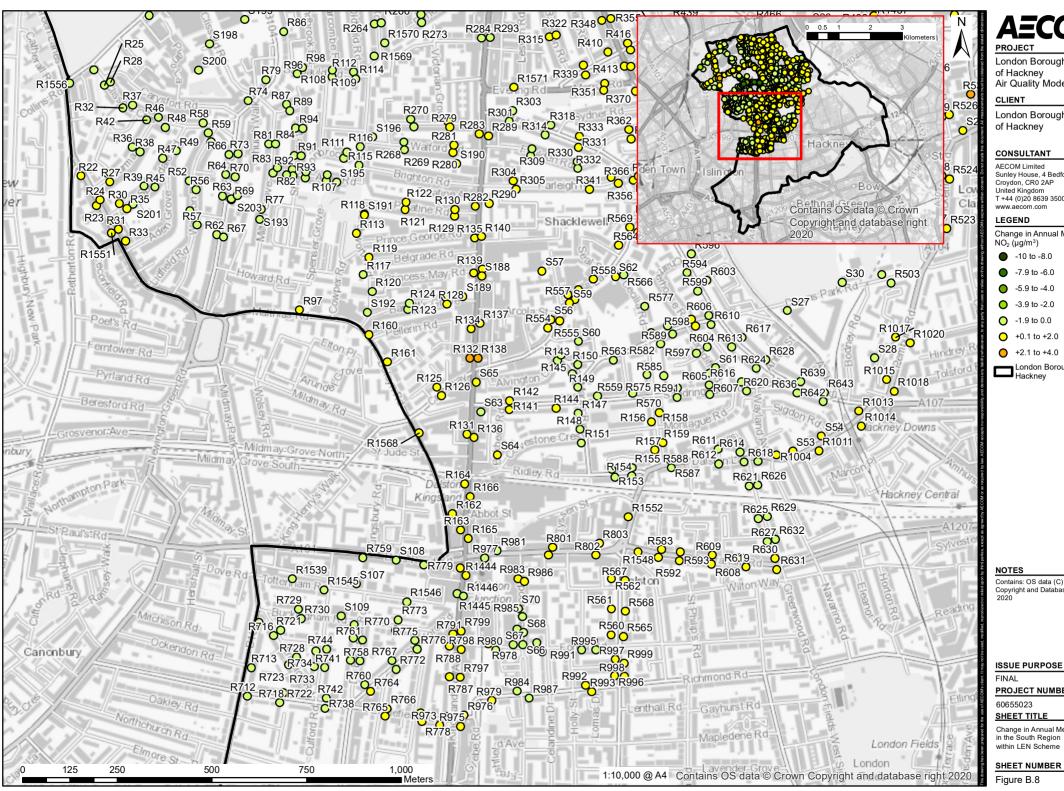
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PROJECT NUMBER

Change in Annual Mean NO2 in the East Region within LEN Scheme

SHEET NUMBER





I ondon Borough

CONSULTANT

Sunley House 4 Redford Park Crovdon, CR0 2AP United Kinadom T+44 (0)20 8639 3500

Change in Annual Mean

- -10 to -8.0
- -5.9 to -4.0
- -3.9 to -2.0
- -1.9 to 0.0
- +0.1 to +2.0
- +2.1 to +4.0
- London Borough of

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PROJECT NUMBER

Change in Annual Mean NO2 in the South Region within LEN Scheme

SHEET NUMBER

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