

Proposed Residential Development: Land South of Cowm Top Lane, Rochdale

Air Quality Assessment: Addendum

1. Background

- 1.1. An outline planning application (ref: 21/01349/OUT) has been submitted by GLP Ltd and Barratt Homes to Rochdale Metropolitan Borough Council (RMBC) for a residential development at land to the south of Cowm Top Lane in Rochdale. Proposals are for the delivery of up to 550 residential units with associated access.
- 1.2. The application was supported by an Air Quality Assessment (AQA) prepared by Smith Grant LLP (SGP)¹ (referred to hereafter as the 'SGP 2021 AQA'). The SGP 2021 AQA included a construction dust assessment and vehicle emissions assessment. The vehicle emissions assessment incorporated detailed atmospheric modelling using ADMS-Roads based on predicted 'with' and 'without' development traffic flows on the local road network considered within the transport assessment study area and location of sensitive receptors.
- 1.3. A detailed planning application has subsequently been submitted to RMBC in relation to the proposed development (ref: 22/01190/FUL). This included for a reduction in the proposed number of residential units from 'up to 550' to 'up to 495'.
- 1.4. The 2022 detailed application was supported by an Air Quality Assessment: Addendum prepared by SGP² (referred to hereafter as the 'SGP 2022 AQA Addendum'). The Addendum comprised a review of any updates and changes in background air quality information along with consideration of any changes to the proposed layout plans and supporting transport information that affected the originally submitted 2021 AQA. The SGP 2022 AQA Addendum should be read in conjunction with the SGP 2021 AQA; it did not replace the original AQA.
- 1.5. The outline and subsequent detailed applications are currently awaiting determination. However, a revised layout is now proposed. This includes for a further reduction in the proposed number of residential units from 'up to 495' to 'up to 445'.
- 1.6. Accordingly, SGP has therefore reviewed both the SGP 2021 AQA and SGP 2022 AQA Addendum to identify any changes or revisions that may be required in relation to the revised layout. As previously this comprised a review of any updates and changes in background air quality information along with consideration of any changes to the proposed layout plans and supporting transport information that affected the previously submitted reports.
- 1.7. For ease this revised Addendum replaces the SGP 2022 AQA Addendum but does not replace the SGP 2021 AQA which should be read in conjunction with.

¹ Smith Grant LLP, Proposed Residential Development, Cowm Top Lane, Rochdale, Air Quality Assessment, for GLP Ltd and Barratt Homes, August 2021, ref: R2392B-R01-v5

² Smith Grant LLP, Proposed Residential Development, Cowm Top Lane, Rochdale, Air Quality Assessment: Addendum, for GLP Ltd and Barratt Homes, August 2022, ref: R2392C-R01-v2

2. Changes in Air Quality Assessment Legislation and Guidance

National Planning Policy Framework

- 2.1. The National Planning Policy Framework (NPPF)³ continues to set out the Government's planning policies for England and how these are expected to be applied. The NPPF has been revised since the SGP 2021 AQA. However, these revisions do not substantially affect how local air quality is considered in the planning regime or affect the original assessment and conclusions.

Local Policy

- 2.2. Since the SGP 2021 AQA the **Places for Everyone: Joint Development Plan** has been adopted (adopted 21st March 2024). This details strategic policies and proposals that are relevant to nine of the Greater Manchester Councils. The Plan includes policy JP-S 5: Clean Air which specifies a range of measures to be taken by councils to support improvements in air quality, including that planning applications should be determined in accordance with the most recent guidance (or successor guidance) published by the IAQM.
- 2.3. The adopted PpE includes a policy allocation for the Site itself, allocation 23. This policy states that: *"Development of the Site will be required to [...] incorporate appropriate noise and air quality mitigation along the M62 and A627(M) motorway corridors."*
- 2.4. The GMCA continues to work with government to develop a Clean Air Plan to reduce NO₂ levels to meet legal limits.
- 2.5. No changes to local planning policy have been identified that affect the original assessment and conclusions.

2023 Air Quality Strategy

- 2.6. In April 2023 the UK Government published the 2023 Air Quality Strategy (2023 AQS) fulfilling the statutory requirement to set out air quality standards, objectives and measures for improving ambient air quality every 5 years. The 2023 AQS sets out a framework to enable local authorities to contribute to long-term air quality goals, and sets out air quality standards, objectives and measures for improving ambient air quality. Previously established standards and objectives for nitrogen dioxide (NO₂), nitrogen oxides (NO_x) and particulate matter of less than 10 µm aerodynamic diameter (PM₁₀) remain as detailed and assessed in the SGP 2021 AQA. However, the 2023 AQS also included new standards for fine particulate matter (PM_{2.5}) as have been established under the Environment Act 2021 and the Environmental Targets (Fine Particulate Matter)(England) Regulations 2023.
- 2.7. The existing and future targets for PM_{2.5} are summarised below in Table 1:

Table 1: Annual Mean Concentrations Targets for PM_{2.5}

	AQAL	Comment
Existing	20 µg/m ³ as an annual mean	Existing standard
Future	12 µg/m ³ as an annual mean	Interim target to be met by 2028
	10 µg/m ³ as an annual mean	Legally binding target to be met by 20240

- 2.8. The responsibility for meeting the new PM_{2.5} targets remains with national government although local authorities have a role in delivering reductions in PM_{2.5}. At the time of

³ National Planning Policy Framework, Department for levelling Up, Housing and Communities, issued 27 March 2021, last updated 20 December 2023

preparation of this Addendum guidance on how the new PM_{2.5} targets are to be integrated into the planning system is awaited⁴.

Revised Defra LAQM Guidance

- 2.9. As noted in the SGP 2022 AQA Addendum, the SGP 2021 AQA incorrectly referred to the most up to date Defra, Local Air Quality Management (LAQM), Technical Guidance at the time of preparation of that AQA as being that issued in 2016, whereas a revised version has been issued in April 2021⁵. This revised version did not however affect the air quality assessment methodology or information that had been presented in the SGP 2021 AQA.
- 2.10. The LAQM Technical Guidance has since been further revised in August 2022⁶, in conjunction with a revised version of the overarching Policy Guidance⁷. The changes were primarily aimed at strengthening the LAQM framework to enable greater action on air pollution. These revised versions do not specifically affect the air quality assessment methodology as presented in the SGP 2021 AQA.

Revised Institute of Air Quality Management (IAQM) Guidance

- 2.11. The IAQM has issued updated guidance on the assessment of dust from demolition and construction⁸ since the SGP 2022 AQA Addendum. One of the key changes in the guidance is a reduction of the dust assessment screening distance from 350m to 250m for human receptors. However, given the presence of residential development to the west of the Site this does not affect the dust assessment as presented in the SGP 2021 AQA. The updated guidance does not substantially affect the outcome of the original assessment.
- 2.12. There have not been any other changes or updates to the air quality legislation and guidance referred to in the SGP 2021 AQA. There are not therefore any revisions or changes required to the assessment methodology employed. Further consideration of PM_{2.5} is however presented below in Section 5.

3. Proposed Development

- 3.1. The outline and subsequent detailed applications included for main vehicular access from an extension to Cowm Top Lane to the north. The detailed application included the submission of detailed layout plans along with a reduction of proposed units from 'up to 550' to 'up to 495'. All proposed access remains as per the outline application and as assessed in the SGP 2021 AQA.
- 3.2. The principal change of relevance to this Addendum is the reduction in residential units from 'up to 550' as assessed in the SGP 2021 AQA to 'up to 445'. Detailed layout plans depicting the new reduced layout are provided in Appendix A.
- 3.3. The revised layout does not involve the introduction of residential dwellings closer to the A627(M) or M62 than previously assessed and considered in the SGP 2021 AQA.

⁴ Department for Levelling Up, Housing and Communities, Planning Newsletter, Message from Chief Planner, 3rd March 2023

⁵ Department for Environment, Food and Rural Affairs, Local Air Quality Management, Technical Guidance (TG16), April 2021

⁶ Defra, Local Air Quality Management, Technical Guidance (TG22), August 2022

⁷ Defra, Local Air Quality Management, Policy Guidance (PG16), August 2022

⁸ Institute of Air Quality Management (IAQM), Guidance on the assessment of dust from demolition and construction v2.2, January 2024.

4. Baseline Conditions and Background Air Quality

Site Setting

- 4.1. SGP is unaware of any changes to the general site setting since production of the SGP 2021 AQA.

Local Air Quality

- 4.2. The SGP 2021 AQA made reference to the 2020 Air Quality Annual Status Report (ASR) prepared by the Greater Manchester Combined Authority (GMCA) which summarised air quality monitoring undertaken by the local authorities across the GMCA region up until the end of 2020⁹. GMCA has since issued a 2021 ASR¹⁰ and 2022 ASR¹¹ summarising air quality monitoring data up until the end of 2021 and 2022 respectively. These have therefore been reviewed to inform this Addendum.
- 4.3. The previously declared Air Quality Management Area (AQMA) that extends across the principal road network across Greater Manchester, as discussed in the SGP 2021 AQA, remains in place. There have not been any alterations to the boundary or extent of the AQMA.
- 4.4. At the time of the preparation of the SGP 2021 AQA RMBC did not undertake any real-time continuous (automatic) monitoring within its' area. The closest automatic monitor was operated by Oldham Council about 4.5km to the southeast and was not considered to provide information applicable to the Site and assessment.
- 4.5. RMBC has since commenced continuous monitoring at a location on the A664, the details of which are provided in Table 2.

Table 2: Continuous Monitoring Sites

Ref.	Location	Grid Ref:	Distance to Site	Type ¹	Pollutants Monitoring	Comments
RDL001	Rochdale Queensway (A664)	389325 411411	920m NNE	Roadside	NO ₂ , PM ₁₀ , PM _{2.5}	Established August 2021

1: Defra definition

- 4.6. The monitor is located about 920m to the north-northeast of the Site as shown below in Figure 1.
- 4.7. Monitoring at RDL001 commenced in August 2021 and hence 2022 formed the first year of full data (as reported in the GMCA 2023 ASR). Reported annual mean concentrations available to date are provided in Table 3.

Table 2: Summary of Annual Mean Pollutant Concentrations

Location	Year ¹	NO ₂	PM ₁₀	PM _{2.5}	Note
RDL001	2022 ²	27	18	10	All well below current AQOs
	2023 ³	26	16	9	
Current Air Quality Objective (AQO)		40	40	20	

⁹ Greater Manchester Combined Authority, 2020 Air Quality Annual Status Report, (ASR), June 2021

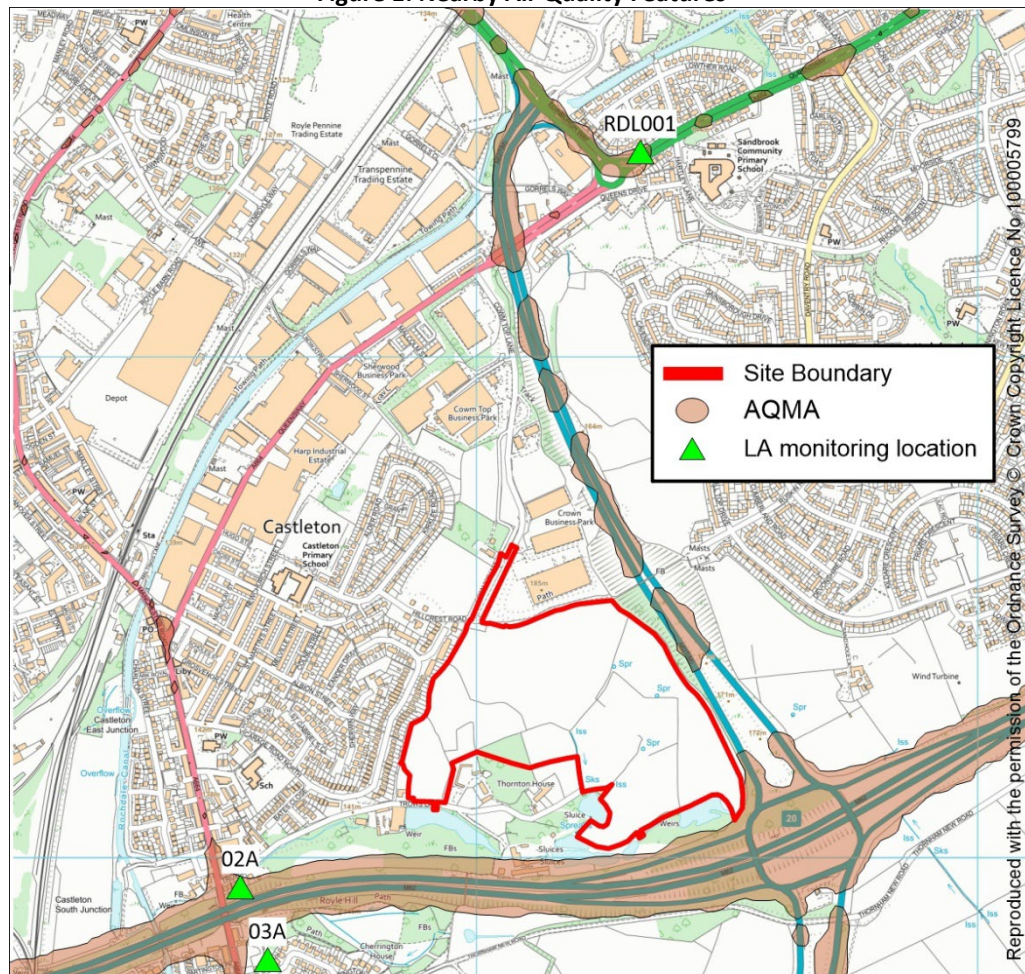
¹⁰ Greater Manchester Combined Authority, 2021 Air Quality Annual Status Report, (ASR), June 2022

¹¹ Greater Manchester Combined Authority, 2022 Air Quality Annual Status Report, (ASR), June 2023

- 1: Available data for 2021 not presented as only covers short period of time
- 2: Data as reported in GMCA 2022 ASR
- 3: Data as reported on Air Quality England website, www.airqualityengland.co.uk; accessed 24.06.24; note data is reported as provisional

4.8. This recently installed monitor therefore provides measured 'roadside' pollutant concentrations at a location within the wider locality of the Site. Reported annual mean NO₂, PM₁₀ and PM_{2.5} concentrations all lie well below the current AQOs.

Figure 1: Nearby Air Quality Features



4.9. Diffusion tube monitoring for nitrogen dioxide (NO₂) continues to take place across the RMBC area and the wider GMCA. The SGP 2021 AQA referred to two monitoring sites (02a and 03a) which were located within a 1km distance of the Site. No new monitoring sites have been established either near the Site or in the wider area and deemed of relevance to the assessment.

4.10. The most up to date data for the two monitoring sites 02a and 03a are provided below.

Table 3: Diffusion Tube Monitors – Annual Nitrogen Dioxide Concentrations

Monitor	Annual Mean ($\mu\text{g}/\text{m}^3$) (<i>bias adjusted</i>)						
	2016	2017	2018	2019	2020 ¹	2021 ¹	2022
02a (RO2ANO)	33.3	35.0	28.9	32.7	21.7	-	-
03a (RO3ANO)	29.9	23.4	20.6	22.1	16.0	16.4	17.0

1: Data for 2020 and 2021 will be affected by the COVID-19 pandemic¹² resulting in reductions in traffic movements and hence ambient air pollutant concentrations.

2: No data for 02a provided for 2021 and 2022 in the GMCA ASRs. Presumed no longer monitored.

4.11. As noted in the GMCA 2021 and 2022 ASRs the annual mean NO₂ concentrations across the Manchester region in 2021 continued to show reduced levels compared to 2019 data due to the COVID-19 pandemic. This is reflected in the results for 2020 and 2021 at location 03a. Consistent with expectations pollutant levels increased in 2022 when compared to 2020 and 2021 but remained lower than pre-2020 levels.

4.12. As noted in the SGP 2021 AQA no exceedances of the annual mean Air Quality Assessment Level of 40 $\mu\text{g}/\text{m}^3$ have been reported at either of these two monitoring locations since 2015 prior to the pandemic.

4.13. The predicted background air quality data issued by Defra for the UK has not been revised since that issued in August 2020 and presented in the SGP AQA 2021.

4.14. It is noted that the long-term implications of any changes in traffic movements and hence air quality since the onset of the COVID-19 pandemic remain unknown. However, indications are that roadside NO₂ and NO_x concentrations remain expected to decrease and it is considered unlikely that the majority of UK roadside locations are likely to experience concentrations above those experienced in 2019 at any point in the foreseeable future¹³. The results reported above are consistent with these expectations.

4.15. There have not therefore been any substantial changes in background air quality that would affect the findings and conclusions of the SGP 2021 AQA.

5. Air Quality Considerations

5.1. Construction Dust Assessment

5.1.1. There are no identified substantial changes required to the construction dust assessment as presented in the SGP 2021 AQA. However, a typographical error has been noted in Tables 6.3 and 6.4 of the dust assessment. The corrected tables are therefore provided in Appendix B to this Addendum.

¹² COVID-19: Following the outbreak of a global pandemic of the Coronavirus disease 2019 (COVID-19) due to the SAR-CoV-2 virus, the UK Government declared several restrictions on non-essential travel and movement during March 2020. Various restrictions remained in place during 2020 and 2021 with resulting implications on transport movements across the UK.

¹³ Air Quality Consultants, Trends in UK NO_x and NO₂ Concentrations – May 2022 Update, 13.05.22

5.2. Vehicle Emissions Assessment

Revised Development-Related Vehicle Trips

- 5.2.1. The assessment presented in the SGP 2021 AQA was based on traffic data provided by the project transport consultants, SCP, and which was based on development of 'up to 550' residential units.
- 5.2.2. The revised proposal as submitted initially for the detailed application for up to 495 residential dwellings resulted in a reduction of estimated annual average development-related vehicle movements to / from the site per day from 2,350 to 2,115, a reduction of 10%. As discussed in the SGP 2022 AQA Addendum this would accordingly result in reduced development-related movements across the local road network considered in the assessment, and hence reduced vehicle exhaust emissions and associated impacts at modelled receptors.
- 5.2.3. The revised proposals for up to 445 residential dwellings would result in a further reduction of development-related traffic movements to those assessed for the SGP 2021 AQA. SCP advises the revised proposals would result in estimated annual average development-related vehicle movements to / from the site per day of 1,901. This would be a reduction of 19% from those movements assessed in the SGP 2021 AQA.

Revised Vehicle Emission Factors

- 5.2.4. The modelling undertaken to inform the SGP 2021 AQA was based on the vehicle emission factors issued by Defra in August 2020 (EFT 10.1). Revised emission factor toolkits have since been issued in November 2021 (EFT 11.0), November 2023 (EFT 12.0) and December 2023 (EFT 12.0.1).
- 5.2.5. The November 2021 changes to the EFT (EFT 11.0) were primarily to include information on vehicle fleet splits from 2030 to 2050 and changes to CO₂ emissions¹⁴. There were no alterations to the emission factors or basic fleet composition used in the original assessment as noted in the SGP 2022 AQA Addendum.
- 5.2.6. The November 2023 (EFT v12.0) changes however included updated base fleet split data, updated COPERT speed-based emission factors and updated PM non-exhaust emissions source data (i.e. from tyre & brake wear and road abrasion). The later December 2023 change (EFT v12.0.1) included an update to the NO_x emissions from hybrid vehicles at speeds of above 50 km/hr.
- 5.2.7. The November 2023 changes to the EFT would therefore potentially affect the vehicle emissions that were predicted by the modelling presented in the SGP 2021 AQA.
- 5.2.8. Further consideration of the potential effects of these changes in the EFT toolkit has therefore been undertaken to determine the potential effects on the original assessment. The EFT has been run for a range of scenarios to enable comparison of the different resulting predicted emission rates. The EFT has been run for the following scenarios:

¹⁴ Department for Environment, Food and Rural Affairs, Emissions Factors Toolkit v11.0, User Guide, November 2021

Table 4: Scenarios Assessed

Scenario	EFT Version	2-way Development Related Trips	Year of Assessment ¹	Speeds	Comments
Scenario A	EFT 10.1	2,350	2026	Variable speeds from 25-120 km/hr	Scenario as per the 2021 SGP AQA
Scenario B		2,350	2027	Variable speeds from 25-120 km/hr	
Scenario C	EFT 12.01	2,350	2027	Variable speeds from 25-120 km/hr	
Scenario D		1,901	2027	Variable speeds from 25-120 km/hr	Scenario that is applicable to the current application

1: Original year of assessment was 2026. With reference to the Transport Assessment prepared by SCP for the detailed application the appropriate year of assessment is now 2027¹⁵.
All other variables, were retained as the same across all 3 scenarios

5.2.9. The EFT has been run to calculate the pollutant emissions of NO_x, PM₁₀ and PM_{2.5} as g/m/s for a range of speeds for each scenario along a straight 1km stretch of road.

5.2.10. Table 5 below compares the results obtained for Scenario 1, which represents that modelled in SGP 2021 AQA, and Scenario 3 which represents the current scenario for the detailed application. Full results are presented in Appendix C.

Table 5: Results of EFT Assessment

Pollutant	Speed (km/hr)	Emission Rate (g/km/s)	
		Scenario A	Scenario D
NO _x	25	0.00523	0.00378
	40	0.00445	0.00323
	60	0.00396	0.00291
	80	0.00398	0.00295
	100	0.00473	0.00356
	120	0.00653	0.00492
PM ₁₀	25	0.00087	0.00082
	40	0.00085	0.00082
	60	0.00085	0.00065
	80	0.00084	0.00048
	100	0.00085	0.00037
	120	0.00086	0.00037
PM _{2.5}	25	0.00049	0.00042
	40	0.00048	0.00042
	60	0.00047	0.00034
	80	0.00047	0.00027
	100	0.00047	0.00022
	120	0.00048	0.00022

¹⁵ SCP, Proposed Residential Development, Cowm Top Lane, Rochdale, Transport Assessment, Doc: PT/15399/TA/6, August 2022

5.2.11. Scenario A results in greater NO_x , PM_{10} and $\text{PM}_{2.5}$ emissions across all speeds when compared to Scenario D.

5.2.12. On this basis the reduced predicted development-related vehicle movements would produce reduced vehicle emissions and hence associated impacts to that presented in the SGP 2021 AQA. It is therefore not considered necessary to undertake a revised detailed assessment in support of the revised detailed planning application. It remains concluded that the proposals would not result in significant impacts at human health or ecological receptors.

$\text{PM}_{2.5}$

5.2.13. The SGP 2021 AQA did not include vehicle emissions modelling for $\text{PM}_{2.5}$. However, in light of the increased focus on $\text{PM}_{2.5}$ and the recent establishment of new future standards for $\text{PM}_{2.5}$ as discussed above in Section 3, further consideration is provided here.

5.2.14. $\text{PM}_{2.5}$ forms a proportion of any PM_{10} . The maximum predicted change in annual mean PM_{10} concentrations at any receptor due to the additional vehicles on the local road network associated with the development was predicted to be $0.28 \mu\text{g}/\text{m}^3$ (see Table 7.8 of the SGP 2021 AQA). This was predicted at a receptor at the Queensway / Cowm Cop Lane junction. This resulted in a change of 1% in annual mean PM_{10} concentrations. The predicted resulting total annual mean PM_{10} concentration at this receptor was 'well below' the AQAL of $40 \mu\text{g}/\text{m}^3$ at $14.86 \mu\text{g}/\text{m}^3$ with resulting *negligible* impacts. Potential impacts at all other modelled receptors were also *negligible*.

5.2.15. If it is assumed all the PM_{10} is emitted as $\text{PM}_{2.5}$ then this maximum change of $0.28 \mu\text{g}/\text{m}^3$ would be 1.4% of the existing AQAL. If it is similarly assumed all the background and total $\text{PM}_{2.5}$ is as PM_{10} then the façade concentration of $14.86 \mu\text{g}/\text{m}^3$ is 'well below' the existing AQAL of $20 \mu\text{g}/\text{m}^3$. The potential impacts will therefore similarly be described as *negligible*.

5.2.16. It is noted this would however be above the interim target of $12 \mu\text{g}/\text{m}^3$ for $\text{PM}_{2.5}$ established for 2028 and future target of $10 \mu\text{g}/\text{m}^3$ for 2024.

5.2.17. However, is also noted as discussed above in Section 4 that RMBC also now carries out monitoring of $\text{PM}_{2.5}$ (along with NO_2 and PM_{10}) at a location on Queensway. Measured concentrations here for $\text{PM}_{2.5}$ for the years 2021 and 2022 were $10 \mu\text{g}/\text{m}^3$ and $9 \mu\text{g}/\text{m}^3$, compared to PM_{10} concentrations of $18 \mu\text{g}/\text{m}^3$ and $16 \mu\text{g}/\text{m}^3$, i.e. 56-62% of the PM_{10} concentrations. Applying this ratio as an approximation would result in estimated $\text{PM}_{2.5}$ concentrations at the modelled receptor at the Queensway / Cowm Cop Lane junction to be in the order of $9.2 \mu\text{g}/\text{m}^3$, below both the interim and future target.

5.2.18. It is also noted that assuming all emitted PM_{10} is emitted as $\text{PM}_{2.5}$ resulting in a potential change of $0.28 \mu\text{g}/\text{m}^3$ is an overestimate. As shown above in Table 5, emitted $\text{PM}_{2.5}$ is predicted to be in the range of 52-60% of emitted PM_{10} . The emitted $\text{PM}_{2.5}$ would therefore be substantially less than PM_{10} .

5.2.19. It should further remain noted that $\text{PM}_{2.5}$ is acknowledged as a regional pollutant and achieving the targets is a national requirement, although local authorities are expected to reduce $\text{PM}_{2.5}$ from sources that are within their control. As discussed above in Section 2 guidance on the approach to the new interim target within the planning regime is awaited.

- 5.2.20. In light of these comments, it is concluded that potential impacts on ambient PM_{2.5} concentrations would not be significant. No further detailed assessment is considered necessary.

Air Quality with the Site

- 5.2.21. The indicative parameters masterplan¹⁶ provided with the outline planning application provided for areas of green infrastructure on the eastern and southern boundaries providing a set-back distance to the proposed properties in this area to the A627(M) and M62. The revised detailed layout plan¹⁷ to be submitted with the detailed application is in accordance with this submitted parameters masterplan. Furthermore, the revised detailed plan continues to provide for roadways and gardens facing these highways providing at least a 19m set-back distance for the house facades and the highways.
- 5.2.22. It therefore remains concluded that there is a suitable set-back distance from the A627(M) and M62 is provided with regards to local air quality and potential impacts on the proposed new residential receptors.

6. Conclusions

- 6.1. The implications of any changes in background local air quality and the proposed development information on the original SGP 2021 AQA have been reviewed to determine any required revisions in relation to the detailed planning application.
- 6.2. Since the SGP 2021 AQA RMBC has commenced continuous (automatic) air quality monitoring at a location on Queensway to the east of the Site. This provides useful data on the local roadside NO₂, PM₁₀ and PM_{2.5} status in the vicinity of the Site. All measured concentrations are well below the existing relevant air quality objectives.
- 6.3. No other changes in the site setting or local air quality status have been identified that would affect the original findings and conclusions.
- 6.4. The revised proposals include for a reduction of 105 residential units to originally proposed, with a resulting reduction in associated development-related traffic movements to / from the site. Revised vehicle emission factors have however been issued since the SGP 2021 AQA and hence the implications of these revised factors in combination with the reduced development-related vehicle numbers have been assessed. Overall, the reduced movements would result in a reduction in vehicle emissions when compared to the original AQA and hence associated impacts at the assessed local human health and ecological receptors.
- 6.5. On this basis it remains concluded that the development-related traffic movements and exhaust emissions would not result in significant adverse impacts on local receptors. It is not considered that revised detailed assessment is required in relation to the detailed planning application.

¹⁶ e*SCAPE, Indicative Parameters Masterplan, Cowm Cop Lane, ref: 019-019-003, August 2021

¹⁷ Barratt Homes, Trows Farm, Castleton, Planning Layout, H8544-BAH-XX-XX-DR-UD-2103XXX-P00-203002-Planning Layout_v1, 01.02.24

- 6.6. As noted in the SGP 2021 AQA the application will be supported by a Travel Plan which will serve to promote sustainable travel thereby assisting in the reduction of vehicle exhaust emissions. Such as Travel Plan has been provided with the detailed application¹⁸.
- 6.7. No revisions to the original construction dust assessment have been identified as being required. The generation of construction dust can be readily managed and mitigated through the incorporation of standard techniques and these would be implemented as part of the Construction Management Plan (CMP).
- 6.8. Overall, the impacts of the development are not predicted to be significant with respect to air quality. It is concluded that there is no reason on air quality grounds why the development proposals should not be granted detailed planning permission.

Prepared on behalf of Smith Grant LLP by:

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Signature:

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19.07.24

¹⁸ SCP, Proposed Residential Development, Cowm Top Lane, Rochdale, Travel Plan, Doc: PT/15399/TP/6, August 2022

APPENDIX A

Proposed Development Plans

BARRATT - CLASSIC PARCEL
SCHEDULE OF ACCOMMODATION

Barratt Type	House Type	Sqft	No	Total Sqft
Type 50 - End	2 Bed Terraced House	866	4	3464
Type 52 - End	3 Bed Terraced House	1025	10	10250
Kew - End	2 Bed Terraced House	785	8	6280
Kew - Mid	2 Bed Terraced House	785	2	1570
Newby	3 Bed Detached House	952	8	7616
Mewstone - End	3 Bed Semi / Mews House	970	36	34920
Mewstone - Mid	3 Bed Semi / Mews House	970	2	1940
Matlock - End	3 Bed Semi / Mews House	970	20	19400
Martham - End	3 Bed Detached / Semi Detached Dual Aspect House	995	6	5970
Martham	3 Bed Detached / Semi Detached Dual Aspect House	995	1	995
Redford	3 Bed Detached	1046	7	7322
Willow	4 Bedroom Int. Garage Detached House	1074	22	23628
Knightwood - End	4 Bed Townhouse	1122	14	15708
Harlow	4 Bedroom Int. Garage Detached House	1276	9	11484
Allerthorpe	4 Bed Dual Aspect Detached House	1225	13	15925
Unstock	5 Bedroom Detached	1551	9	13959

Total number of units and square footage 171 180431

Gross Site Area in Acres N/A

Open Space & Undevelopable Area in Acres N/A

Net Site Area in Acres 11.18

Density (Units per Acre) 15

Density (Units per Hectare) 38

Square Foot / Acre 16,139

Percentage NDSS Compliant 100%

BARRATT - CONTEMPORARY PARCEL
SCHEDULE OF ACCOMMODATION

Barratt Type	House Type	Sqft	No	Total Sqft
Type 50 - End	2 Bed Terraced House	866	6	5196
Type 50 - Mid	2 Bed Terraced House	866	1	866
Type 52 - End	3 Bed Terraced House	1025	4	4100
Type 52 - Mid	3 Bed Terraced House	1025	2	2050
Kew - End	2 Bed Terraced House	785	10	7850
Kew - Mid	2 Bed Terraced House	785	4	3140
Holkham	3 Bedroom Int. Garage Detached House	922	9	8298
Brownstone - End	3 Bed Semi / Mews House	934	12	11208
Mewstone - End	3 Bed Semi / Mews House	970	28	27160
Mewstone - Mid	3 Bed Semi / Mews House	970	6	5820
Matlock - End	3 Bed Semi / Mews House	970	13	12610
Martham - End	3 Bed Detached	995	2	1990
Martham	3 Bed Detached / Semi Detached Dual Aspect House	995	5	4975
Redford	3 Bed Detached	1046	4	4184
Knightwood - End	4 Bed Townhouse	1122	8	8976
Allerthorpe	4 Bed Dual Aspect Detached House	1225	5	6125
Newby	3 Bed Detached House	952	7	6664
Unstock	5 Bedroom Detached	1551	5	7755

Total number of units and square footage 131 128967

Gross Site Area in Acres N/A

Open Space & Undevelopable Area in Acres N/A

Net Site Area in Acres 7.93

Density (Units per Acre) 17

Density (Units per Hectare) 41

Square Foot / Acre 16,263

Percentage NDSS Compliant 100%

Percentage Part M4(2) Compliant 10%

BARRATT - CLASSIC PARCEL
SCHEDULE OF ACCOMMODATION

House Type Code	House Type Name	Beds	Storey Height	Number	sgm	Sq Ft	Total Sq Ft
N224 XEH7	Primrose (End)	2	2	8	71.3	768	6144
N224 XI-7	Primrose (Mid)	2	2	4	71.3	768	3072
YH50 XOHE	YH50 (End)	2	2	4	80.5	866	3464
YH50 XO-I	YH50 (Mid)	2	2	2	80.5	866	1732
YH52 XOHE	YH52 (End)	3	2	6	95.2	1025	6150
YH52 XO-I	YH52 (Mid)	3	2	2	95.2	1025	2050
N382 XEH7	Alder (End)	3	2	31	89.7	966	29946
N382 XI-7	Alder (Mid)	3	2	3	89.7	966	2898
N341 XDG7	Foxglove (Det)	3	2	9	103.7	1116	10044
N341 XEG7	Foxglove (End)	3	2	3	103.7	1116	3348
N319 XEG7	Frampton (End)	3	2.5	10	104.7	1127	11270
N403 X-G7	Hazelborough	4	2	8	108	1163	9304
N431 X-H7	Hamford	4	2	5	118.5	1275	6375
N411 X-H7	Thornhill	4	2	8	124.3	1338	10704
N442 X-H7	Winterton	4	2	11	125.8	1354	14894
N417 X-H7	Lynford	4	2	6	133.2	1434	8604
N408 X-H7	Hepburn	4	2	6	134.2	1444	8664
N456 X-H7	Wychwood	4	2	10	138.3	1489	14890
N469 X-H7	Culver	5	2	7	141.7	1525	10675

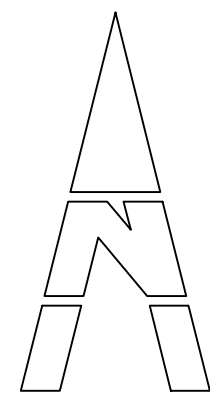
Open Market Summary			
Bedroom Provision			
1 Beds:	0	0.0%	Total Dwellings: 143
2 Beds:	18	12.6%	Provision Percentage: 100.0%
3 Beds:	56	39.2%	Total Sq Ft: 164228
4 Beds:	54	37.8%	
5 Beds:	7	4.9%	

Site Areas			Acres	Hectares
Gross Development Area:			10.2	4.135
Net Development Area:			10	4.05
Open Space Provision (including SuDS):			N/A	N/A
Ancillary Areas (Infrastructure etc):			N/A	N/A

Housing Summary			
Bedroom Provision			
1 Beds:	0	0.0%	Total Dwellings: 143
2 Beds:	24	16.8%	
3 Beds:	68	47.6%	Total Sq Ft: 164228
4 Beds:	54	37.8%	
5 Beds:	7	4.9%	

Efficiency Calculations		
Housing Density (Per Gross Hectare):		N/A
Housing Density (Per Net Hectare):		35.4
Net to Gross Ratio:		N/A
Sq Ft per Net Acre:		16410

Warning to House Purchasers
Buyers are warned that this is a working drawing and the contents of this drawing may be subject to change during the build process. The layout, form, content, and dimensions specified are included for general guidance only. Features or fixtures shown may differ or be subject to individual interpretation. Whilst we make every effort to ensure no change, we do not guarantee that any change will be made to the drawing. It is the responsibility of the purchaser to ensure that the drawing is accurate and to ensure that any change is made to the drawing. The contents of this drawing do not constitute a contract, part of any contract or warranty unless specifically incorporated into the contract. They should not be relied upon for the purposes of entering into a contract to purchase any property.



APPENDIX B

Corrected Text to Construction Dust Assessment

as presented in 2021 SGP AQA

SGP 2021 AQA

Construction Dust Assessment

Typographical errors have been identified in Tables 6.3 and 6.4 as presented in the SGP 2021 AQA.

The corrected tables are presented below:

Table 6.3: Outcome of defining the Sensitivity of the Area

Potential Impact	Sensitivity of the Surrounding Area			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	n/a	high	high	low
Human Health	n/a	low	low	low
Ecological	n/a	low	low	not sensitive

Table 6.4: Risk of Dust Impacts

Potential Impact	Risk			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	n/a	high	high	low
Human Health	n/a	low	low	low
Ecological	n/a	low	low	not sensitive

The text and conclusions as presented were correct.

APPENDIX C

Emission Factor Toolkit Assessment

R2392C **Cowm Top Lane, Rochdale**
Air Quality Assessment: Addendum

Predicted Pollutant Emissions for Different Defra Emission Factor Toolkits
Run for different versions and number of vehicles across different speeds

Scenario	EFT Version	Number of vehicles	Speed	Year of Assessment	All Vehicles (g/km/s)
NO_x					
A	v10.1	2350	25	2026	0.00523
B	v10.1	2350	25	2027	0.00468
C	v12.0.1	2350	25	2027	0.00467
D	v12.0.1	1901	25	2027	0.00378
A	v10.1	2350	40	2026	0.00445
B	v10.1	2350	40	2027	0.00398
C	v12.0.1	2350	40	2027	0.00399
D	v12.0.1	1901	40	2027	0.00323
A	v10.1	2350	60	2026	0.00396
B	v10.1	2350	60	2027	0.00354
C	v12.0.1	2350	60	2027	0.00360
D	v12.0.1	1901	60	2027	0.00291
A	v10.1	2350	80	2026	0.00398
B	v10.1	2350	80	2027	0.00355
C	v12.0.1	2350	80	2027	0.00365
D	v12.0.1	1901	80	2027	0.00295
A	v10.1	2350	100	2026	0.00473
B	v10.1	2350	100	2027	0.00421
C	v12.0.1	2350	100	2027	0.00440
D	v12.0.1	1901	100	2027	0.00356
A	v10.1	2350	120	2026	0.00653
B	v10.1	2350	120	2027	0.00578
C	v12.0.1	2350	120	2027	0.00608
D	v12.0.1	1901	120	2027	0.00492

Scenario	EFT Version	Number of vehicles	Speed	Year of Assessment	All Vehicles (g/km/s)
PM10					
A	v10.1	2350	25	2026	0.00087
B	v10.1	2350	25	2027	0.00086
C	v12.0.1	2350	25	2027	0.00101
D	v12.0.1	1901	25	2027	0.00082
A	v10.1	2350	40	2026	0.00085
B	v10.1	2350	40	2027	0.00085
C	v12.0.1	2350	40	2027	0.00101
D	v12.0.1	1901	40	2027	0.00082
A	v10.1	2350	60	2026	0.00085
B	v10.1	2350	60	2027	0.00085
C	v12.0.1	2350	60	2027	0.00080
D	v12.0.1	1901	60	2027	0.00065
A	v10.1	2350	80	2026	0.00084
B	v10.1	2350	80	2027	0.00084
C	v12.0.1	2350	80	2027	0.00060
D	v12.0.1	1901	80	2027	0.00048
A	v10.1	2350	100	2026	0.00085
B	v10.1	2350	100	2027	0.00084
C	v12.0.1	2350	100	2027	0.00045
D	v12.0.1	1901	100	2027	0.00037
A	v10.1	2350	120	2026	0.00086
B	v10.1	2350	120	2027	0.00086
C	v12.0.1	2350	120	2027	0.00046
D	v12.0.1	1901	120	2027	0.00037
PM2.5					
A	v10.1	2350	25	2026	0.00049
B	v10.1	2350	25	2027	0.00048
C	v12.0.1	2350	25	2027	0.00052
D	v12.0.1	1901	25	2027	0.00042
A	v10.1	2350	40	2026	0.00048
B	v10.1	2350	40	2027	0.00047
C	v12.0.1	2350	40	2027	0.00052
D	v12.0.1	1901	40	2027	0.00042
A	v10.1	2350	60	2026	0.00047
B	v10.1	2350	60	2027	0.00047
C	v12.0.1	2350	60	2027	0.00043
D	v12.0.1	1901	60	2027	0.00034
A	v10.1	2350	80	2026	0.00047
B	v10.1	2350	80	2027	0.00046
C	v12.0.1	2350	80	2027	0.00033
D	v12.0.1	1901	80	2027	0.00027
A	v10.1	2350	100	2026	0.00047
B	v10.1	2350	100	2027	0.00047
C	v12.0.1	2350	100	2027	0.00027
D	v12.0.1	1901	100	2027	0.00022
A	v10.1	2350	120	2026	0.00048
B	v10.1	2350	120	2027	0.00048
C	v12.0.1	2350	120	2027	0.00028
D	v12.0.1	1901	120	2027	0.00022

Notes:

EFT Inputs:

Area: England (not London)

Traffic Format: Basic Split

Road Type: Urban (not London)

%HGV: 0

Link length: 1km