

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. The outline application is currently awaiting determination. A detailed planning application is now however to be submitted in relation to the proposed development. This includes for a reduction in the proposed number of residential units from up to 550 to up to 495.
- 1.4. Accordingly, SGP has reviewed the SGP 2021 AQA submitted with the outline application and identified any changes or revisions that may be required in relation to the detailed application. The review has 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.
- 1.5. This following Addendum should be read in conjunction with the SGP 2021 AQA; it does not replace the original AQA.

2. Air Quality Assessment Guidance

- 2.1. It is noted that the SGP 2021 AQA incorrectly referred to the most up to date Defra, Local Air Quality Management, Technical Guidance as being that issued in 2016, whereas a revised version was issued in April 2021². This revised version does not however affect the air quality assessment methodology or information presented in the SGP 2021 AQA.
- 2.2. There have not been any other changes or updates to the air quality guidance referred to in the SGP 2021 AQA. There are not therefore any revisions or changes required to the assessment methodology employed.

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

3. Proposed Development

- 3.1. The outline application included for main vehicular access from an extension to Cowm Top Lane to the north. All proposed access remains as per the outline application. The principal change of relevance to this Air Quality Addendum is the reduction in residential units from up to 550 to up to 495 along with provision of detailed layout plans.

4. Baseline Conditions and Background Air Quality

- 4.1. SGP is unaware of any changes to the general site setting since production of the SGP 2021 AQA.
- 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 2020³. GMCA has since issued a 2021 ASR summarising air quality monitoring data up until the end of 2021⁴. This has 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. Diffusion tube monitoring for nitrogen dioxide (NO₂) continues to take place across the RMBC area and the wider GMCA. The most up to date data for the two monitoring sites (02a and 03a) discussed in the SGP 2021 AQA are provided below.

Table 1: Diffusion Tube Monitor – Annual Nitrogen Dioxide Concentrations

Monitor	Annual Mean (µg/m ³) (<i>bias adjusted</i>)					
	2016	2017	2018	2019	2020 ¹	2021 ¹
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

1: Data for 2020 and 2021 will be affected by the COVID-19 pandemic⁵ resulting in reductions in traffic movements and hence ambient air pollutant concentrations.

- 4.5. As noted in the GMCA 2021 ASR 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 locations 02a and 03a. However as noted in the SGP 2021 AQA no exceedances of the annual mean Air Quality Assessment Level of 40 µg/m³ have been reported at these two monitoring locations since 2015 prior to the pandemic.
- 4.6. 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.

³ Greater Manchester Combined Authority, 2020 Air Quality Annual Status Report, (ASR), June 2021

⁴ Greater Manchester Combined Authority, 2021 Air Quality Annual Status Report, (ASR), June 2022

⁵ 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.

- 4.7. There have not therefore been any substantial changes in background air quality that would affect the findings and conclusions of the SGP 2021 AQA.
- 4.8. 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.

5. Air Quality Considerations

5.1. Construction Dust Assessment

- 5.1.1. There are no identified changes required to the construction dust assessment as presented in the SGP 2021 AQA.

5.2. Vehicle Emissions Assessment

- 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. The revised proposal for up to 495 residential dwellings results 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%.
- 5.2.2. 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 modelling undertaken to inform the SGP 2021 AQA was based on the vehicle exhaust emission factors issued by Defra in August 2020 (EFT 10.1). A revised emission factor toolkit was issued in November 2021 (EFT 11.0).
- 5.2.4. The changes to the EFT however are primarily to include information on vehicle fleet splits from 2030 to 2050 and changes to CO₂ emissions⁶. There are no alterations to the emission factors or basic fleet composition used in the original assessment. It is also of note that default fleet projections in EFT v11.0 remain based on fleet growth assumptions which were current before the Covid-19 outbreak in the UK. In consequence, default fleet outputs from the tool do not reflect short- or longer-term impacts on emissions in 2020 and beyond resulting from behavioural change during the national or local lockdowns.
- 5.2.5. On this basis the reduced predicted development-related vehicle movements would produce reduced exhaust emissions and associated impacts to that presented in the SGP 2021 AQA. It is not considered necessary to undertake a revised detailed assessment in support of the detailed planning application. It remains concluded that the proposals would not result in significant impacts at human health or ecological receptors.
- 5.2.6. The indicative parameters masterplan⁷ 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 detailed layout plan⁸ to be submitted with the detailed application is in accordance with this submitted parameters masterplan. Furthermore, the detailed plan provides for roadways and gardens

⁶ Department for Environment, Food and Rural Affairs, Emissions Factors Toolkit v11.0, User Guide, November 2021

⁷ e*SCAPE, Indicative Parameters Masterplan, Cowm Cop Lane, ref: 019-019-003, August 2021

⁸ Barratt Homes, Trows Farm, Castleton, Planning Layout, 496-P-PLF-01, rev 04, 02.08.22

facing these highways providing at least a 19m set-back distance for the house facades and the highways.

- 5.2.7. 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. The revised proposals include for a reduction of 55 residential units to that originally proposed, with a resulting reduction in associated development-related traffic movements to / from the site. These reduced movements would result in a reduction in vehicle exhaust emissions and hence associated impacts at the local human health and ecological receptors considered in the original AQA. No other changes in available information that have been identified, such as in the site setting, local air quality data or vehicle emission factors, that would affect the original findings and conclusions. 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.
- 6.3. 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.
- 6.4. 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).
- 6.5. 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:

Name:

Signature:

Date:

K. Hawkins, Partner

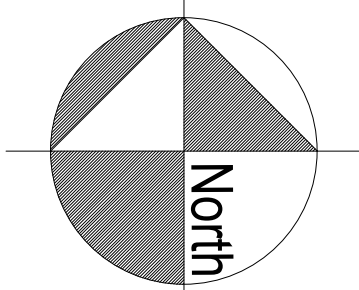
BSc MSc MIAQM MEnvSci CEnv



10.08.22

APPENDIX A

Proposed Development Plans



SCHEDULE OF ACCOMMODATION

Barratt Type	House Type	Sqft	No	Total Sqft
Private Sales Units				
Kensley - End	2 Bed Terraced House	624	8	4992
Kensley - Mid	2 Bed Terraced House	624	2	1248
Brandon - End	3 Bed Semi / Mews House	706	10	7060
Moresby -	3 Bed Detached / Semi Detached Dual Aspect House	854	11	9394
Moresby - End	3 Bed Detached / Semi Detached Dual Aspect House	854	8	6832
Ellerton - End	3 Bed Semi / Mews House	830	68	56440
Ellerton - Mid	3 Bed Semi / Mews House	830	17	14110
Maidstone - End	3 Bed Semi / Mews House	830	16	13280
Maidstone - Mid	3 Bed Semi / Mews House	830	4	3320
Lutworth - SH	3 Bedroom Detached House	1000	13	13000
Kingville - End	4 Bed Townhouse	1072	66	70752
Kingville - Mid	4 Bed Townhouse	1072	20	21440
Stambourne - End	3 Bed Townhouse	1157	8	9256
Stambourne - Mid	3 Bed Townhouse	1157	4	4628
Alderny	4 Bed Dual Aspect Detached House	1225	25	30625
Deely	3 Bedroom Int. Garage Detached House	881	2	1762
Windermere	4 Bedroom Int. Garage Detached House	1073	28	30044
Ripon	4 Bedroom Int. Garage Detached House	1121	11	12331
Halton	4 Bedroom Int. Garage Detached House	1267	17	21539
Lamberton	5 Bed Detached House	1552	18	27936
Private Total				356 359989

DAVID WILSON HOMES

Archford (End)	3 bed house	832	33	27456
Archford (Mid)	3 bed house	832	6	4992
Hadley (End)	3 bed house	1001	1	1001
Hadley (Del)	3 bed house	1001	1	1001
Abbedale	3 bed house	1026	5	5130
Greenwood (End)	3 bed house	1179	28	33012
Greenwood (Mid)	3 bed house	1179	3	3537
Millford	4 bed house	1335	18	24030
Baywater	4 bed house	1342	5	6710
Kirkdale	4 bed house	1354	9	12186
Hertford	4 bed house	1364	9	12276
Bradgate	4 bed house	1454	1	1454
Alfordale	4 bed house	1491	7	10437
Holden	5 bed house	1539	8	12312
Emerson (Corner)	5 bed house	1822	4	7288
Emmerson	5 bed house	1822	1	1822
Private Total				139 164624

Total number of units and square footage	495 524613
Gross Site Area in Acres	TBC
Open Space & Undevelopable Area in Acres	TBC
Net Site Area in Acres	31.21
Density (Units per Acre)	16
Density (Units per Hectare)	39
Square Foot / Acre	16,809

WARNING TO HOUSE PURCHASERS

Property Misdescriptions Act 1991

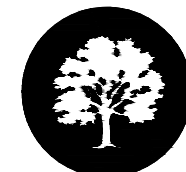
Buyers are warned that this is a working drawing and is not intended to be treated as descriptive material describing, in relation to any particular property or development, any of the specified matters prescribed by any Order made under the above act. The contents of this drawing may be subject to change at any time, and alterations and variations can occur during the progress of the works without revisions of the drawing. Consequently the layout, form, content and dimensions of the finished construction may differ materially from those shown. Nor do the contents of this drawing constitute a contract, part of any contract, or warranty.

KEY:

- Application Boundary Red Edge
- 5m Access Way
- 6m Access Way
- 10m Access Way
- Landscape Buffer
- Proposed dwelling and house type code
- Proposed garage(s) to be built
- AS/OPP Denotes handing of plot (As or Opposite)
- Personnel gates
- Indicative Tree Planting
Refer to PGLA Landscaping Design for actual positions

Right of way. To allow machinery to the northern lodge. From the southern boundary up to the lodge the easement is 6m. Around the actual lodge itself it is 10m

Potential 5m easement / right of way for last lodge.



**BARRATT
HOMES
MANCHESTER**

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Job			
TROWS FARM CASTLETON			
Title			
PLANNING LAYOUT FULL			
Design By AA	Date APR 22	Drawing Number 496 - P - PLF - 01	Rev 04
Drawn By NC	Scale @ A1 1: 1000		