



## Proof of Evidence - **Summary**

# Noise

Produced by Margaret Steen

Rule 6 Party

Peel Hall - APP/ M0655/W/17/3178530

## Summary

- 1 Noise levels over the Peel Hall site are dominated day and night by road traffic noise from the M62, which runs the entire length of the site's north boundary.
- 2 The existing noise levels from the M62 prevent the proposed development, unless the noise can be reduced to the levels recommended by the World Health Organisation.
- 3 The Appellant's proposal to reduce the noise is two fold; firstly to build a continuous barrier from the existing ground level, the entire length of the north boundary at a minimum height of 4 metres.
- 4 **Step one** of this processes should be to capture the existing noise levels, in order to know how much noise reduction is needed. However, the level of monitoring reported by the Appellant, was extremely minimum and haphazard, with only 3 monitoring locations for the entire length of the north boundary. At the noisiest part of the motorway, monitoring this was done for only 2 hours and 49 minutes. They didn't bother to monitor anywhere on the site boundary between 8.00 am and 12.00.
- 5 The M62 is an extremely busy motorway, even during the night. You would expect noise monitoring to cover the whole length of the boundary, but that didn't happen. Just one location was monitored overnight -MP04; once again it wasn't the noisiest part -MP02. The fact is that the M62 from Junction 9 to Junction 12 had road works, lane and road closures and speed reductions for the entire 8-hour night-time monitoring.
- 6 **Step two** of the process needs to identify exactly where a noise barrier could be located. The site's north boundary is complex, the appellants land is as close as 2 metres and as far as 25 metres, from the motorway; the embankment, in parts, is level with the site; in other parts the site is 2.5. metres below the motorway, at the other extreme, the embankment rises 7 metres above the motorway.
- 7 The complexity continues; the high-pressure gas main runs within the site from

Birch Avenue, then at right angles, the length of the boundary, but does not run in a straight line. You cannot build above a high-pressure gas main; any noise barrier would have to be built on just one side of the gas main, taking into consideration the 12-metre easement.

- 8 An added complication is that United Utilities have a pumping station on the appellant's land, adjacent to the site boundary, once again an easement exists to allow access at all times.
- 9 Highways England owns the existing boundary fence, requiring access at all times to their fence.
- 10 The location of these assets, easements, rights of way and the potential size of a noise barrier required, has a significant bearing on the construction and location of a barrier.
- 11 Other obstacles exist along the boundary; the properties at Elm Road are just 6 metres from the motorway boundary; Spa Brook, ditches, protected hedge, the overhead pedestrian bridge and the public right of way.
- 12 Then you have to consider the ground level of the site, the Appellant has reported that the land drops by 10 metres across the site. The impact of this is that a noise barrier would need to vary in height; a large portion of the barrier would need to be 6.5 metres in height; that's higher than a normal 2-storey house.
- 13 **Step three** of this process should be to capture the accurate existing noise source (M62 motorway) and the exact location of the barrier position. This needs to be done across the length of the north boundary. Noise barriers are more effective the closer they are to the noise source, a barrier at variable distances, height and topography from the noise source would give varying degrees of noise reduction.
- 14 **Step four:** Identity the height of, and the noise reduction value of the proposed noise barrier. Noise reduction values of noise barriers, varies tremendously, the height of the barrier in relation to the noise source is also vital for the accurate calculation of noise reduction on the site.

- 15 **Step 5:** Holes, slits or gaps through or **beneath** a noise barrier, can seriously reduce barrier performance, allowing sound to “leak” through. Gaps can be considered to transmit 100% of noise. You need to assess the impact of the noise that you cannot block out (all those places where the barrier cannot be constructed: above Spa Brook, the ditch, the historic hedge, the public right of way and the ends of site). Then assess if the barrier is of any benefit.
- 16 None of these steps are included in the noise assessment, without this information it is impossible to ascertain if a noise barrier could achieve any noise reduction.
- 17 All of this information tells us the format of the modelling cannot be replicated along the length of the north boundary. A detailed assessment should have been done.
- 18 The assumption that the barrier is indefinitely long is unreasonable and substantially overestimates the potential mitigation provided by the proposed screen. This undermines the Appellants conclusions and methodology
- 19 The second stage of the Appellants noise reduction proposals for the site is for all plots immediately south of the barrier to be four stories tall, and in a tight configuration to allow building massing to provide a further noise barrier.
- 20 This second stage for noise reduction is also flawed; the assumption is that building massing will further reduce the motorway noise. However, the noise assessment failed to mention any attenuation measures for the gaps, where **no** massing can take place for instance:
- 230 metres at the rear of Peel Hall Kennels & attenuation pond
  - Between separate apartment blocks
  - Between separate building plots
  - Above brooks and watercourses
  - Location of historic hedge
  - At the rear of Elm Road
  - At the site entrance in Mill Lane
  - Above the 12 metre Gas Main easement

- 21 All of these locations produce gaps that would allow 100% of the noise levels to penetrate through the site; this renders the proposal of apartments reducing the noise to the amenity space and rest of the site as being ineffectual.
- 22 Neighbouring communities - Cinnamon Brow and Locking Stumps, are situated alongside M62/M6 Croft Interchange. The layout of both areas incorporated a significant set backs from the motorway noise of 140 metres minimum at Cinnamon Brow and 150 metres minimum at Locking Stumps. No such distance is proposed for Peel Hall.
- 23 The information submitted from the limited monitoring of the M62 noise is unreliable; it does not capture accurate or sufficient data to assess the impact of such noise on a housing development in this location.
- 24 The Appellant's noise report lacks sufficient detail and robustness in the base line surveys with key omissions; as such the noise report does not stand scrutiny and is inadequate to demonstrate that the proposed development would not give rise to significant adverse noise impacts.
- 25 The Framework includes as a core planning principle that planning should always seek to secure a high quality design and a good standard of amenity for all existing and future occupants of land and buildings.
- 26 Article 8 of the Human Rights Act, states that a person has the substantive right to respect for their private and family life. A public authority needs to take positive steps to protect homes from serious noise pollution.
- 27 Highways England confirmed there were road closures and road works along the entire length of the site's north boundary adjacent to the M62 motorway, from 8.00 p.m. on 23/05/19 until 6.00 a.m. on 24/05/19.
- 28 The road closures and speed reductions would have a **significant** impact on the noise data collected and used by Miller Goodall in the preparation of the Appellants Noise Assessment.
- 29 The Appellant's noise assessment is not a true reflection of noise from the M62.

- 30 An accurate acoustic report cannot be complete unless all noise sources are included in the assessment. The Appellant's noise assessment did not consider other noises on the site such as Peel Hall Kennel, a noise source that would still exist after a noise barrier and massing occurred.
- 31 Without evidence that motorway noise can be mitigated, there is a real danger that the site will be developed in a piecemeal fashion without adequate implementation of the required noise reduction from the M62.
- 32 It has not been proven that the proposed noise attenuation measures could be implemented to an acceptable noise level.
- 33 The noise report is not fit for purpose, there is no confidence the site is suitable for a development of the size proposed. 1200 dwellings are unrealistic in this location when all of the site constraints are considered. A significant reduction in the overall proposal for entire site; with an adequate stand off from the M62 motorway could be considered.
- 34 This matter is too critical to fall back on condition, and needs to be assessed and designed for this purpose prior to permission being granted to ensure the noise mitigation can be met.