Appeal Decision

Site visit made on 1 October 2018

by Geoff Underwood BA(Hons) PGDip(Urb Cons) MRTPI IHBC

an Inspector appointed by the Secretary of State

Decision date: 23 October 2018

Appeal Ref: APP/P2935/W/17/3190769 Land East of Barrington Park, off Moorland Avenue, East Sleekburn, Northumberland NE22 7BZ

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant consent, agreement or approval to details required by a condition of a planning permission.
- The appeal is made by Mr David Robinson, Amethyst Homes Ltd against the decision of Northumberland County Council.
- The application Ref 17/03598/DISCON, dated 3 October 2017, sought approval of details pursuant to condition No 24 of a planning permission Ref 15/02628/FUL, granted on 30 January 2017.
- The application was refused by notice dated 2 November 2017.
- The development proposed is residential development of 59 dwellings with associated access and area of public open space.
- The details for which approval is sought are: a report detailing the protective measures to prevent the ingress of ground gases into new buildings.

Decision

1. The appeal is dismissed and approval of details is refused, namely: details submitted in pursuance of condition 24 attached to planning permission Ref 15/02628/FUL, dated 30 January 2017.

Application for costs

2. An application for costs was made by Mr David Robinson, Amethyst Homes Ltd against Northumberland County Council. This application is the subject of a separate Decision.

Preliminary Matters

- 3. The appellant points out that the Council's decision notice refusing to discharge the condition refers to British Standard BS8425:2015. The Council have confirmed that this was a typographical error. The condition itself refers to BS 8485:2015 which is the Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings.
- 4. It is not a matter for me in determining this appeal against a refusal for approval required by a condition to consider whether the condition itself is necessary.

Background and Main Issue

5. Planning permission was granted for a residential development and this included a condition which stated:

"No development shall commence until a report detailing the protective measures to prevent the ingress of ground gases, to the standards required in BS8485:2015 (Code of Practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings), have been submitted to and approved in writing by the Local Planning Authority. The report shall contain full details of the validation and verification assessment to be undertaken on the installed ground gas protection, as detailed in CIRIA C735 (Good practice on the testing and verification of protection systems for buildings against hazardous ground gases)."

- 6. The appellant initially did not submit a protective measures report, relying on his Phase 2 Ground Investigation Report which concluded that no protection measures were necessary. The appellant subsequently submitted a concise document entitled Gas Protection Measures Report. This reiterated his position that no protection measures were necessary but proposed that dwellings would be designed with a "pot and beam" floor (that is concrete beams supporting voided or hollow blocks forming the floor) with a ventilated sub-floor advising that this would act as a structural barrier with a passive sub-floor dispersal layer. There are no details of the subsequent validation and verification assessment required by the condition.
- 7. This report referred to on site gas monitoring which had been carried out and which the appellant considers demonstrates that the proposed floor construction would satisfy the recommendations of BS8485:2015 and consequently the condition.
- 8. The Council consider that the site's location within the Northumberland Coal Field puts it at risk from mine gas. They consider that as the appellant's gas monitoring was carried out during the summer period it would not have taken account of gas emissions which may be triggered by sharp drops in atmospheric pressure which are more likely to be experienced in winter.
- 9. The main issue is therefore whether the information submitted would be adequate to satisfactorily discharge condition to ensure that the health and safety of future occupiers of the development would be adequately protected.

Reasons

- 10. The first part of the condition requires the submission of a report. The appellant's Gas Protection Measures Report provides a basic written description of the proposed floor construction method but no details of any validation and verification assessment as the appellant considers that this is not necessary. The approach of BS8485:2015 is that the appropriate protection measures are based on establishing the "characteristic gas situation" (CS) for the development, which is a classification based on adequate site investigations. This is then considered against the proposed floor and substructure design, the proposed ventilation protection measures and any gas resistant membrane proposed with a methodology for attributing scores to each. These scores indicate whether the proposed measures would be appropriate for the site conditions.
- 11. In the event that the CS is CS1, i.e. a very low hazard potential as the appellant contends for the appeal development, BS8485:2015 sets a minimum gas protection score of zero. In effect this means that a beam and block type floor construction, which has a high risk for ground gas ingress, would achieve

that minimum zero score with or without any additional measures. Therefore the acceptability or otherwise of the protection measures proposed depends on the site's CS value. Whether this has been appropriately assessed for the site or not is the crux of the dispute between the parties. This is because if it were found to be higher than CS1 then the floor construction proposed by the appellant would not provide the minimum gas protection set out in BS8485:2015.

- 12. The Coal Authority's response to the application was that the site lies within an area they define as a Development Low Risk area. However, the appellant's Coal Authority Mining Report notes that the site is in the likely zone of influence from workings in 7 seams of coal at 50m to 220m depth, last worked in 1968.
- 13. Although this does not necessarily indicate the likelihood of gas emissions it supports the Council's position that the area is one which has seen coal mining activity. The Council advise that South East Northumberland has many old abandoned workings, many of which are unrecorded and located very close to the surface. The Coal Authority Mining Report goes on to advise that there is no record of a mine gas emission within the site which required action by the Coal Authority. Nevertheless, on the basis of the Council's position there is at least some reasonable basis to support the possibility that the site may be affected by mining gas emissions, at least to the degree that it would be prudent to carry out appropriate investigation
- 14. Gas monitoring was carried out by the appellant between May and August 2017. The results documented by the appellant's environmental consultants led them to conclude that the site was in CS1 and that consequently no protection measures would be necessary. This monitoring followed the approach of technical guidance in CIRIA C665¹. However, despite the monitoring methodology attempting to cover a 'worst case' scenario during rapid falls in atmospheric pressure, the maximum range in atmospheric pressure recorded was 1mbar. Although the results table noted trends it did not detail the duration of the pressure change.
- 15. BS8485:2015 is concerned with the design of protective measures rather than the risk assessment of hazardous ground gasses, although it does include guidance on gas monitoring data. However, it does not rule out undertaking more monitoring or adopting a precautionary principle in some circumstances, advising that collecting an improved dataset is prudent if assumptions of a worst case basis might lead to serious construction implications.
- 16. It is not in dispute that the CIRIA C665 guidance which informed the appellant's monitoring does not set specific times of year when monitoring should be carried out and the appellant points out that there is no legal requirement for monitoring at the time of year the Council consider necessary. However, the duration of monitoring recommended in CIRIA C665 depends on the potential of ground gasses being generated, with any source with a higher than a 'very low potential' requiring six months or more monitoring for a high sensitivity development such as houses with gardens. From the information provided the typical or idealised monitoring periods cited in CIRIA C665 are minimum ones.

-

¹ CIRIA C665: Assessing Risks Posed by Hazardous Ground Gases to Buildings, Construction Industry Research and Information Association, 2007.

- 17. The Council rely on officers of its Public Health Protection team having established technical and specialist knowledge and experience in mine gas assessment which they consider compensates for an absence of specific technical guidance. In particular they cite sources which indicate that rapid and profound falls in atmospheric pressure can lead to dangerous effects in air expiring from mine workings and that a drop of between 4 to 8mbar over three hours could be considered 'rapid and profound'. They also point to such drops in pressure being more sustained in winter months.
- 18. The Council's view does not contradict the approach in established industry standards but they seek monitoring in specific conditions and at a certain time of year. They consequently take a more precautionary approach in light of local knowledge and experience. Whilst the advice of Council officers in this respect does not appear to have been formalised in any guidance or similar, given the Council's experience of dealing with development in coalfield areas over a significant period this carries material weight in support of their position.
- 19. In this case there appears to be a sound and prudent reason for carrying out monitoring in more specific circumstances than the minimum set out in the established industry standards. I have been presented with no conclusive evidence that casts doubt on the Council's view, based on their experience, regarding the need to carry out monitoring at a time of year or in conditions where when rapid and profound pressure drops could be experienced and therefore enable more certainty about the site's CS classification.
- 20. The consequences to human health have the potential to be seriously adverse if an inappropriate design solution is chosen. There is sufficient potential for the CS classification of the site to be questioned and it is therefore reasonable to require data under more specific circumstances. On this basis it would be reasonable to adopt a precautionary approach which may include carrying out more exhaustive and conclusive monitoring or assuming a 'worst case' design for gas protection measures at a higher level than proposed. Neither of these options are provided for in the appellant's Gas Protection Measures Report and it cannot therefore be certain that the proposed floor construction would be adequate for the conditions on site.
- 21. Consequently I do not consider that the Report would be adequate to satisfactorily discharge the planning condition. Although it refers to requirements necessary before permission would be granted, insofar as the Report does not put forward feasible solutions to secure the removal of unacceptable risks to make the site suitable for its new use, it would not accord with saved Local Plan² Policy GP29.

Other Matter

22. The appellant mentions the findings of an Inspector in an appeal³ for a nearby housing site. In that case the Inspector found that conditions relating to contamination were not necessary in light of the findings of a phase 2 ground investigation report for that development. However, I have not been presented with all the details which led to that conclusion including what monitoring led to that site's CS classification. In any event each appeal needs to be considered

² Wansbeck District Local Plan – Written Statement, 2007.

³ APP/P2935/W/14/3001679.

on its own merits and in light of the evidence before me this does not lead me to a different conclusion on this appeal.

Conclusion

23. For the above reasons it has not been demonstrated that the information submitted would be adequate to satisfactorily discharge condition 24, and consequently it has not been demonstrated that the health and safety of future occupiers of the development would be adequately protected. The appeal is therefore dismissed.

Geoff Underwood

INSPECTOR

