

## **8. Ground Conditions**

### **8.1 Introduction**

8.1.1 This chapter considers the ground conditions of the Home Farm, Sandhills site, and in particular the Mineral Safeguarding Area which the site lies within, and why it is not considered suitable for mineral extraction.

### **8.2 Ground Conditions and Mineral Safeguarding Area**

8.2.1 The site is located within a Mineral Safeguarding Area for Sand and Gravel (Policy MIN1 of the Black Country Joint Core Strategy). The purpose of a Minerals Safeguarding Area is to alert prospective developers to the existence of mineral resources, so that they can be taken into account at the earliest possible stage of the development project.

8.2.2 The policy explains that proposals for non-mineral development within Mineral Safeguarding Areas will not be permitted unless it can be demonstrated that the development will not result in sterilisation of the resources within these areas. All non-mineral development proposals will be encouraged to extract any viable mineral resources present in advance of construction where practicable, and where this would not have unacceptable impacts on neighbouring uses. The policy requires supporting information to be submitted to demonstrate that mineral resources will not be sterilised. The supporting information is required to demonstrate that:

- Mineral resources are either not present, are of no economic value or have already been extracted as a result of a previous site reclamation scheme or other development; or
- Extraction of minerals is not feasible, for example due to significant overburden or because mineral extraction would lead to or exacerbate ground instability; or
- Prior extraction of minerals would result in abnormal costs and/or delays which would jeopardise the viability of the development; or
- There is an overriding need for the development which outweighs the need to safeguard the mineral resources present; or
- Extraction of minerals would have unacceptable impacts on neighbouring uses, the amenity of local communities or other important environmental assets.

8.2.3 Mindful of the above, the site at Home Farm, Sandhills is not considered suitable for mineral extraction. It is a sensitive location given the uses that immediately border the site including, in particular, Millfield Primary School and residential properties along the Chester Road and Lichfield Road. The area surrounding the site is generally residential in nature, particularly to the west and south. In addition, the Wyrley and Essington Canal borders the site western boundary and mineral extraction could have a severe impact on ecology in and around the canal side.

8.2.4 In addition to the sensitive uses that surround the site that render the site unsuitable for mineral extraction, the Environment Agency have confirmed that the bedrock beneath the site is a major aquifer, from which there is a public water supply abstraction located to the south east of the site. A small area of land in the south-eastern corner of the site is classified as Source Protection Zone 2, and the remainder of the site is classified as Source Protection Zone 3. The residential development of this site is compatible with these Zones. Should the site however be used for mineral excavation, the aquifers below the site could be adversely affected by the backfilling operations. This has the potential to cause problems regarding pollution risk. The backfilling of the site following excavation would also lead to the current permeable site becoming impermeable thereby reducing aquifer recharge. Any excavation and subsequent backfilling of the site would have implications on the future use of the site. The current sand and gravel soils provide ideal ground conditions to build on, being both permeable and stable, foundation solutions would become an issue on filled ground which would affect costs and values and potentially lead to issues with the viability of the development of the site in the future.

8.2.5 In essence, this site is not suitable for mineral extraction. Whilst the site overlies substantial sand and gravel reserves, these minerals are not a scarce resource and given the extent of other land potentially available for mineral extraction in the area which does not have such constraints it is the case that the need for minerals from this site does not outweigh what are material planning objections to such a use in this location.

### **8.3 Summary**

8.3.1 In light of the above it is concluded that this site is suitable for residential development in accordance with both local and national planning policy which promotes a presumption in favour of sustainable development. A proposal for an alternative use, such as mineral extraction, would not be. Notwithstanding this it is considered that the site is unsuitable for mineral extraction given its location relative to a number of sensitive receptors and the potential for pollution risk with regards the aquifers below the site. Sand and gravel reserves are not in short supply and given that there is the extent of land potentially available locally for mineral extraction without the use of this site, it is therefore the case that the loss of this site as a potential mineral location is not significant and does not outweigh the legitimate material planning benefits arising from the use of the site for residential development as suggested.

8.3.2 In conclusion, having undertaken the above initial work in relation to the site's ground conditions, it is considered that the site is suitable for residential development.