











MINERAL RESOURCE ASSESSMENT

PROPOSED RESIDENTIAL AND COUNTRYSIDE PARK DEVELOPMENT

WILDERNESS PARK, LAND NORTH OF WILDERNESS LANE, GREAT BARR

WAIN ESTATES (LAND) LTD.

OCTOBER 2023

MINERAL RESOURCE ASSESSMENT				
Wilderness Park	Wain Estates (Land) Limited	W032-01		

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Contents

1	INTRODUCTION	2
1.1	Context	2
1.2	Local Policy Background	2
2	MINERALS POLICY CONTEXT	6
2.1	The Development Plan	6
2.2	National Planning Policy Framework, July 2021	7
3	MINERAL SAFEGUARDING	8
3.1	Introduction	8
3.2	Minerals Policy Statement 1: Planning and Minerals (November 2006)	8
3.3	National Planning Policy Framework, March 2012	9
3.4	National Planning Policy Framework, July 2021	9
3.5	Planning Practice Guidance, March 2014	11
3.6	Local Policy & Guidance	14
4	SITE LEVEL MINERAL RESOURCES AND SAFEGUARDING	16
4.1	Background History, Geology and Ground Conditions	16
5	MINERAL SAFEGUARDING AREA	20
6	ENVIRONMENTAL EFFECTS OF MINERAL WORKINGS	27
6.1	Introduction	27
7	THE IMPACT OF MINERAL SAFEGUARDING AREAS	30
7.1	Introduction	30
7.2	Site Topography and Context	30
7.3	Local Environmental Considerations	30
7.4	The Likely Environmental Effects of Minerals Extraction in the MSA	31
7.5	Policy Requirements	31
7.6	The Need for and Likelihood of Future Extraction in the adjacent MSA	36
7.7	Compliance with other Policies	37
8	CONCLUSIONS	39
8.1	Conclusions from this Report	39

1 INTRODUCTION

1.1 Context

- 1.1.1 GP Planning Ltd has been commissioned to prepare a Mineral Resource Assessment (MRA) in connection with prospective housing on Land north of Wilderness Lane, Great Barr, Birmingham (the Site).
- 1.1.2 The Site lies within the administrative boundary of Sandwell Metropolitan Borough Council.
- 1.1.3 The Site is approximately 27ha in size and the development plot is 3.91ha is proposed for new housing. The proposal includes provision of 40% affordable housing and a countryside park.
- 1.1.4 The site has been actively promoted since 2017 by Wain Estates (Land) Ltd, formerly Himor, as a sustainable and deliverable opportunity for new homes and associated infrastructure. The entire site is in the ownership of Wain Estates (Land) Ltd.

1.2 The Proposals

- 1.2.1 The proposed development is masterplan led and comprises 3.91ha of potential development plots with up to 150 dwellings.
- 1.2.2 A large part of the site is proposed to be reserved for a countryside park, allowing public access to this green infrastructure asset.
- 1.2.3 The Illustrative Masterplan is shown on Drawing 09364-FPCR-XX-ZZ-DR-L-0012, Revision P07. This is replicated in Figure 1 below.



Figure 1: Illustrative Masterplan

1.3 Local Policy Background

- 1.3.1 The Development Plan for Sandwell comprises the Site Allocations and Delivery Development plan document, adopted December 2012 and the Black Country Core Strategy Adopted February 2011.
- 1.3.2 The Sandwell Metropolitan Borough Council (SMBC) is in the process of preparing a new local plan for the borough and the public consultation on the Sandwell Issues and Options Consultation took place between 6th February and 20th March 2023.

- 1.3.3 Prior to the publication of the Issues and Options document, SMBC was closely involved in the production of a replacement for the Black Country Core Strategy, in the form of the Black Country Plan (BCP), alongside the other three Black Country councils. However, work on the production of the joint BCP officially ceased in October 2022. It is understood that some of the evidence base for the BCP is to be reused as part of the emerging Sandwell Local Plan.
- 1.3.4 The Site has been promoted historically through the BCP since 2017 and most recently to the Regulation 18 consultations in October 2021 and September 2022. To support these representations background work has been undertaken to provide a robust evidence base to support the allocation of the Site for development. A representation was submitted to the Sandwell Local Plan Issues and Options consultation which ended in March 2023.

Site Features and Constraints

- 1.3.5 The site is an area of low-grade agricultural land, to the north and west of Great Barr and is located within the Greater Birmingham Green Belt. It is made up of field compartments which are generally irregular in shape and comprise outgrown hedges with some hedgerow trees. Some blocks of trees lie immediately to the north within the grounds of the Aston University sports facilities.
- 1.3.6 Existing land uses in the vicinity are a complex mix of pockets of farmland (or former farmland), built up areas, sports facilities, golf courses, woodland and water.
- 1.3.7 Land to the east and south of the Site comprises residential development, with mainly semi-detached and short terraced properties. Properties on Peak House Road back onto the Site and properties on the southern side of Wilderness Lane, front onto the Site.
- 1.3.8 The Q3 Academy, with a range of academic buildings and sports facilities/ external space lies immediately to the south.
- 1.3.9 The Site generally descends from approximately 165m in the north east corner, to 130m in the west. A localised valley runs from the south west to north east within the site.

Constraints

- 1.3.10 There are no Public Rights of Way (PROW) within the site, and the site is not publicly accessible. However, the proposal for the site incorporates public access.
- 1.3.11 There are no designated archaeological assets within the Site.

- 1.3.12 The site is not covered by any designation relating to its landscape character or quality.
- 1.3.13 There are no statutory designations of nature conservation value within or immediately adjacent to the site.
- 1.3.14 However, there is a Site of Local Important Nature Conservation (SLINC) designation covering the site. It primarily relates to the network of hedgerows running throughout the site. It is in a degraded state and will be enhanced as part of the proposals.
- 1.3.15 An area within the western part of the Site falls within a Minerals Safeguarding Area (MSA), the extent and implications of which are discussed below.
- 1.3.16 As a consequence of the Site's location in a MSA, and in line with the Black Country Cire Strategy, it is necessary to prepare a Minerals Resource Assessment (MRA) to determine compliance with the requirements of the relevant policy.
- 1.3.17 The purpose of this Mineral Resource Assessment is threefold:
 - Firstly, the Assessment considers the proposal against national and local policy;
 - Secondly, it considers whether the proposed development itself would sterilise mineral reserves; and
 - Thirdly, whether the grant of planning permission would mean that other reserves could potentially be sterilised by virtue of the proximity of the residential properties

2 MINERALS POLICY CONTEXT

2.1 The Development Plan

- 2.1.1 The current development plan, as far as minerals extraction is concerned, is:
 - Black Country Core Strategy (BCCS), adopted 16 February 2011.
- 2.1.2 The key policy in respects of safeguarding is Policy MIN1, Managing and Safeguarding Mineral Resources part of which is reproduced below:

Mineral Resources to be Safeguarded

The Black Country has the following mineral resources which are either currently of economic importance or have the potential to become important in the future:

- Aggregates (sand and gravel);
- · Brick clays (Etruria Marl and fireclay);
- · Coal:
- Limestone;
- · Dolerite;
- · Building stone.

The resources are very extensive and cover almost the whole of the Black Country. They will be protected by being included within the Mineral Safeguarding Area (MSA) shown on the Minerals Key Diagram. The MSA has been defined in detail on the Proposals Maps for each authority, and separate maps showing the extent of each mineral commodity are provided in Appendix 7. Mineral commodity areas may be further refined and developed in other DPDs.

Non-Mineral Development within the MSA

Proposals for non-mineral development within the Areas of Search (see MIN2 and MIN3) will not be permitted unless it can be demonstrated that the development will not result in sterilisation of the resources within these areas. Proposals for non-mineral development close to an operational quarry should also demonstrate that the quarrying operation would not be compromised by the proposed development.

All non-mineral development proposals within the MSA 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. Particular encouragement will be given to schemes involving the prior extraction of minerals for use on-site or for use/ stockpiling elsewhere for future use (such as brick clays or natural building stone), to support a land remediation or stabilisation scheme, and schemes which will help conserve features important to the Black Country's geological heritage.

The following types of development within the MSA (except for conversions/ changes of use which do not involve any new building or excavation works) should be accompanied by supporting information demonstrating that mineral resources will not be needlessly sterilised:

- All non-mineral development proposals relating to sites or areas of 0.5ha and over in the Green Belt:
- All non-mineral development proposals relating to sites or areas of 5ha and over in the urban areas (outside the Green Belt).
- 2.1.3 The Policy also includes the following:

"The supporting information to be provided with the above types of application should include details of a prior extraction scheme or, where this is not considered feasible, evidence 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."

2.2 National Planning Policy Framework, September 2023

- 2.2.1 Section 17 of NPPF relates to facilitating the sustainable use of minerals.
- 2.2.2 Paragraph 209 states:

"It is essential that there is a sufficient supply of minerals to provide infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation."

2.2.3 In respect of developing appropriate policies, Paragraph 210 advises that planning policies should, *inter alia*:

"c) safeguard mineral resources by defining Mineral Safeguarding Areas and Mineral Consultation Areas; and adopt appropriate policies so that known locations of specific minerals resources of local and national importance are **not sterilised** by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked);

d) set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place;"

Note: **bold** is the Author's emphasis.

2.2.4 The implications of extant policies are discussed in Section 7 of this MRA.

3 MINERAL SAFEGUARDING

3.1 Introduction

3.1.1 This section explains the overarching policy background to mineral safeguarding and the emerging local policy context.

3.2 Minerals Policy Statement 1: Planning and Minerals (November 2006)

- 3.2.1 Prior to the publication of the National Planning Policy Framework in March 2012 (MPPF), Minerals Policy Statement 1: *Planning and minerals* (November 2006) (MPS 1) and the accompanying Planning and Minerals: Practice Guide provided the national planning policy for mineral safeguarding. Paragraph 15 set out national policy on safeguarding mineral reserves with the following intent:
 - I. To place an obligation on all Mineral Planning Authorities (MPAs) to define Mineral Safeguarding Areas (MSAs) in Local Development Documents (LDDs) to ensure that 'proven' resources are not needlessly sterilised.
 - II. To encourage the prior extraction of minerals 'where practicable' if non-mineral development is necessary in MSAs.
 - III. In two-tier planning areas, include policies and proposals to safeguard mineral resources within MSAs in county LDDs and MSAs in district LDDs. Counties should define Mineral Consultation Areas (MCAs) based on MSAs. Where a planning application is submitted within an MCA, the District Council should consult the County Council on the application.
 - IV. District Council's responsible for spatial planning of land defined in MSAs should not normally include policies and proposals in their LDDs for non-minerals development in those areas, or sensitive development around MSAs, where such policies would affect the potential for future extraction of minerals.
- 3.2.2 While the MPS is no longer extant, it is included as it provides background to the derivation of MSAs.
- 3.2.3 It was not intended for MSAs to impose a blanket restriction on development within them and there is no presumption that mineral resources will be worked in these areas. Furthermore, the delineation of minerals resources does not involve consideration of the full range of land use constraints that might apply if future extraction was to be considered.
- 3.2.4 The purpose of MSAs is to ensure that the presence of mineral resources is both adequately and effectively considered in land-use planning decision making.

3.3 National Planning Policy Framework, March 2012

- 3.3.1 NPPF 2012 confirmed that the purpose of the planning system was to contribute to the achievement of sustainable development and that the policies taken as a whole, constituted the Government's view of what sustainable development in England means in practice for the planning system.
- 3.3.2 Section 13 of NPPF 2012 addressed the sustainable use of minerals.
- 3.3.3 NPPF 2012 confirmed that, in preparing local plans, local planning authorities are required to define Mineral Safeguarding Areas (Paragraph 144) and adopt appropriate policies in order that known locations of specific mineral resources of local and national importance are not *needlessly* sterilised by non-mineral development, whilst not creating a presumption that the resources defined will be worked, and there is a requirement to define Minerals Consultation Areas based on the MSAs.
- 3.3.4 The use of the word *needlessly* did not feature in NPPF 2019.

3.4 National Planning Policy Framework, September 2023

- 3.4.1 The updated NPPF confirms that the purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development is summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs. There are three overarching objectives within the planning system to ensure that sustainable development is achieved:
 - An economic objective to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
 - A social objective to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

- An environmental objective to protect and enhance our natural, built and historic environment; including making effective use of land, helping to improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.
- 3.4.2 The three objectives should not be undertaken in isolation. This assists in weighing up the balance in the decision-making process. The sustainable credentials of the proposed housing development are an important consideration when determining the planning balance.
- 3.4.3 Section 17 of the NPPF deals with facilitating the sustainable use of minerals and recognises the key role minerals have in supporting growth and the need to plan for sufficient supply. Minerals resources are finite and should be used with that in mind. Consideration needs to be given to whether the extraction of minerals alongside this proposal is sustainable.
- 3.4.4 In preparing local plans, MPAs should safeguard mineral resources by defining Mineral Safeguarding Areas and Mineral Consultation Areas (Paragraph 210 c) and adopt appropriate policies so that known locations of specific mineral resources of local and national importance are not sterilised by non-mineral development, where this should be avoided (whilst not creating a presumption that the resources defined will be worked).
- 3.4.5 Planning policies should also set out policies to encourage the prior extraction of minerals, where this is practical and environmentally feasible, if it is necessary for non-mineral development to take place.
- 3.4.6 NPPF does not require MPAs to include policies that prevent <u>all</u> development in MSAs. There is flexibility if there is a degree of necessity for the non-mineral development.
- 3.4.7 The nature of the delineation of MSAs exercise means that judgement needs to be applied as the reserves are mapped with no consideration of the wider land use planning implications and the acceptability of future extraction. MSAs are a useful tool to allow the existence of mineral resources to be 'flagged up' for consideration as part of other potential developments.
- 3.4.8 The MSA is intended to cover the full estimated extent of the reserve. The definition of MSAs on its own will not safeguard reserves and there are normally linked development management policies to afford additional protection.

- 3.4.9 When determining planning applications Local Planning Authorities (LPAs) should not normally permit other development proposals in MSAs if it might constrain potential future use for mineral working (Paragraph 212, NPPF). The use of the word "normally" is important because it means that the NPPF does not require all development in MSAs to be refused.
- 3.4.10 Minerals are finite and can only be worked where they occur. Sterilisation of minerals can occur as a result of surface development on top of reserves or by development that is close to the boundary of a resource. Where mineral resources exist below a development the prior extraction of those minerals should be considered. NPPF states, in Paragraph 210 d, that the MPA should set out polices to *encourage* the prior extraction of minerals, where *practical and environmentally feasible*. There is no explicit reference to *practical or environmental feasibility* in the MPA's adopted policies, which are considered below.

3.5 Planning Practice Guidance, March 2014

3.5.1 Planning Practice Guidance (PPG) includes guidance on planning for mineral extraction in the plan making and application process. Section 2 of the Minerals Guidance addresses mineral safeguarding commencing at Paragraph: 002 Reference ID: 27-002-20140306. Section 3 covers planning for mineral extraction and Section 4 provides guidance on assessing the environmental effects from mineral extraction.

Section 2 Mineral Safeguarding

- 3.5.2 The guidance re-iterates NPPF by stating that mineral safeguarding is the process of ensuring that non-minerals development does not needlessly prevent the future extraction of minerals resources of local and national importance. The use of the word needlessly is important. Needless means without cause or reason. In the same way as the over-arching NPPF, PPG is not imposing a complete restriction on non-minerals development in MSAs. that does not provide for prior extraction where there is cause and reason for that decision.
- 3.5.3 MPAs are advised to adopt a systematic approach to safeguarding mineral resources, which:
 - Uses best available information on the location of all mineral resources;
 - Involves consultation with stakeholders to define MSAs;
 - Sets out MSAs on the polices map that accompanies the local plan; and
 - Adopts clear development management policies which set out how proposals for non-mineral development in MSAs will be handled, and what action applicants for development should take to address the risk of losing the ability to extract the resource. This may include policies that encourage

the prior extraction of minerals, where practicable, if it is necessary for non-mineral development to take place in MSAs and to prevent the unnecessary sterilisation of minerals.

3.5.4 Councils are advised to:

- Have regard to the local minerals plan when identifying suitable areas for non-mineral development and should show MSAs on their policy maps;
- Consult the MPA and take account of the policies in the local minerals plan before determining applications for non-mineral development; and
- When determining planning applications, doing so in accordance with development policy on mineral safeguarding, and taking account of the views of the MPA on the risk of preventing extraction.
- 3.5.5 PPG contains a link to "Mineral safeguarding in England: good practice advice" (Open Report OR/11/046),
 British Geological Survey 2011. This is the second edition of the guide, the first having been produced in
 2007. This guide provides clearer guidance and assistance with implementing certain aspect of the mineral
 safeguarding process.
- 3.5.6 The BGS Report, while published pre-NPPF, remains relevant. At Paragraph 1.1.2 it states, 'The essence of any safeguarding process is that it should introduce the consideration of minerals into the decision-making balance, so that access to mineral resources for future generations is preserved as far as possible.' This recognises that it will not be possible to safeguard minerals resources in all cases.
- 3.5.7 The Guide sets out a 7-stage safeguarding methodology:
 - Identify the best geological and resource information;
 - The definition of up to date MSAs requires up to date, factual information on the physical location of mineral resources and should be based principally on the best available mineral resource information at the time they are prepared. A robust credible starting point is BGS data. Mineral deposits do not necessarily equate to viable mineral resources. Where available other data should also be incorporated e.g., from industry, sand and gravel assessments, Coal Authority data.
 - Decide which minerals to safeguard and the physical extent of MSAs;
 - The best available data gathered from Stage 1 should then be used as a basis for deciding those minerals that are of economic importance and should be safeguarded. Information should be used to compile resource maps best done using GIS. MSAs should usually cover the whole resource and not be curtailed by other planning considerations. Decisions and modifications to the extent of any resources should be fully recorded and justified. It may be appropriate to extend the MSA beyond the resource boundary to take account of the risks associated with sterilisation by incompatible development nearby. In urban areas MPAs should define MSAs to highlight the potential for extracting minerals beneath large

regeneration projects and brownfield sites. In exceptional circumstances the definition of MSAs to exclude urban areas may be justified e.g., where the method of working the mineral may not acceptable.

• Undertake consultation on Draft MSAs;

The proposed list of minerals to be safeguarded and the justification together with maps of mineral resources and draft MSAs should be the subject of specialist consultations. Key consultees include the Coal Authority, English Heritage, BGs and neighbouring MPAs. Consultation may take many forms.

- Decide on the approach to safeguarding in the Core Strategy;
 It is essential that the approach to safeguarding is defined in the Core Strategy.
- Include Mineral Assessments in the local list of information requirements;

The definition of MSAs will not in itself safeguard mineral resources. Effective safeguarding will only be achieved by outlining criteria against which planning applications for land use and development in the MSAs will be considered. A criteria based safeguarding policy is advised, stating the circumstances where non-mineral development would be appropriate. It may also be useful to set out exemption criteria e.g., householder development. MSA boundaries should be presented on proposals map that accompanies the relevant DPD.

- Include safeguarding in district level DPDs;
 This stage is only where there are two tier authorities.
- Include Mineral Assessments in local list requirements;

Sufficient information on mineral resources is necessary for local authorities to determine non-mineral planning applications submitted in MSAs. The requirement for a Mineral Assessment could be administered through the Local List.

- 3.5.8 The information that is required in a Mineral Assessment/MRA should be relevant, necessary and material to the application in question. The Mineral Assessment should include a site specific, desk-based assessment of existing surface and solid geological information and an analysis of that information, its potential for use in forthcoming development and an assessment of whether it is feasible and viable to extract the mineral resources ahead of development to prevent unnecessary sterilisation.
- 3.5.9 Where an applicant proposes development within an MSA, the planning authority should ensure that the applicant has considered all the options to avoid sterilisation of the minerals.
- 3.5.10 An assessment of the viability of prior extraction will need to take into account whether the environmental conditions are suitable to support extraction and whether extraction is achievable in an acceptable

timeframe. Additional considerations may also include the availability of the market to deal with the supply and the financial outlay required to develop the subsequent excavation.

- 3.5.11 PPG also assists with guidance on assessing environmental impacts of mineral extraction.
- 3.5.12 The introduction of a significant mineral extraction element would most likely give rise to impacts that could be considered significant and more than localised.
- 3.5.13 PPG lists the type of environmental issues that would need to be considered. It also addresses whether separation distances / buffer zones are appropriate, confirming that in specific circumstances they may be necessary. Any proposed distances should be established on a site-specific basis and should be effective, properly justified and reasonable.

3.6 Local Policy & Guidance

- 3.6.1 Section 2 of this Report sets out the extant minerals policy context and Policy MIN 1 is relevant.
- 3.6.2 The Policy predates both NPPF 2012 and NPPF 2021. However, the principle of safeguarding minerals has not fundamentally altered.
- 3.6.3 Policy MIN 1 provides criteria against which to judge the appropriateness of development within an MSA as follows:

"The supporting information to be provided with the above types of application should include details of a prior extraction scheme or, where this is not considered feasible, evidence 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."

3.6.4 As each bullet point in is followed by "or" then only one of the criteria would need to be met. In this case, however, it will be demonstrated that all of the bullet points area applicable.

4 SITE LEVEL MINERAL RESOURCES AND SAFEGUARDING

4.1 Background History, Geology and Ground Conditions

Site History

4.1.1 The Site is not subject to any planning applications/permissions and there is no record of any mineral applications/permissions on the site or adjoining land.

Site Geology

4.1.2 Figure 2 is an extract from the BGS Mineral Resources map for Warwickshire/West Midlands (1999). The approximate site boundary is marked in red. It can be seen that none of the Site is shown to be underlain by mineral resources.

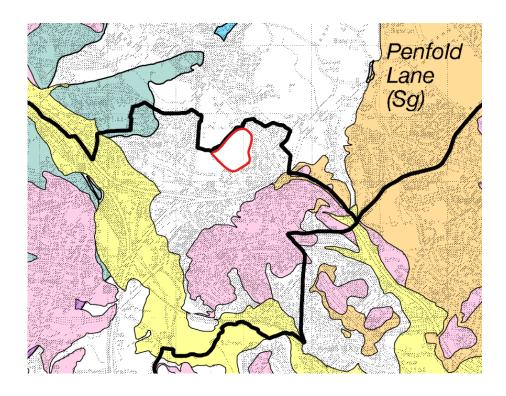


Figure 2: BGS West Midlands/ Warwickshire Map extract

4.1.3 The BGS online geology viewer shows no superficial deposits below the Site as can be seen in Figure 3 below.



Figure 3: BGS Viewer superficial deposits

- 4.1.4 Figure 4 shows the *bedrock* geology with a dark pink filter. Here the bedrock comprises:
 - Enville Member Sandstone with subordinate conglomerate, siltstone and mudstones (olive/brown)
 - Enville Member Sandstone (dark pink)
 - Coalbrookdale Formation Mudstone (lilac)
 - Rubery Sandstone Member Sandstone (green)



Figure 4: BGS geology viewer bedrock deposits

BGS Boreholes Analysis

4.1.5 The BGS online viewer has no record of any boreholes under the site. Nearby boreholes, within the MSA, are shown on the overview plan below. The black boreholes are confidential, and no information is available. The boreholes to the west of the canal relate to the housing estate and were only drilled to around 2m depth. The mineral present in the majority of these logs was defined as silty clay. The most useful boreholes therefore are those to the north of the Site.



Figure 5: Boreholes in the vicinity of the Site

- 4.1.6 The boreholes logs to the north are summarised below. Depths are metres below ground level (BGL):
 - SP09NW1123: clay 0.9-1.7; siltstone 1.7-5.55
 - SP09NW1122: clay/siltstone 0.5- 2.9; siltstone 2.9 4.2
 - SP09NW1121: clay 1.1-2.05: clay/siltstone 2.05 3.4; siltstone 3.4 4
 - SP09NW1120: clay 0.7-2.15; siltstone 2.15 4.25
 - SP09NW1118: clay 0.55-2.10; siltstone 2.1-2.60; mudstone 3.1-4.1
- 4.1.7 All the above boreholes were drilled on behalf of Walsall MBC in 1989. The reasons for the boreholes are not stated.

5 MINERAL SAFEGUARDING AREA

5.1.1 Figure 6 below is an extract from the BCCS. The MSA in the vicinity of the Site is shown by a brown dashed oval. The Site is marked by an orange dot. The green areas are Green Belt.

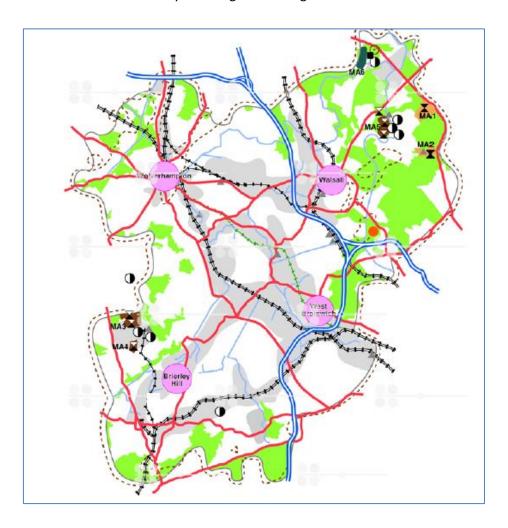


Figure 6: Black Country Core Strategy Minerals Key Diagram

5.1.2 Unfortunately, the map is at too small a scale to be able to identify boundaries of individual sites. However, the *Review of the Evidence Base for Minerals to support preparation of the Black Country Plan* – January 2020 (Mineral Report) includes the safeguarding areas at a larger scale, shown below in Figures 7 and 8. The safeguarding area nearest to the proposal site is shown by the oval black and blue dashed line, which crosses over the Sandwell/Walsall border, shown in red.

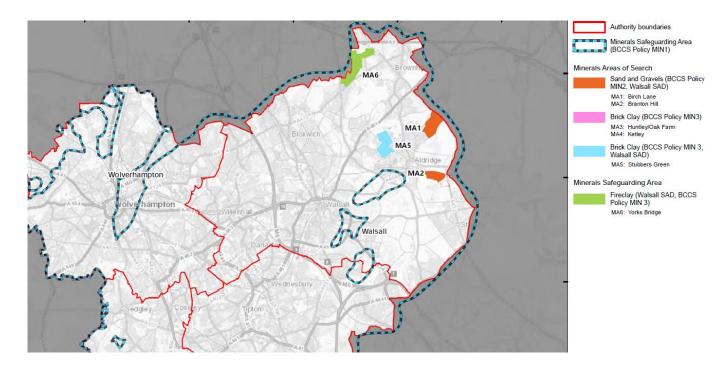


Figure 7: Extract from Figure 11.2 Existing Minerals Safeguarding Area and Areas of Sea

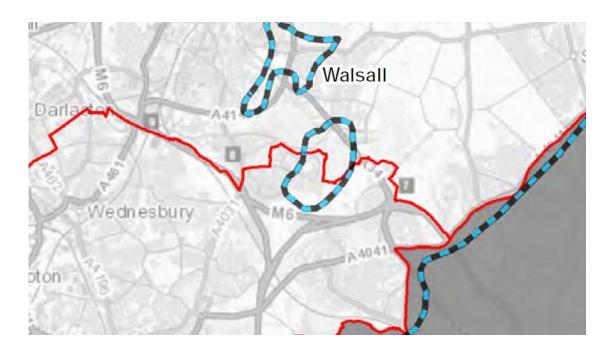


Figure 8: Blow-up" of Figure 8

5.1.3 The MSA does not differentiate between minerals and so it is not possible from the above mapping to ascertain which mineral(s) are being safeguarded.

5.1.4 Mineral Commodity Map MC1 from the BCCS shows the sand and gravel resource as shown in Figure 9 below.

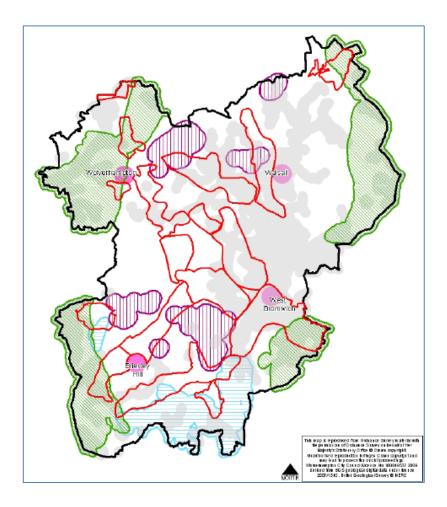


Figure 9: Mineral Commodity Map MC1

- 5.1.5 The green areas are the sand and gravel bedrock and the grey areas are the superficial deposits. The proposal site is outwith the green area. However, the scale of the plan is too small to accurately determine if the Site is within a grey area.
- 5.1.6 Mineral Commodity Map MC2 from the BCCS shows the limestone and brick clay resource as shown in Figure 10 below:

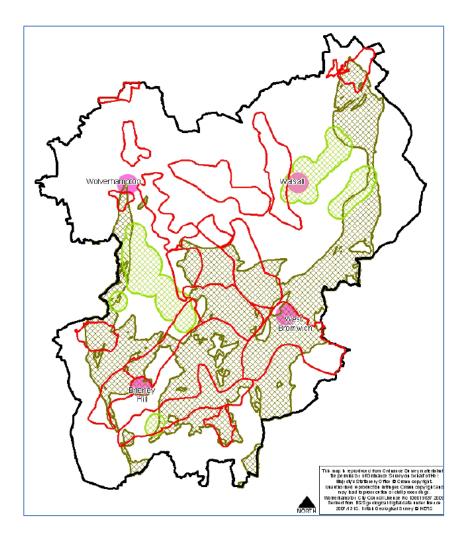


Figure 10: Mineral Commodity Map MC2

- 5.1.7 It is evident that the site is not within a limestone resource area (green). However, it is possibly within the brick clay resource area (brown)
- 5.1.8 Mineral Commodity Map MC3 shows the coal resource as shown in Figure 11 below:

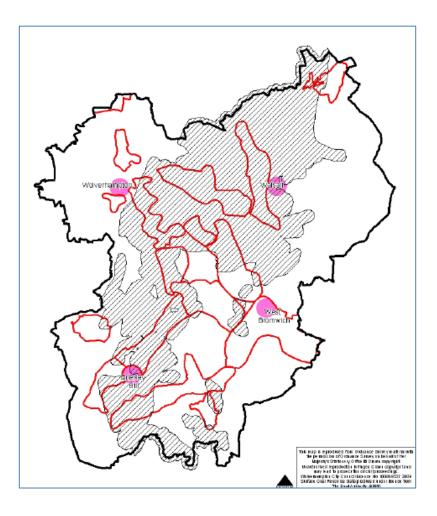


Figure 11: Mineral Commodity Map MC31

- 5.1.9 The Site is not within the coal resource area.
- 5.1.10 Based on the above, the site would appear to be within the brick clay resource area.
- 5.1.11 However, it should also be pointed out that the BGS resource map does not show any mineral resources within the proposal site as shown in Figure 1 above. The online BGS viewer does not show any superficial deposits below the site.
- 5.1.12 The bedrock within the MSA as shown on the BGS Viewer, is Coalbrookdale Formation Mudstone. Sedimentary bedrock formed between 433.4 and 427.4 million years ago during the Silurian period. Mudstone is a type of mudrock, is a fine-grained sedimentary rock whose original constituents were clays or mudstone.
- 5.1.13 Further evidence is provided in the Black Country Minerals Study of 2008. Under section 4.3 bedrock Geology it states:

"The Coalbrookedale Formation (formerly Wenlock Shales) comprises is a thick series of shales and interbedded limestones between the Barr and Much Wenlock Limestones"

5.1.14 The 2008 Mineral study included a *proposed* MSA for limestone an extract of which is shown below. The horizontal shaded light blue areas are the limestone MSAs. Notably, this does not correlate with the existing MSA.

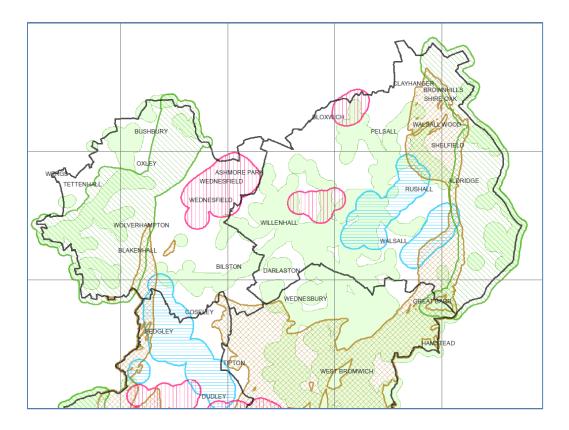


Figure 12: Black Country Proposed Mineral Safeguarding Areas (2008)

- 5.1.15 Whilst the mineral in the <u>existing</u> MSA may be limestone, that does not correlate the limestone resource area in Figures 10 or 12. The area which the application area overlies appears to be is within the brick clay resource safeguarding area but there is not geological evidence that there is workable brick clay resource here.
- 5.1.16 In light of the above it is not clear which mineral resource the MSA relates to.
- 5.1.17 Notwithstanding the above Figure 13 below shows the area of land which is covered by the MSA within the application boundary (shaded brown). This represents 23% of the total site area.



Figure 13: Land within the MSA (brown)

6 ENVIRONMENTAL EFFECTS OF MINERAL WORKINGS

6.1 Introduction

- 6.1.1 The extraction of minerals can give rise to certain environmental effects. NPPF recognises this at Paragraph 210 and requires environmental criteria to be set out in Local Plans, in line with the other policies in NPPF, against which planning applications will be assessed to ensure that permitted and proposed operations do not have unacceptable adverse impacts on the natural and historic environment or human health.
- 6.1.2 When determining planning applications, mineral planning authorities (MPAs) should ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety.
- 6.1.3 Policy MIN5 states that the working or processing of minerals or extraction of coal bed methane will not be permitted in residential areas unless it can be demonstrated that the operations will not cause unacceptable harm to the amenity of local communities.
- 6.1.4 The policy also states that proposals for mineral working or will be assessed against certain criteria. These include:
 - Whether the proposal is compatible with neighbouring uses (taking into account the nature of the
 operations, the hours of working, the timing and duration of the operations and cumulative
 effects), and if so, whether it identifies and adequately addresses potential harmful effects on
 amenity;
- 6.1.5 Planning Practice Guidance (PPG) addresses these potential effects in more detail.
- 6.1.6 All of the matters are relevant when considering the impact of mineral working prior to the residential development and the impact of residential development on potential future mineral workings beyond the site in the MSA.

Proximity of mineral workings to communities

6.1.7 PPG provides for a programme of work to be agreed with the MPA, which takes into account, as far as is practicable, the potential impacts on the local community over the life of the development. PPG advises that separation distances/buffer zones may be appropriate in specific circumstances where it is clear that, based on site specific assessments and other forms of mitigation measures (such as working scheme design and landscaping) a certain distance is required between the boundary of the minerals extraction area and

occupied residential property. Any proposed separation distance should be established on a site-specific basis and should be effective, properly justified, and reasonable. There is no suggested distance in PPG, but the distance should be effective but reasonable taking into account:

- The nature of mineral extraction activity;
- The need to avoid undue sterilisation of mineral resources,
- Location and topography;
- The characteristics of the various environmental effects; and
- The various mitigation measures that can be applied.

Dust Emissions

6.1.8 The NPPF makes it clear that unavoidable dust emissions are controlled, mitigated or removed at source and that a dust assessment study should be undertaken. Guidance is provided on the key stages of assessment and the potential health effects of dust. Residential properties are deemed to be of medium sensitivity.

Noise Emissions

- 6.1.9 The NPPF makes it clear that MPAs should ensure that unavoidable noise emissions are controlled, mitigated or removed at source and that appropriate noise limits should be established for extraction in proximity to noise sensitive properties.
- 6.1.10 A noise emissions assessment should be carried out and should identify all potential sources of noise in the context of the existing noise climate and background noise at noise sensitive properties.
- 6.1.11 The proposed noise standards carry forward previous guidance in MPS 2. Subject to a maximum of 55dB (A)LAeq, 1h (free field) MPAs should aim to establish a noise limit at noise sensitive properties that does not exceed the background level by more than 10dB (A). In some cases, that may be difficult and in those cases the limit set should be as near that level as practicable during normal working hours and should not exceed 55dB(A)LAeq, 1h (free field). Evening limits should not exceed the background level by more than 10dB(A) and night-time limits should not exceed 42dB(A)LAeq, 1h (free field) at noise sensitive properties.
- 6.1.12 The Guidance acknowledges that some temporary operations are inherently noisy and cannot meet the limits e.g., soil stripping. Increased temporary daytime noise limits of up to 70dB(A)LAeq, 1h (free field) for periods of up to 8 weeks in a year at noise sensitive properties should be considered to facilitate site operations.

6.1.13 The potential environmental impacts of any future extraction are contained in Section 7 of this Report.

7 THE IMPACT OF MINERAL SAFEGUARDING AREAS

7.1 Introduction

7.1.1 In order to determine the impact of the proposed residential development on the MSA it is necessary to examine a number of topics, before reaching a conclusion.

7.1.2 This section addresses:

- Site topography, geology and context;
- Identified environmental considerations;
- The location and boundaries of the MSA;
- The likely environmental effects of mineral extraction;
- The need for and likelihood of future mineral extraction in the adjacent MSA;
- The prospect of being able to extract minerals prior to extraction, and
- The need for the housing development.

7.2 Site Topography and Context

- 7.2.1 The site is an area of low-grade agricultural land, to the north and west of Great Barr, and is currently located within the Birmingham Green Belt. It is largely grassland, and formerly used for grazing.
- 7.2.2 The site generally descends from approximately 165m in the north east corner, to 130m in the west. A localised valley runs from the south west to north east within the site.

7.3 Local Environmental Considerations

- 7.3.1 The Site is not subject to any formal local or statutory landscape or nature conservation designations.
- 7.3.2 A housing estate borders the eastern boundary. The Q3 Academy borders part of the southern boundary. Aston University recreation centre lies adjacent to the northwestern boundary.
- 7.3.3 The Site's local context is shown on the aerial photo below.



Figure 14: Site context and adjoining land-uses

7.4 The Likely Environmental Effects of Minerals Extraction in the MSA

- 7.4.1 There are two approaches to considering the impact of MSA's. The first is consideration of the impacts arising from prior extraction at the development site on existing residents. In this case those are the receptor locations, mainly to the east and north of the Site as described above.
- 7.4.2 The second is the impact of working minerals in the MSA beyond the development site and the impact that would have on the living conditions of future residents associated with the proposed development site, referred to as "proximal" impact.
- 7.4.3 The "impacts" that may be experienced are considered to be amenity impacts arising from noise, dust and plant associated with quarrying activities.

7.5 Policy Requirements

7.5.1 Policy MIN 1 states:

"The supporting information to be provided with the above types of application should include details of a prior extraction scheme or, where this is not considered feasible, evidence 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."
- 7.5.2 Each of the bullet points is addressed separately below.

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

- 7.5.3 With regards to the *presence* of the mineral, mudstone bedrock and sandstone underlays that part of the Site which is subject to the MSA. The whole of the MSA is mainly mudstone. But it is not apparent from the available evidence what mineral(s) the MSA in question is aiming to safeguard. Nevertheless, there is mineral below part of the application area which may hold some value.
- 7.5.4 As far as can be ascertained minerals have not been extracted from the site in the past. This leaves the middle part of the bullet point:

Mineral resources... are of no economic value

- 7.5.5 As stated earlier, the safeguarding area only covers the western part of the application site, covering an area of approximately 6.5 ha. However, crucially, the proposed development proposals for the Site do not include any built development within the MSA. Clearly this would mean that the mineral resource would not be sterilised.
- 7.5.6 Notwithstanding the above there is evidence that the mineral resource within the MSA has no economic value as will be amplified below.

BGS data

7.5.7 The BGS map for Warwickshire and West Midlands shows no mineral resource at all within the application sire area (see Figure 2). The BGS on-line geology viewer shows bedrock present but no superficial deposits. It is the presence of superficial deposits which usually indicate that the mineral may be winnable and of economic value.

Minerals Study to support preparation of the Black Country Plan

- 7.5.8 This Minerals Study, carried out by Wood Environment & Infrastructure Solutions UK Limited January 2020, formed part of the evidence base of the new Black Country Plan, to inform new minerals policies and allocations over this period. The BCPL has since been abandoned but the Mineral Study provides a useful review of the mineral evidence base within the sub-region.
- 7.5.9 Crucially the Study recommended that mineral safeguarding should be limited to the area shown below in Figure 15.

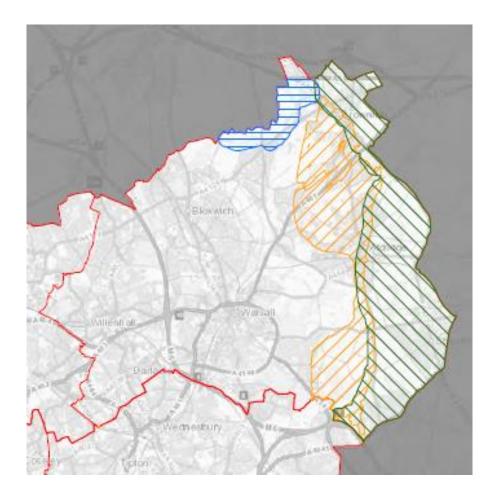


Figure 15: Recommended MSA from the 2019 Minerals Study

- 7.5.10 As can be seen the MSA is concentrated within the north eastern part of the sub-region and excludes any areas within Sandwell. Therefore, the existing MSA, which covers part of the proposed development area was not recommended to be included in the new BCP. This would tend to suggest that the old MSA was mapped in error or that the mineral within it was of no economic value.
- 7.5.11 It is concluded that the mineral resource within the existing MSA, which overlaps part of the application site holds no economic value. On this point alone the application would not contravene Policy MIN1.

 However, for completeness the other points of the policy are addressed below.

Extraction of minerals is not feasible, for example due to significant overburden or because mineral extraction would lead to or exacerbate ground instability

- 7.5.12 In mining, overburden (also called waste or spoil) is the material that lies above an area that lends itself to economical exploitation, such as flawed rock and soils.
- 7.5.13 As discussed earlier the only borehole records within the AoS which are available at depths of greater 2m are within the northern part of the MSA. But even here they are only between 3.3 and 5.5m bgl and so do not provide a sufficiently detailed analysis of any mineral resource. The materials logged (where not made ground) includes the following descriptions:
 - silty clay
 - sandy silty clay
 - clayey siltstone
 - silty mudstone
 - weak laminated mudstone
- 7.5.14 Borehole records are therefore inconclusive but do not portray any evidence of winnable minerals. It could also be argued that much of the material logged would be considered to be overburden. Because of the limited depth of the boreholes no judgment can be made on whether the mineral extraction would lead to or exacerbate ground instability.

Prior extraction of minerals would result in abnormal costs and/or delays which would jeopardise the viability of the development

7.5.15 Prior extraction of the mineral would not be practicable because any excavation would need to be backfilled with imported waste, which would prolong the overall operations and cause environmental and amenity impacts, in addition to those caused by mineral operations.

There is an overriding need for the development which outweighs the need to safeguard the mineral resources present

- 7.5.16 The most recent five-year housing land supply position for the Borough (as per the Strategic Housing Land Availability Assessment 2020/21) is 1.6 years based on the Council's own evidence, well below the required five years.
- 7.5.17 The proposed development would make a substantial contribution to Sandwell's chronic under supply of affordable housing. Between 2004/05 and 2018/19, despite gross completions of 3,309 affordable homes, there has been a net reduction in 454 affordable homes for the same period across the Borough. The proposed development is offering a 40% affordable housing contribution which is significantly higher than the current 25% policy requirement.
- 7.5.18 The Council will not be able to solely rely on brownfield land. This strategy has not worked to date, as demonstrated by the Council's five-year housing land supply position, Housing Delivery Test score, and net loss of affordable housing provision since 2004. Furthermore, as shown by the Black Country Viability Delivery Study (September 2021) 65% of urban typologies tested are marginally viable (27%) or unviable (38%). Such sites will make no contribution to the Council's affordable housing needs and are unlikely to deliver significant wider infrastructure benefits for the local community.

Extraction of minerals would have unacceptable impacts on neighbouring uses, the amenity of local communities or other important environmental assets

- 7.5.19 The proposed site lies between two residential areas, which both contain schools. There is also an Academy to the south of the Site. Even with stand-offs and screening bunds in place, the extraction of minerals alone (notwithstanding any mineral processing) would inevitably affect both areas particularly when working near to the east/west site boundaries, through noise and fugitive dust.
- 7.5.20 There would then be further impact through landfilling operations to restore the site.

7.6 The Need for and Likelihood of Future Extraction in the adjacent MSA

- 7.6.1 Once the development is completed, residential properties and their associated curtilages together with other built development would occupy the eastern part of the Site. There is limited potential for adjacent mineral extraction because of the constraints which surround the Site, notably:
 - Residential development to the east;
 - Canal to the west, beyond which is residential development;
 - M6 to the south, and
 - A34 to the north.
- 7.6.2 Furthermore, given the evidence discussed above it is not considered that this would unduly sterilise any workable reserves.
- 7.6.3 NPPF, Section 15 Conserving and Enhancing the Natural Environment, states that the intention is that the planning system should prevent developments from contributing to or being put at unacceptable risk from or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability. New development should be appropriate for its location.
- 7.6.4 The wider MSA is shown in Figure 16 below. The red circle is the approximate location of the proposed housing site.

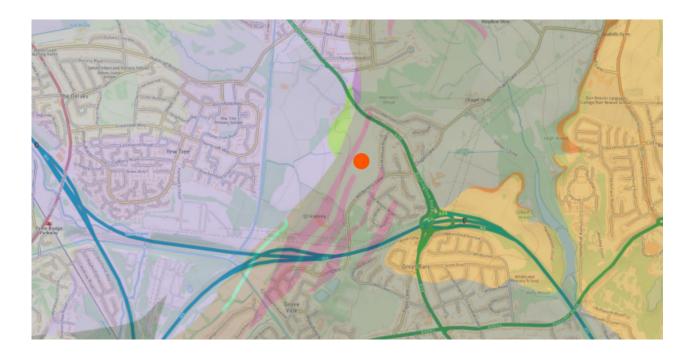


Figure 16: The wider MSA

- 7.6.5 It is acknowledged that the purpose and role of MSAs is not just about dealing with extraction in the plan period but is also about ensuring that reserves are available for future generations. The delineation of the MSA boundaries is led by the geology and the potential for minerals. Environmental factors arising from extraction are not taken into account.
- 7.6.6 The wider MSA extends north to the A34 and southwest covering the Yew Tree area which is residential.

 Part of it may also extend into Walsall Golf Course. As explained above it is highly unlikely that the MSA contains any winnable minerals and will not be retained as a designation in any future local plan.
- 7.6.7 It is considered, therefore, that development of the Site for housing would not unduly sterilise any workable mineral adjacent to the site.

7.7 Compliance with other Policies

- 7.7.1 Paragraph 212 of the NPPF states that local planning authorities should not *normally* permit other development proposals in MSAs where they might constrain potential future use for these purposes. The policy does not impose a blanket restriction on other development. The test is whether the development proposals might constrain future extraction.
- 7.7.2 There is no prospect of minerals being extracted from the development site.

- 7.7.3 Under these circumstances, it is considered that developing the site for future residential development would not conflict with the intentions of policy in the NPPF or the extant mineral policies.
- 7.7.4 Prior extraction is rendered environmentally and financially unviable.
- 7.7.5 It would be difficult to extract the full extent of the potential mineral resources within the application site due to the requirement for mitigation and restoration. This renders whatever reserve remains of no potential value.
- 7.7.6 There is an overriding need for the residential development in this locality, particularly given the 40% affordable housing provision.

8 CONCLUSIONS

8.1 Conclusions from this Report

- 8.1.1 The proposed residential site lies within a Mineral Safeguarding Area for sand and gravel.
- 8.1.2 An assessment of viability of prior extraction needs to take account of the nature and extent of the mineral resource present. It also needs to take account of whether the environmental conditions are suitable to support extraction and whether extraction can be achieved in a reasonable timescale.
- 8.1.3 In this instance the environmental considerations include the importation of additional waste materials; the impacts that would arise as a result of extracting the minerals; and the underground pipeline.
- 8.1.4 There is no conflict with Policy MIN1 as:
 - There is no potential value in extracting the minerals, the extent and nature of which would not be commercially viable;
 - There is no prospect of prior extraction;
 - There is an overriding need for the development, and
 - The introduction of residential receptors will not result in proximal sterilisation of the wider MSA.
- 8.1.5 There is no prospect of minerals ever being worked in the future, so there is no conflict with paragraphs 210 and 212 in NPPF.
- 8.1.6 There is a clear, identified need for development in contributing to the district council's housing delivery targets in the short/medium term. New housing can be delivered in a sustainable manner consistent with NPPF.
- 8.1.7 Overall, the proposed development is consistent with policies in NPPF, and the Black Country Core Strategy.



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